October 21, 2014

Syed H. Rahman, P.E.
Regional Solid & Hazardous Materials Engineer
NYS Department of Environmental Conservation
Region 1
50 Circle Road
Stony Brook, NY 11790-3409

Re: Transmittal of: Groundwater Monitoring Well Installation and Monitoring Report For the Town of Islip Roberto Clemente Park

Dear Mr. Rahman:

Transmitted herewith, please find a copy of the above-referenced *Groundwater Monitoring Well Installation and Monitoring Report*, for the Town's Roberto Clemente Park; prepared by the Town's Consultant, Enviroscience Consultants, Inc.

As you are aware, the installation and sampling of the Wells was required by the NYSDEC, prior to the commencement of remedial activities at the Roberto Clemente Park. We are available to discuss your comments regarding same at your earliest convenience.

Very truly yours:

Eric M. Hofmeister Deputy Supervisor

Inez Birbiglia

Deputy Commissioner

EMH:clb

cc:

File

#### **ENVIROSCIENCE CONSULTANTS, INC.**

#### ENVIRONMENTAL, ASBESTOS & LEAD CONSULTANTS 2150 SMITHTOWN AVENUE, SUITE 3, RONKONKOMA, NY 11779 PHONE 631.580.3191 FAX 631.580.3195

October 16, 2014

Mr. Syed Rahman, P.E. NYSDEC Division of Materials Management 50 Circle Road Stony Brook, NY 11790-3409

**Re:** Roberto Clemente Town Park

400 Broadway, Brentwood, NY 11717

Dear Mr. Rahman:

#### Introduction

On behalf of our client, the Town of Islip ("Town"), Enviroscience Consultants, Inc. is providing this Groundwater Monitoring Well Installation and Monitoring Report for the above-referenced site. The installation and sampling of these wells was required by the New York State Department of Environmental Conservation ("NYSDEC") prior to any remedial activities of contaminated fill that was illegally disposed on the former soccer field and in the recharge basin.

Figure 1 shows the site's location, and Figure 2 shows the general site layout, including the locations of the groundwater monitoring wells.

#### Methods

#### Well Locations

The groundwater monitoring wells were installed at the site to establish baseline groundwater conditions and to evaluate whether there may be significant impacts to the groundwater beneath the site and its immediate vicinity from the illegal dumping of contaminated fill. The groundwater monitoring wells were installed using a subcontracted drilling company with oversight by Enviroscience personnel. NYSDEC personnel were present during the installation and sampling of the wells.

Two of the wells (MW-2 and MW-3) were installed as downgradient wells, and one well (MW-1) was installed as an upgradient well. The wells were installed in their proposed locations based on an estimated regional groundwater flow direction of southeast, which was obtained from our interpretation of the Suffolk County Department of Health Services ("SCDHS") Water Table Contours Map (March 2002). The subsequent surveying of the wells' relative elevations, determination of relative groundwater elevations, and calculation of the site-specific groundwater flow direction were consistent with the estimated regional groundwater flow direction. Table 1 shows the relative

groundwater elevation measurements. The site-specific groundwater flow direction was determined to be towards the southeast, which is shown in Figure 2.

The upgradient well (MW-1) was installed in a location that is sufficiently north of the impacted areas such that it's unlikely to be adversely affected by the contaminated fill.

For the downgradient wells, one well was installed on a grassy parking lot island, immediately southeast of the former soccer fields (MW-2). This location was selected since its downgradient of the former soccer fields and it would identify possible adverse impacts to groundwater earlier than a groundwater monitoring well further downgradient.

The second of the downgradient wells was installed immediately south of the impacted portion of the recharge basin (MW-3). This well was installed in the only reasonably accessible general location for a drill rig, which is downgradient of the recharge basin.

#### Well Construction

Prior to the installation of the groundwater monitoring wells, the one-call utility markout service was contacted to request identification of subsurface utilities in the drilling locations. Information regarding the presence and locations of subsurface utilities was also requested from the Town. At each groundwater monitoring well installation location, manual techniques, including the use of a post-hole digger and a hand auger, were used to hand-clear the locations to a depth of five feet.

For the well installation, a hollow-stem auger drill rig utilized 4.25-inch diameter augers to a total boring depth of approximately 31 feet for wells MW-1 and MW-2 and approximately 23 feet for well MW-3. Prior to well drilling, the equipment was decontaminated using a non-phosphate soap/potable wash with a potable water rinse. A copy of the well installation logs is provided in Attachment A.

During the well installations, the soil cuttings were continuously characterized for composition and texture, along with field screening for indications of impacted soil by using visual methods and a photo-ionization detector (PID). Based on this screening, there were no indications of impacted soil. Therefore, no soil samples for laboratory analysis were performed during well installations.

