INVESTIGATION SUMMARY REPORT

"CENTRAL BOULEVARD ELEMENTARY SCHOOL"
60 CENTRAL BOULEVARD
BETHPAGE, NEW YORK 11714

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

JCB PROJECT #: 17-37392
SEPTEMBER 2017

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

1775 Expressway Drive North
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Section No. 1.0: Introduction

J.C. Broderick and Associates, Inc. (JCB) was retained by the Bethpage Union Free School District to install three (3) groundwater monitoring wells at Central Boulevard Elementary School to perform groundwater sampling and analysis.

Section No. 2.0: Site Description and Location

The subject site is located at 60 Central Boulevard, Bethpage, New York 11714. The subject site is located on the west side of Central Boulevard, between Brenner Avenue to the North and Jean Avenue to the south. According to the United States Geological Survey (USGS) *Amityville, New York 1994 7.5 Minute Series* Topographical Map, the subject site is situated at an approximate elevation of 100 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: Private Utility Mark Out

On August 7, 2017, JCB performed a limited underground utility mark out of the proposed groundwater monitoring well locations at the above referenced subject site. The mark out was performed utilizing various equipment in an attempt to locate subsurface anomalies within the areas of concern to ensure none were impacted during subsequent drilling activities. After completion of the limited underground utility mark out, no subsurface anomalies were located within the scope of work.

Section No. 3.2: Monitoring Well Installation

On August 7 and 8, 2017 three (3) groundwater monitoring wells (MW-1, MW-2, and MW-3) were installed on the north side of the school building with the use of a track-mounted Geoprobe® Model 7822 DT utilizing 3.25 inch outside diameter probe rod methodology. The wells were constructed of ten (10) feet of two (2) inch diameter 0.020 inch slotted schedule 40 PVC screen and forty (40) feet of two (2) inch diameter Schedule 40 PVC riser pipe. A sand pack consisting of Morie grit #1 was installed to one (1) foot above the top of the PVC screen. A one (1) foot thick bentonite seal was installed above the sand pack, followed by backfilling with clean sand to approximately two (2) inches below the top of the well casing. The wells were then finished to grade with a locking compression J-plug and a flush mount road box was concreted in place. Monitoring well construction diagrams are included in the attachments of this report. Subsequent to installation, the monitoring wells were properly developed by over-pumping.

On August 8, 2017, JCB checked the monitoring wells 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.

The following table summarizes the groundwater monitoring data:

Table No. 1: Depth to Groundwater Gauged with Interface Meter		
Well Number	**Depth to Product (ft)**	**Depth to Groundwater (ft)**
MW-1	No Product	45.09
MW-2	No Product	42.62
MW-3	No Product	42.80

Section No. 3.3: Soil Sampling

On August 7, 2017, JCB collected three (3) soil samples at each boring location subsequent to drilling, but prior to the installation of the monitoring wells. The soil samples were collected from the groundwater interface at each boring location, from 42.5 to 45 feet below surface grade (bsg).

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

Table No. 2: Summary of Soil Samples Submitted for Laboratory Analysis			
Sample ID#	**Date Sampled**	**Description of Sample**	**Analysis Method**
B-01	08-07-17	Boring No. 1: 42.5'-45'	EPA 903.0, EPA 904
B-02	08-07-17	Boring No. 2: 42.5'-45'	EPA 903.0, EPA 904
B-03	08-07-17	Boring No. 3: 42.5'-45'	EPA 903.0, EPA 904
Notes: EPA = Environmental Protection Agency			

Section No. 3.4: Groundwater Sampling

On August 18, 2017, JCB collected three (3) groundwater samples from the new groundwater monitoring wells. The sample collection was witnessed and split samples were collected by a representative of the NYSDEC Region 2. 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 disposable polyethylene bailer. During the purging process, specific groundwater parameters were monitored by a YSI Multi-meter.

The following table summarizes the purged water testing.

Table No. 3: Groundwater Monitoring During Sample Collection					
MW-1	**DTW (ft)**	**TD (ft)**	**Water Column (ft)**		
	43.30	49.97	6.94		
Time	**Temp (°C)**	**TDS (g/l)**	**DO (%)**	**pH**	**ORP (mV)**
11:57	18.33	0.434	66.5	7.97	-150.2
12:01	17.02	0.425	60.8	7.33	-18.0
12:04	16.80	0.405	60.6	7.10	-8.50

12:07	16.83	0.396	60.7	7.03	-15.6
12:10	17.04	0.379	61.9	7.04	-31.9
12:15	Samples Collected				
MW-2	**DTW (ft)**	**TD (ft)**	**Water Column (ft)**		
	42.86	49.85	6.99		
Time	**Temp (°C)**	**TDS (g/l)**	**DO (%)**	**pH**	**ORP (mV)**
12:37	17.21	0.213	86.1	7.13	-39.1
12:40	16.35	0.267	69.1	7.12	-55.7
12:43	16.37	0.207	69.8	7.17	-58.9
12:46	16.36	0.207	71.0	7.23	-61.7
12:49	16.36	0.207	70.7	7.25	-60.2
12:50	Samples Collected				
MW-3	**DTW (ft)**	**TD (ft)**	**Water Column (ft)**		
	42.96	50.05	7.09		
Time	**Temp (°C)**	**TDS (g/l)**	**DO (%)**	**pH**	**ORP (mV)**
1:15	17.29	0.407	78.4	7.08	-30.8
1:18	16.33	0.382	63.3	7.15	-27.3
1:21	16.14	0.359	61.5	7.15	-28.8
1:24	16.24	0.346	61.8	7.1	-20.5
1:27	16.30	0.333	64.4	7.07	-25.0
13:30	Samples Collected				

Notes:
DTW = Depth to Groundwater Table
TD = Total Depth of Well
Temp = Temperature in degrees celceous
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. 4:
Summary of Groundwater Samples Submitted for Laboratory Analysis

Sample ID#	Date Sampled	Description of Sample	Analysis Method
MW-1	08-18-17	Monitoring Well No. 1	EPA 8260, EPA 903.0, EPA 904
MW-2	08-18-17	Monitoring Well No. 2	EPA 8260, EPA 903.0, EPA 904
MW-3	08-18-17	Monitoring Well No. 3	EPA 8260, EPA 903.0, EPA 904

Notes:
EPA = Environmental Protection Agency

Section No. 4.0: Soil Laboratory Analytical Summary

Soil 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.

Soil samples submitted for laboratory analysis were analyzed for Radium 226 utilizing Environmental Protection Agency (EPA) Method 903.0, and for Radium 228 utilizing EPA Method 904. EMSL Analytical, Inc. (EMSL) provided laboratory analytical services. Copies of EMSL's NYSDOH certifications are available upon request.

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

Table No. 5:
Summary of Soil Samples Analysis Results

Client Sample ID	Allowable Standards	B-01	B-02	B-03
EPA 903.0 & EPA 904	**pCi/g**	**8/7/2017**	**8/7/2017**	**8/8/2017**
Radium 226 (pCi/g)	N/A	0.03	0.04	0.04
Radium 228 (pCi/g)	N/A	0.04	0.02	0.07

Notes:
pCi/g = picocuries per gram
N/A = Guidance Value Not Established by the New York State Department of Environmental Conservation at the time of this report

The laboratory analysis results from the soil samples submitted from B-5, B-6, and B-7 indicated detection of Radium-226 and Radium-228 at concentrations of less than one (1) pCi/g. At the time of the writing of this report there are no guidance values established by the New York State Department of Environmental Conservation (NYSDEC).

Section No. 5.0: 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) utilizing Environmental Protection Agency (EPA) Method 8260 and for Radium 226 and Radium 228 utilizing EPA Method 903.0 and EPA Method 904 respectively.

York Analytical Laboratories, Inc. (York) provided laboratory analytical services for VOC analysis. Copies of York's NYSDOH certifications are available upon request. EMSL provided laboratory analytical services for the Radiochemical Analysis of Radium 226 and Radium 228. 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 *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 review of the laboratory analysis revealed the following significant findings:

Table No. 6:
Summary of Groundwater Samples Analysis Results

Client Sample ID	Allowable Standards	MW-1	MW-2	MW-3
EPA 8260 Volatiles List	**µg/L**	**8/18/2017**	**8/18/2017**	**8/18/2017**
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
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	0.37
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

Table No. 6: Summary of Groundwater Samples Analysis Results				
Client Sample ID	**Allowable Standards**	**MW-1**	**MW-2**	**MW-3**
EPA 8260 Volatiles List	**µg/L**	**8/18/2017**	**8/18/2017**	**8/18/2017**
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
Toluene	5	ND	ND	0.30
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	ND	ND
Radium 226 (pCi/L)	3.0	**19.40**	**10.24**	**25.23**
Radium 228 (pCi/L)	5.0	4.20	1.95	**6.85**

Notes:
µg/L = parts per billion
pCi/L = picocuries per liter
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 samples submitted from MW-1, MW-2 and MW-3 did not indicated any elevated concentrations of VOCs exceeding the above referenced guidance values for the analytical method conducted.

The laboratory analysis results from the groundwater samples submitted from MW-1, MW-2, and MW-3 did indicate elevated concentrations of Radium 226 exceeding the above refenced guidance value for the

analytical method conducted. The laboratory analysis results from the groundwater sample submitted from MW-3 did indicate elevated concentrations of Radium 228 exceeding the above referenced guidance values for the analytical method conducted.

Section No. 6.0: 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.

Section No. 7.0: 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 soil samples submitted did indicate concentrations of Radium 226 or Radium 228, although at the time of the writing of this report there are no guidance values established by the NYSDEC for these compounds.

The laboratory analysis results from the groundwater samples submitted did not indicate any elevated concentrations of VOCs exceeding the above referenced guidance values.

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

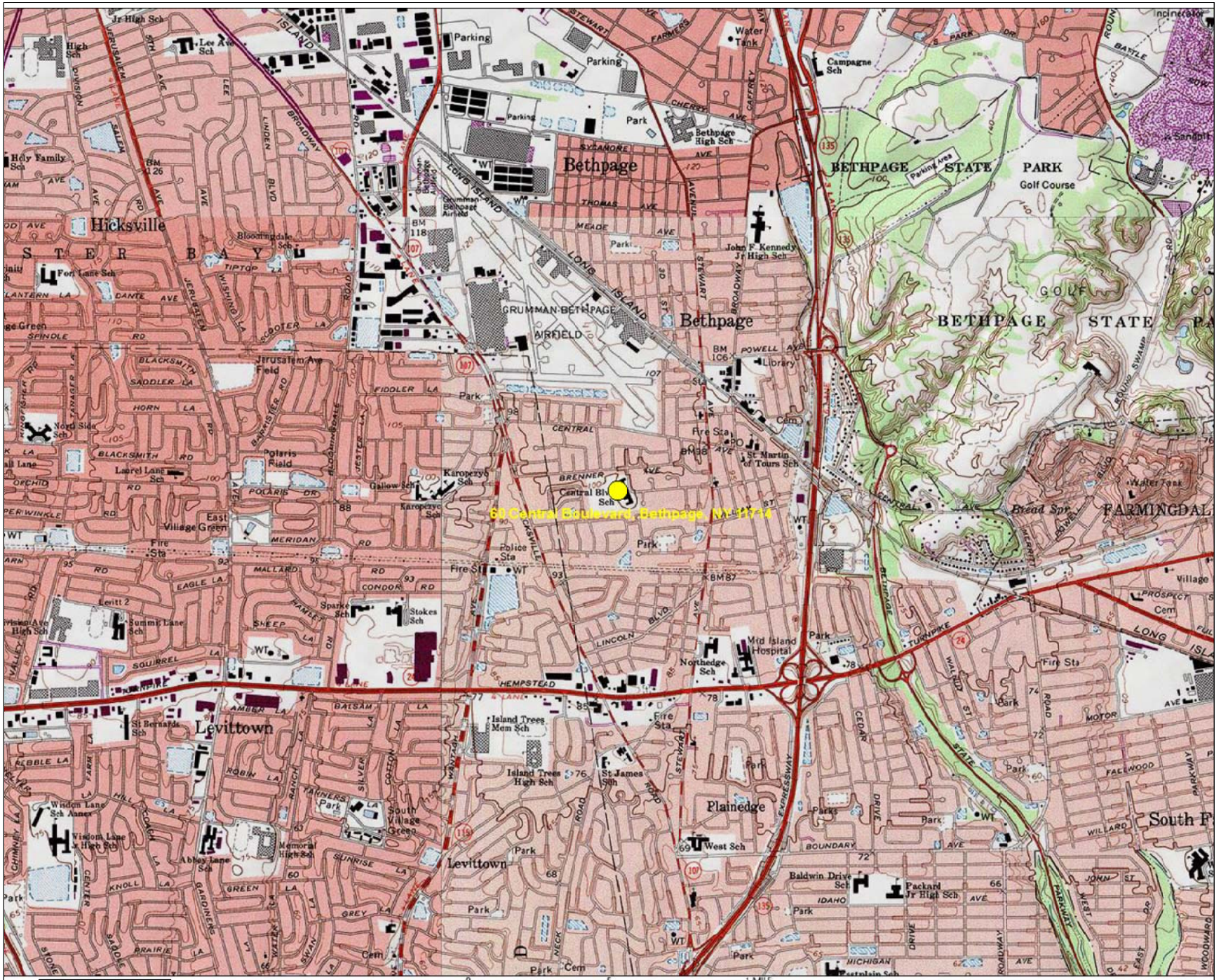
It is recommended that periodic groundwater sampling and analysis be performed to monitor site conditions.

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

Jeffrey V. Nannini
Environmental Scientist

Steven Muller, P.G.
Director – Subsurface Division

Appendix A
Figures



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Notes:

Central Boulevard
Elementary School
60 Central Boulevard
Bethpage, NY 11714

Drawing Title

Figure No. 1

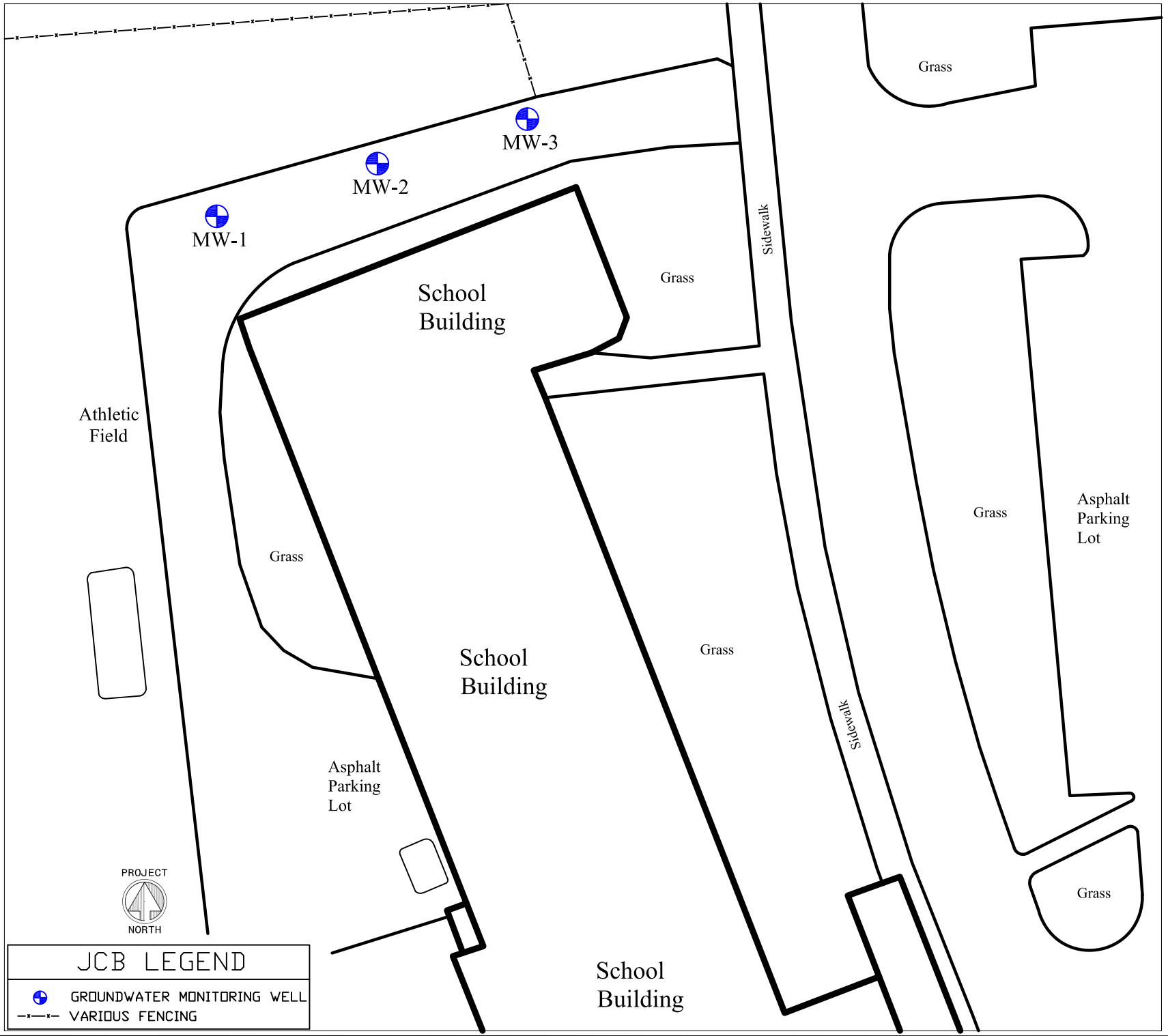
Site Location Map

Scale	Project No.	Date
As Noted	17-37392	08-08-17

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

Drawing No.

1



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Notes:

Central Boulevard Elementary School
60 Central Boulevard,
Bethpage, NY 11714

Drawing Title

Figure No. 2

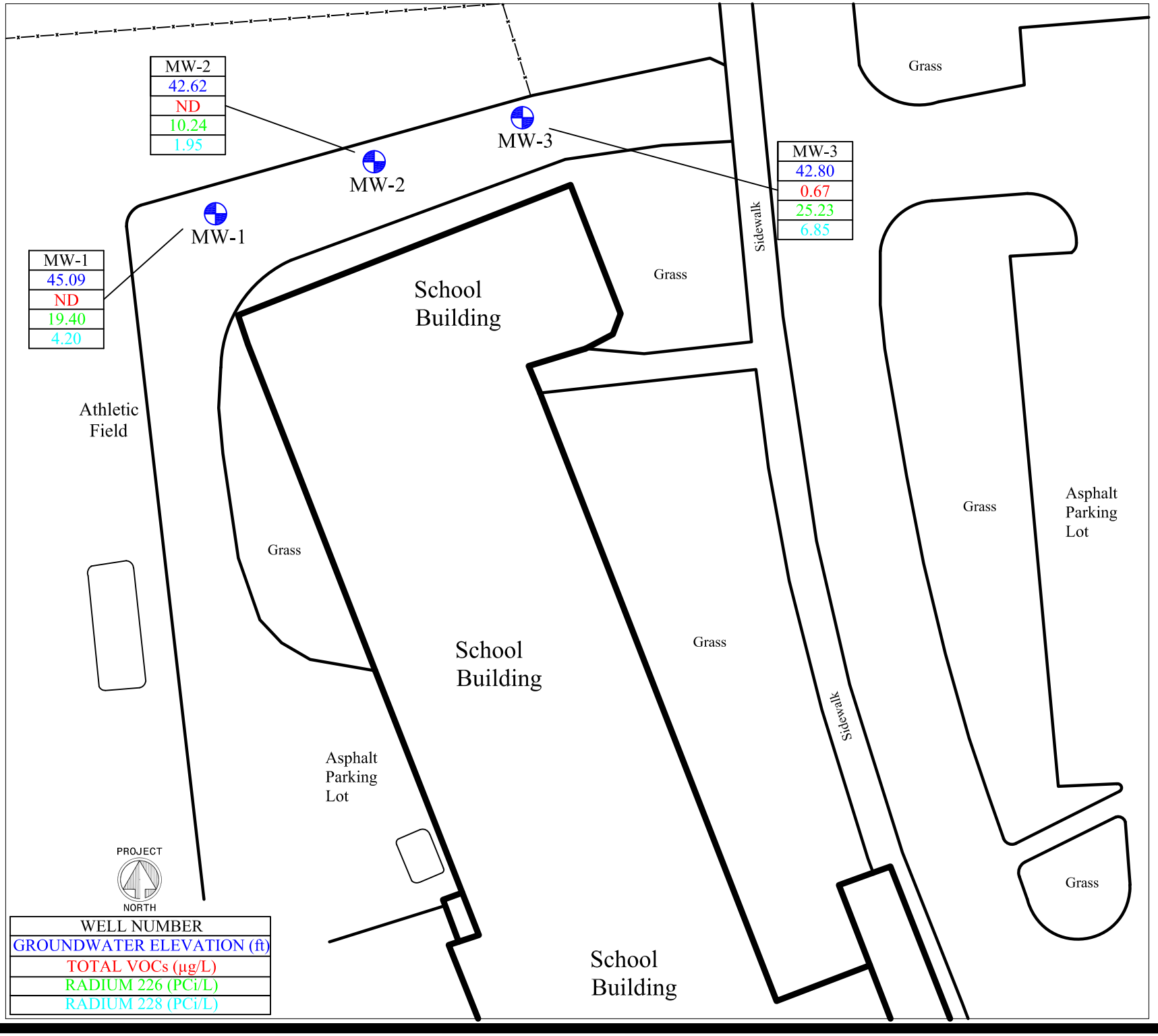
Monitoring Well Locations Map

Scale	Project No.	Date
As Noted	17-37392	08-07-17

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

Drawing No.

2



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Central Boulevard
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60 Central Boulevard,
Bethpage, NY 11714

Drawing Title

Figure No. 3

Analytical Results Map

Scale	Project No.	Date
As Noted	17-37392	08-07-17

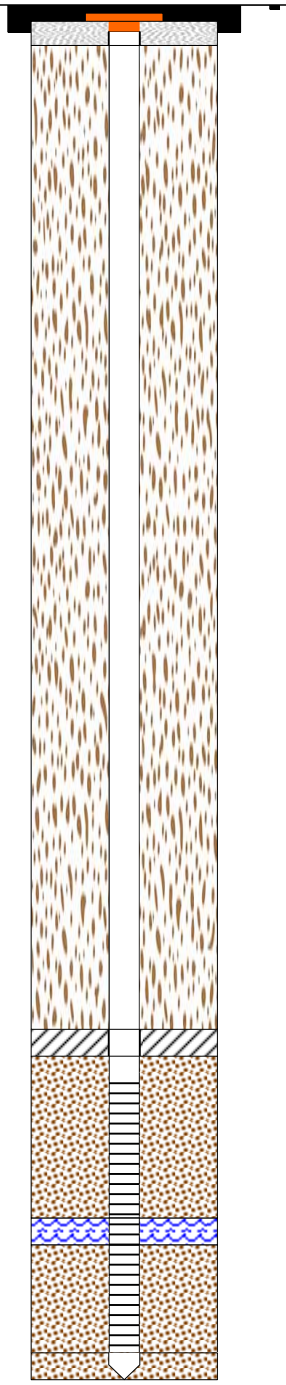
Drawn By	Checked By	Page No.
J.V.N.	S.W.M.	3 of 3

Drawing No.

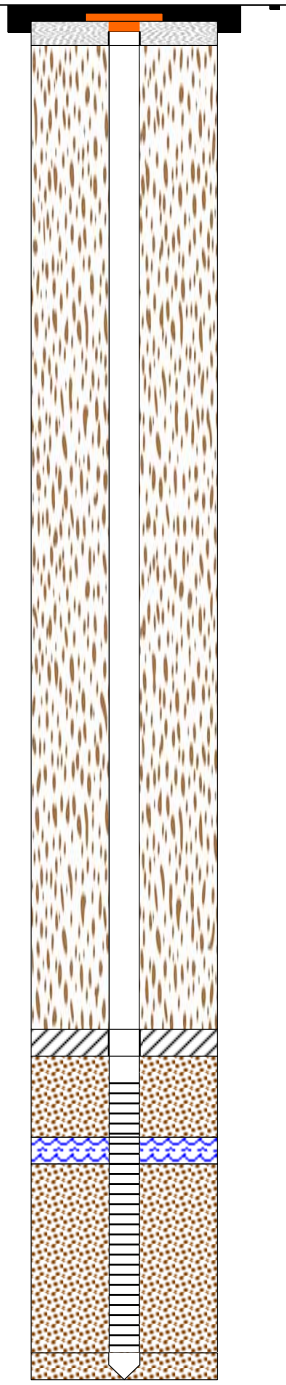
3

Appendix B
Monitoring Well Completion Logs

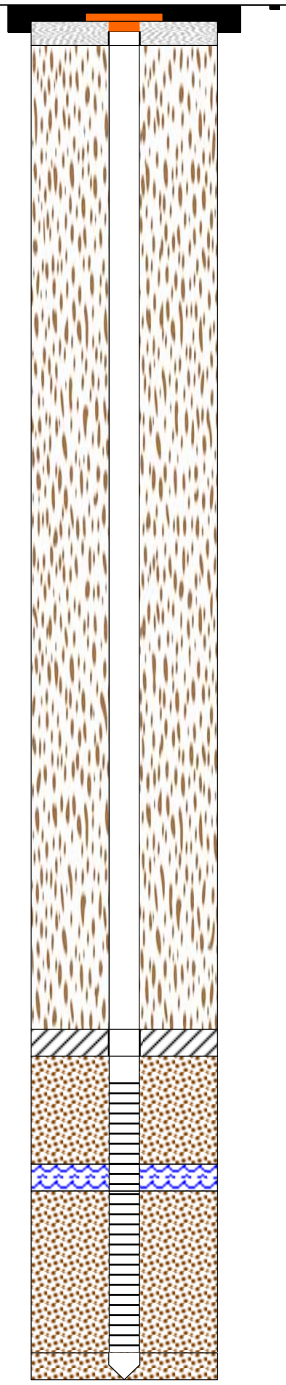
PROJECT NAME: Central Boulevard ES	BORING NUMBER: MW-1
PROJECT ADDRESS: 60 Central Boulevard, Bethpage, NY, 11714	
DRILLING CONTRACTOR: JC Broderick & Associates, Inc.	BORING LOCATION: Northwest Corner of Building
DRILLING METHOD: 3.25 inch OD Probe Rods	TOTAL DEPTH: 50 Feet bsg / MEASURING POINT: Ground Surface
DRILLING EQUIPMENT: Geoprobe® 7822DT	GROUND SURFACE ELEVATION: 100 Feet Above Sea Level / DATE COMPLETED: 8/7/17
SAMPLING METHOD: DT325 Soil Sampling System	DEPTH TO GROUNDWATER: 45 Feet bsg
HAMMER WEIGHT: N/A / DROP: N/A	RESPONSIBLE PROFESSIONAL: Jeffrey Nannini / LOGGED BY: Edward Combs

DEPTH (feet)	WELL CONSTRUCTION	WELL LOG
0.0	Traffic Rated Well Box Locking J-Plug Concrete	
4.0		
8.0		
12.0		
16.0		
	Clean Sand Backfill	
20.0		
24.0	2" diameter Schedule 40 PVC Riser	
28.0		
32.0		
36.0	Tan Fine to Medium SAND, Trace Gravel	
	Bentonite Chip Seal	
40.0		
	Tan/Brown Medium to Coarse SAND, Few Gravel	
44.0		
	Groundwater Interface	
	#1 Morie Sand Pack	
48.0	2" diameter 0.020" Slot, Schedule 40 PVC Screen	
	End Cap	
52.0		

PROJECT NAME: Central Boulevard ES	BORING NUMBER: MW-2
PROJECT ADDRESS: 60 Central Boulevard, Bethpage, NY, 11714	
DRILLING CONTRACTOR: JC Broderick & Associates, Inc.	BORING LOCATION: North Center of Building
DRILLING METHOD: 3.25 inch OD Probe Rods	TOTAL DEPTH: 50 Feet bsg / MEASURING POINT: Ground Surface
DRILLING EQUIPMENT: Geoprobe® 7822DT	GROUND SURFACE ELEVATION: 100 Feet Above Sea Level / DATE COMPLETED: 8/7/17
SAMPLING METHOD: DT325 Soil Sampling System	DEPTH TO GROUNDWATER: 42 Feet bsg
HAMMER WEIGHT: N/A / DROP: N/A	RESPONSIBLE PROFESSIONAL: Jeffrey Nannini / LOGGED BY: Edward Combs

DEPTH (feet)	WELL CONSTRUCTION	WELL LOG
0.0	Traffic Rated Well Box Locking J-Plug Concrete	
4.0		
8.0		
12.0		
16.0		
	Clean Sand Backfill	
20.0		
24.0	2" diameter Schedule 40 PVC Riser	
28.0		
32.0		
36.0		
	Bentonite Chip Seal	
40.0	Tan Fine to Medium SAND, Trace Gravel	
	Groundwater Interface	
44.0	Tan/Brown Medium to Coarse SAND, Few Gravel	
	#1 Morie Sand Pack	
48.0	2" diameter 0.020" Slot, Schedule 40 PVC Screen	
	End Cap	
52.0		

PROJECT NAME: Central Boulevard ES	BORING NUMBER: MW-3
PROJECT ADDRESS: 60 Central Boulevard, Bethpage, NY, 11714	
DRILLING CONTRACTOR: JC Broderick & Associates, Inc.	BORING LOCATION: Northeast Corner of Building
DRILLING METHOD: 3.25 inch OD Probe Rods	TOTAL DEPTH: 50 Feet bsg / MEASURING POINT: Ground Surface
DRILLING EQUIPMENT: Geoprobe® 7822DT	GROUND SURFACE ELEVATION: 100 Feet Above Sea Level / DATE COMPLETED: 8/8/17
SAMPLING METHOD: DT325 Soil Sampling System	DEPTH TO GROUNDWATER: 43 Feet bsg
HAMMER WEIGHT: N/A / DROP: N/A	RESPONSIBLE PROFESSIONAL: Jeffrey Nannini / LOGGED BY: Edward Combs

DEPTH (feet)	WELL CONSTRUCTION	WELL LOG
0.0	Traffic Rated Well Box Locking J-Plug Concrete	
4.0		
8.0		
12.0		
16.0		
20.0	Clean Sand Backfill	
24.0	2" diameter Schedule 40 PVC Riser	
28.0		
32.0		
36.0		
40.0	Bentonite Chip Seal Tan Medium to Coarse SAND, Trace Gravel	
44.0	Groundwater Interface Tan/Brown Medium to Coarse SAND, Few Gravel	
48.0	#1 Morie Sand Pack 2" diameter 0.020" Slot, Schedule 40 PVC Screen End Cap	
52.0		

Appendix C
Photo Log

Groundwater Monitoring Well Location
MW-1

Field Photograph Log

Investigation Summary Report

Central Boulevard Elementary School
60 Central Boulevard
Bethpage, New York 11714

Photo No. 01 **JCB#: 17-37392**

Groundwater Monitoring Well Location
MW-2

Field Photograph Log

Investigation Summary Report

Central Boulevard Elementary School
60 Central Boulevard
Bethpage, New York 11714

Photo No. 02 **JCB#: 17-37392**

Groundwater Monitoring Well Location
MW-3

Field Photograph Log

Investigation Summary Report

Central Boulevard Elementary School
60 Central Boulevard
Bethpage, New York 11714

Photo No. 03 **JCB#: 17-37392**

Typical Soil Sample at the Groundwater Table

Field Photograph Log

Investigation Summary Report

Central Boulevard Elementary School
60 Central Boulevard
Bethpage, New York 11714

Photo No. 04 **JCB#: 17-37392**

Appendix D
Laboratory Analysis Report

Technical Report

prepared for:

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

Report Date: 08/25/2017
Client Project ID: 17-37392
York Project (SDG) No.: 17H0971

Report Date: 08/25/2017
Client Project ID: 17-37392
York Project (SDG) No.: 17H0971

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 August 21, 2017 and listed below. The project was identified as your project: **17-37392**.

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	Matrix	Date Collected	Date Received
17H0971-01	MW-1	Water	08/18/2017	08/21/2017
17H0971-02	MW-2	Water	08/18/2017	08/21/2017
17H0971-03	MW-3	Water	08/18/2017	08/21/2017

General Notes for York Project (SDG) No.: 17H0971

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: 

Date: 08/25/2017

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: MW-1 **York Sample ID:** 17H0971-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17H0971	17-37392	Water	August 18, 2017 3:00 pm	08/21/2017

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		

Sample Information

Client Sample ID: MW-1 **York Sample ID:** 17H0971-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17H0971	17-37392	Water	August 18, 2017 3:00 pm	08/21/2017

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		

Sample Information

Client Sample ID: MW-1 **York Sample ID:** 17H0971-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17H0971	17-37392	Water	August 18, 2017 3:00 pm	08/21/2017

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY10854-Qu		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY10854-Qu		
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		

Sample Information

Client Sample ID: MW-1 **York Sample ID:** 17H0971-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17H0971	17-37392	Water	August 18, 2017 3:00 pm	08/21/2017

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	08/24/2017 17:54	08/24/2017 17:54	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*94.7 %*	*69-130*
2037-26-5	*Surrogate: Toluene-d8*	*93.7 %*	*81-117*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*98.5 %*	*79-122*

Sample Information

Client Sample ID: MW-2 **York Sample ID:** 17H0971-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17H0971	17-37392	Water	August 18, 2017 3:00 pm	08/21/2017

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		

Sample Information

Client Sample ID: MW-2 **York Sample ID:** 17H0971-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17H0971	17-37392	Water	August 18, 2017 3:00 pm	08/21/2017

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		

Sample Information

Client Sample ID: MW-2 **York Sample ID:** 17H0971-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17H0971	17-37392	Water	August 18, 2017 3:00 pm	08/21/2017

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		

Sample Information

Client Sample ID: MW-2 **York Sample ID:** 17H0971-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17H0971	17-37392	Water	August 18, 2017 3:00 pm	08/21/2017

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY10854-Qu		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY10854-Qu		
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	08/24/2017 18:20	08/24/2017 18:20	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*101 %*	*69-130*
2037-26-5	*Surrogate: Toluene-d8*	*93.2 %*	*81-117*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*98.2 %*	*79-122*

Sample Information

Client Sample ID: **MW-3** **York Sample ID:** **17H0971-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17H0971	17-37392	Water	August 18, 2017 3:00 pm	08/21/2017

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		

Sample Information

Client Sample ID: MW-3 **York Sample ID:** 17H0971-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17H0971	17-37392	Water	August 18, 2017 3:00 pm	08/21/2017

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
67-66-3	**Chloroform**	**0.37**	J	ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		

Sample Information

Client Sample ID: **MW-3** **York Sample ID:** **17H0971-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17H0971	17-37392	Water	August 18, 2017 3:00 pm	08/21/2017

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY10854-Qu		
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY10854-Qu		
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	NELAC-NY10854,NJDEP,NELAC-NY10854-Que		
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
108-88-3	**Toluene**	**0.30**	J	ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		

Sample Information

Client Sample ID: MW-3 **York Sample ID:** 17H0971-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
17H0971	17-37392	Water	August 18, 2017 3:00 pm	08/21/2017

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	08/24/2017 18:46	08/24/2017 18:46	AS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,NELAC-NY1(		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*100 %*	*69-130*
2037-26-5	*Surrogate: Toluene-d8*	*93.2 %*	*81-117*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*103 %*	*79-122*

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
17H0971-01	MW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17H0971-02	MW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
17H0971-03	MW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

Sample and Data Qualifiers Relating to This Work Order

J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

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

Field Chain-of-Custody Record

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

York Project No. 1710971

YOUR Information	**Report To:**	**Invoice To:**
Company: JC Broderick	Company: JCB	Company: JCB
Address: 1775 Express Dr. N Hauppauge, NY 11788	Address:	Address:
Phone No. 631-584-5492	Phone No.	Phone No.
Contact Person: Steven Muller	Attention:	Attention:
E-Mail Address: Gmuller@JCBroderick.com	E-Mail Address:	E-Mail Address:

YOUR Project ID: 17-37392

Purchase Order No.:

Samples from: CT ___ NY X NJ ___

Turn-Around Time

- RUSH - Same Day ☐
- RUSH - Next Day ☐
- RUSH - Two Day ☐
- RUSH - Three Day ☐
- RUSH - Four Day ☐
- Standard(5-7 Days) ☒

Report Type

- Summary Report X
- Summary w/ QA Summary ___
- CT RCP Package ___
- CTRCP DQA/DUE Pkg ___
- NY ASP A Package ___
- NY ASP B Package ___
- NJDEP Red. Deliv. ___

Electronic Data Deliverables (EDD)

- Simple Excel ___
- NYSDEC EQuIS ___
- EQuIS (std) ___
- EZ-EDD (EQuIS) ___
- NJDEP SRP HazSite EDD ___
- GIS/KEY (std) ___
- Other ___
- **York Regulatory Comparison**
- **Excel Spreadsheet**

Compare to the following Regs. (please fill in):

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

Samples Collected/Authorized By (Signature)

Jeffrey Nannis
Name (printed)

Matrix Codes

S - soil
Other - specify(oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

Volatiles		Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Misc.
8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.	Corrosivity
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics	Reactivity
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL MetCN	Ignitability
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part 360-Routine	Heterotrophs
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part 360-Baseline	TOX
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part 360-Expanded No Dioxins/Furans	BTU/lb.
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part 360-Expanded Full List	Aquatic Tox.
Halog.only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer	TOC
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer	Asbestos
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM	Silica

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
MW-1	8-18-17	GW	EPA 8260	3-40ml VOA
MW-2	8-18-17	GW	↓	↓
MW-3	8-18-17	GW	↓	↓

Comments
Central Boulevard E.S.
60 Central Boulevard
Bethpage, NY 11714

Preservation Check those Applicable
Special Instructions
Field Filtered ☐
Lab to Filter ☐

4°C X Frozen ___ HCl X MeOH ___ HNO_3 ___ H_2SO_4 ___ NaOH ___
ZnAc ___ Ascorbic Acid ___ Other ___

Samples Relinquished By — Date/Time: 8-18-17
Samples Relinquished By — Date/Time:

Samples Received By — Date/Time: 8/21/17 1135
Samples Received in LAB by: TC — Date/Time: 8/21/17 1905

Temperature on Receipt 0.9 °C

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0327
http://www.emsl.com cinnaminsonradonlab@emsl.com

EMSL Order #: **781702727**
Customer ID: **JCBR50**
Customer PO:

Attn: **Steven Muller**
J.C. Broderick & Associates
1775 Expressway Drive North, Suite 1
Hauppauge, NY 11788

Phone: **631-584-5492**
Fax: **Not Available**

Project: **B-01@42.5'-45'**

Collected: **08/07/2017**
Received: **08/17/2017**

NELAC Certification #: ***03036***

Analytical Report

Sample Identification: B-01@42.5'-45' ***Lab Sample #: 781702727-0001*** ***Date/Time Collected: 8/7/2017***

Test Parameter	***Result pCi/g***	***Uncertainty pCi/g***	***MDC pCi/g***	***Start Count Date/ Time***	***Analyst***	***Status Count***	***Method***
Radium 228	*0.04*	*0.02*	*0.06*	*8/22/17 1:30 PM*	*PM*	*First Count*	*EPA 904*
Radium 226	*0.03*	*0.01*	*0.02*	*9/1/17 1:53 PM*	*PM*	*First Count*	*EPA 903.0*

* All analysis met quality control acceptance criteria unless otherwise specified.

Report Date	**Report Revision**	**Revision Comments**
09/05/2017	R0	Initial Report

Kishor Paudel, **Laboratory Manager**

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0327
http://www.emsl.com cinnaminsonradonlab@emsl.com

EMSL Order #: **781702728**
Customer ID: **JCBR50**
Customer PO:

Attn: **Steven Muller**
J.C. Broderick & Associates
1775 Expressway Drive North, Suite 1
Hauppauge, NY 11788

Phone: **631-584-5492**
Fax: **Not Available**

Project: **B-02@42.5'-45'**

Collected: **08/07/2017**
Received: **08/17/2017**

NELAC Certification #: ***03036***

Analytical Report

Sample Identification: B-02@42.5'-45' ***Lab Sample #: 781702728-0001*** ***Date/Time Collected: 8/7/2017***

Test Parameter	***Result pCi/g***	***Uncertainty pCi/g***	***MDC pCi/g***	***Start Count Date/ Time***	***Analyst***	***Status Count***	***Method***
Radium 228	*0.02*	*0.03*	*0.10*	*8/22/17 1:30 PM*	*PM*	*First Count*	*EPA 904*
Radium 226	*0.04*	*0.01*	*0.03*	*9/1/17 1:53 PM*	*PM*	*First Count*	*EPA 90.0*

* All analysis met quality control acceptance criteria unless otherwise specified.

Report Date	**Report Revision**	**Revision Comments**
09/05/2017	R0	Initial Report

Kishor Paudel, **Laboratory Manager**

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0327
http://www.emsl.com cinnaminsonradonlab@emsl.com

EMSL Order #: **781702729**
Customer ID: **JCBR50**
Customer PO:

Attn: **Steven Muller**
J.C. Broderick & Associates
1775 Expressway Drive North, Suite 1
Hauppauge, NY 11788

Phone: **631-584-5492**
Fax: **Not Available**

Project: **B-03@42.5'-45'**

Collected: **08/07/2017**
Received: **08/17/2017**

NELAC Certification #: ***03036***

Analytical Report

Sample Identification: B-03@42.5'-45' ***Lab Sample #: 781702729-0001*** ***Date/Time Collected: 8/7/2017***

Test Parameter	***Result pCi/g***	***Uncertainty pCi/g***	***MDC pCi/g***	***Start Count Date/ Time***	***Analyst***	***Status Count***	***Method***
Radium 228	*0.07*	*0.02*	*0.06*	*8/22/17 1:30 PM*	*PM*	*First Count*	*EPA 904*
Radium 226	*0.04*	*0.01*	*0.03*	*9/1/17 1:53 PM*	*PM*	*First Count*	*EPA 903.0*

* All analysis met quality control acceptance criteria unless otherwise specified.

Report Date	**Report Revision**	**Revision Comments**
09/05/2017	R0	Initial Report

Kishor Paudel, **Laboratory Manager**

EMSL ANALYTICAL, INC.
LABORATORY | PRODUCTS | TRAINING

Radiochemical Analysis Chain of Custody

EMSL Order Number (Lab Use Only): 78170-

RECEIVED EMSL CINNAMINSON, N.J. 2017 AUG 17 A 10:05

Contact Name: Steven Muller	**Bill To Company:** J.C. Broderick & Assoc., Inc.	**Sampled By (Sign):** Steven Muller
Company Name: J.C. Broderick & Assoc., Inc.	**Attention To:** Steven Muller	**Sampled By (Name):** Steven Muller
Address: 1775 Expressway Drive N	**Address:** 1775 Expressway Drive N	**Total # of Samples:** 3
City: Hauppauge **State:** NY **Zip Code:** 11788	**City:** Hauppauge **State:** NY **Zip Code:** 11788	**Date of Shipping:** 8/16/17
Telephone #: 631-584-5492 **Fax :** 631-584-3395	**Telephone #:** 631-584-5492 **Fax :** 631-584-3395	**Sample State/ Zip Code:** NY/11706
Email: smuller@jcbroderick.com	**Project Name:** Central Blvd	**Purchase Order:**

Turn Around Time: ☐ 4 weeks (Standard) **Client Specific:** ☐ 48 Hours ☐ 96 Hours ☐ 1 week ■ 2 weeks ☐ 3 Weeks

Field Use - All Information Required!					Analytes													
					Gross Alpha													
Client Sample ID	Lab ID (For Lab Use only)	Matrix	Size (mL, g)	Date/Time	NJ 48 Hrs	EPA 900	Gross Beta	Ra-228	Ra-226	Total Uranium	Gamma Emitters	*Actinides (U, Th, Pu, Am)*	Sr-89, Sr-90	I-131	Radon	Tritium	Tc-99	Note
2727 B-01@42.5'-45'		S	56 g	8/7/17				X	X									
2728 B-02@42.5'-45'		S	56 g	8/7/17				X	X									
2729 B-03@42.5'-45'		S	56 g	8/8/17				X	X									

Report Requirement*: ☐ Level One ■ Level Two ☐ Level Three

Relinquished by:	Date/ Time	Received by:	Date/ Time		Note
Steven Muller	8/16/17/1600	[signature]	8/17/17	9:15 AM	

*Level One =Results only; Level Two = Results and QC; Level Three = Results, QC, Logs, Worksheets, Printout/Spectrum and Calibrations

OrderID: 781702729

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0327
http://www.emsl.com cinnaminsonradonlab@emsl.com

EMSL Order #: **781702733**
Customer ID: **JCBR50**
Customer PO:

Attn: **Steven Muller**
J.C. Broderick & Associates
1775 Expressway Drive North, Suite 1
Hauppauge, NY 11788

Phone: **631-584-5492**
Fax: **Not Available**

Project: **MW-1**

Collected: **08/18/2017**
Received: **08/21/2017**

NELAC Certification #: ***03036***

Analytical Report

Sample Identification: MW-1 ***Lab Sample #: 781702733-0001*** ***Date/Time Collected: 8/18/2017 12:15 PM***

Test Parameter	***Result pCi/L***	***Uncertainty pCi/L***	***SDWA DL pCi/L***	***Start Count Date/ Time***	***Analyst***	***Status Count***	***Method***
Radium-226	*19.40*	*0.79*	*0.42*	*8/24/17 3:31 PM*	*KP*	*First Count*	*EPA 903.0*
Radium 228	*4.20*	*0.40*	*0.40*	*8/29/17 2:15 PM*	*KP*	*First Count*	*EPA 904*

* All analysis met quality control acceptance criteria unless otherwise specified.

* Listed activity by EPA 903.0 represents total alpha radium.

Report Date	**Report Revision**	**Revision Comments**
08/31/2017	R0	Initial Report

Kishor Paudel, Analyst

Kishor Paudel, **Laboratory Manager**

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0327
http://www.emsl.com cinnaminsonradonlab@emsl.com

EMSL Order #: **781702734**
Customer ID: **JCBR50**
Customer PO:

Attn: **Steven Muller**
J.C. Broderick & Associates
1775 Expressway Drive North, Suite 1
Hauppauge, NY 11788

Phone: **631-584-5492**
Fax: **Not Available**

Project: **MW-2**

Collected: **08/18/2017**
Received: **08/21/2017**

NELAC Certification #: ***03036***

Analytical Report

Sample Identification: MW-2 ***Lab Sample #: 781702734-0001*** ***Date/Time Collected: 8/18/2017 12:50 PM***

Test Parameter	***Result pCi/L***	***Uncertainty pCi/L***	***SDWA DL pCi/L***	***Start Count Date/ Time***	***Analyst***	***Status Count***	***Method***
Radium 226	*10.24*	*0.61*	*0.47*	*8/24/17 3:31 PM*	*KP*	*First Count*	*EPA 903.0*
Radium 228	*1.95*	*0.29*	*0.45*	*8/29/17 2:15 PM*	*KP*	*First Count*	*EPA 904*

* All analysis met quality control acceptance criteria unless otherwise specified.

* Listed activity by EPA 903.0 represents total alpha radium.

Report Date	**Report Revision**	**Revision Comments**
08/31/2017	R0	Initial Report

Kishor Paudel, Analyst

Kishor Paudel, **Laboratory Manager**

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0327
http://www.emsl.com cinnaminsonradonlab@emsl.com

EMSL Order #: **781702735**
Customer ID: **JCBR50**
Customer PO:

Attn: **Steven Muller**
J.C. Broderick & Associates
1775 Expressway Drive North, Suite 1
Hauppauge, NY 11788

Phone: **631-584-5492**
Fax: **Not Available**

Project: **MW-3**

Collected: **08/18/2017**
Received: **08/21/2017**

NELAC Certification #: ***03036***

Analytical Report

Sample Identification: MW-3 ***Lab Sample #: 781702735-0001*** ***Date/Time Collected: 8/18/2017 01:30 PM***

Test Parameter	***Result pCi/L***	***Uncertainty pCi/L***	***SDWA DL pCi/L***	***Start Count Date/ Time***	***Analyst***	***Status Count***	***Method***
Radium 226	*25.23*	*0.93*	*0.39*	*8/24/17 3:31 PM*	*KP*	*First Count*	*EPA 903.0*
Radium 228	*6.85*	*0.61*	*0.44*	*8/29/17 2:15 PM*	*KP*	*First Count*	*EPA 904*

* All analysis met quality control acceptance criteria unless otherwise specified.

* Listed activity by EPA 903.0 represents total alpha radium.

Report Date	**Report Revision**	**Revision Comments**
08/31/2017	R0	Initial Report

Kishor Paudel, Analyst

Kishor Paudel, **Laboratory Manager**

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Radiochemical Analysis Chain of Custody

EMSL Order Number (Lab Use Only): 78170—

RECEIVED
EMSL
CINNAMINSON, N.J.
2017 AUG 21 A 10:51

Contact Name: Steven Muller	**Bill To Company:** JC Broderick & Associates, Inc.	**Sampled By (Sign):**
Company Name: JC Broderick & Assocaites, Inc.	**Attention To:** Steven Muller	**Sampled By (Name):** Steven Muller
Address: 1775 Express Drive North	**Address:** 1775 Express Drive North	**Total # of Samples:** 3
City: Hauppauge **State:** NY **Zip Code:** 11788	**City:** Hauppauge **State:** NY **Zip Code:** 11788	**Date of Shipping:** 8-18-17
Telephone #: 631-584-5492 **Fax :** 631-584-3395	**Telephone #:** 631-584-5492 **Fax :** 631-584-3395	**Sample State/ Zip Code:** NY/1111714
Email: SMuller@JCBroderick.com	**Project Name:** Central Blvd Elementart School	**Purchase Order:**

Turn Around Time: ☐ 4 weeks (Standard) **Client Specific:** ☐ 48 Hours ☐ 96 Hours ☐ 1 week ☒ 2 weeks ☐ 3 Weeks

Field Use - All Information Required!					Analytes													
					Gross Alpha													
Client Sample ID	Lab ID (For Lab Use only)	Matrix	Size (mL, g)	Date/Time	NJ 48 Hrs	EPA 900	Gross Beta	Ra-228	Ra-226	Total Uranium	Gamma Emitters	*Actinides (U, Th, Pu, Am)*	Sr-89, Sr-90	I-131	Radon	Tritium	Tc-99	Note
2733 MW-1		GW	1,000 mL	8-18-17/12:15 pm				X	X									
2734 MW-2		GW	1,000 mL	8-18-17/12:50 pm				X	X									
2735 MW-3		GW	1,000 mL	8-18-17/1:30 pm				X	X									

Report Requirement*: ☐ Level One ☒ Level Two ☐ Level Three

Relinquished by:	Date/ Time	Received by:	Date/Time		Note
	8/18/17 4:00pm	FX	8/21/17	@ 9:10AM	

*Level One =Results only; Level Two = Results and QC; Level Three = Results, QC, Logs, Worksheets, Printout/Spectrum and Calibrations

OrderID: 781702735

Page 1 Of 2