The borings were completed as two-inch diameter Schedule 40 PVC groundwater monitoring wells that were screened with 10 feet of 2-inch diameter Schedule 40 PVC flush joint #20 slot screen. The wells were gravel-packed from one foot below the maximum depth of the screen to three feet above the maximum height of the screen with a number 2 graded gravel set. A two-foot thick bentonite seal was installed, which consisted of two pounds of bentonite per gallon of water. The wells were backfilled from the bentonite-seal to grade with drill cuttings that contain no indications of impacted soil, and the groundwater monitoring wells were finished at grade with a 6-inch thick concrete pad, locking caps, locks that are keyed alike, and 8-inch diameter manholes. Upon completion of the wells, five 55-gallon drums of drill cuttings were generated, which will be properly disposed.

#### Well Development & Surveying

Subsequent to installation, the total depth of the wells and their depth-to-water levels were measured using a Solinst water level indicator. All equipment that was placed down the wells was decontaminated before their use. Pumping groundwater from the wells developed the wells, and the groundwater was discharged to the ground surface.

The development of the three wells was performed by Enviroscience personnel using a Grundfos variable-speed RediFlow 2 submersible pump, and the following parameters were measured using real-time instruments: temperature; pH; conductivity; and turbidity.

The development of the wells was considered complete when there is a 10% or less difference in two consecutive parameter measurements, along with turbidity readings of less than 50 nephelometric turbidity units (NTUs). After their development, the groundwater monitoring wells were surveyed for location and relative elevation in order to calculate the site-specific groundwater flow direction based on water level measurements that were obtained during the groundwater sampling event.

#### Groundwater Sampling

After the development of the wells, the three groundwater monitoring wells were purged and sampled. All equipment that was placed down the wells was decontaminated before their use. Prior to purging, the depths to groundwater in the wells were measured using a water level indicator.

During well purging, standard parameters (temperature, pH, conductivity, and turbidity) were measured after each casing volume using real-time field-measuring equipment. The purge water was discharged to the ground surface. The groundwater from each well was sampled after five casing volumes was purged from each well.

All of the groundwater samples for laboratory analysis were obtained using dedicated polyethylene bailers, collected in laboratory-supplied containers, preserved properly, placed in an ice-filled cooler, and transported to York Analytical Laboratories, Inc., which is a National Environmental Laboratory Approval Program (NEVLAP)-accredited laboratory, New York Certification No. 10854. The samples were analyzed for NYSDEC Part 375 parameters, which include volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), pesticides, and an herbicide. Also, chain-of-custody forms were completed to document the sequence of sample possession.

#### Results & Discussion

Table 2 summarizes the detected compounds and metals from the groundwater monitoring event. A copy of the laboratory reports is provided in Attachment B.

The results show that there were no detected levels of compounds or metals except for the following: in the upgradient well MW-1 groundwater sample, the pesticides dieldrin and alpha-chlordane, along with the metals barium, manganese, and zinc; in the MW-2

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groundwater sample, the SVOC naphthalene, along with the metals barium, copper, lead, manganese and zinc; and in the MW-3 groundwater sample, the VOC chloroform, and the SVOCs naphthalene and phenanthrene, along with the metals barium, copper, lead, manganese, and zinc.

The groundwater results were compared to the NYSDEC Class GA Ambient Water Quality Standards (Groundwater Standards), which is also shown in Table 2. The comparison shows that there are no exceedances of the NYSDEC Groundwater Standards except for dieldrin in the groundwater sample from the upgradient well (MW-1), which indicates its presence is not from the contaminated fill at the site, and manganese in downgradient well MW-3, which slightly exceeds its NYSDEC Groundwater Standard.

#### Conclusions & Recommendations

Based on the groundwater monitoring results, no significant impacts to the groundwater from the illegal disposal of contaminated fill at the site were identified at this time. Consequently, it's recommended that an additional round of groundwater monitoring should be performed immediately following the completion of remedial activities.

If there are any questions, please contact me.

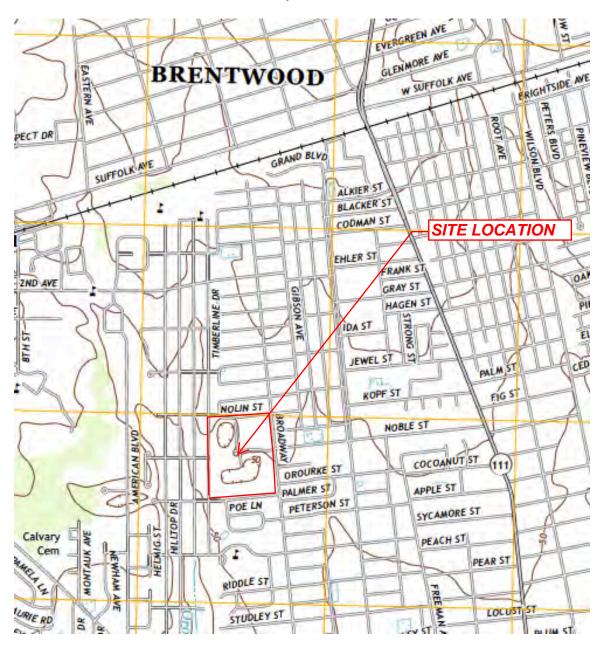
Very truly yours,

Greg Menegio

Greg Menegio

Department Manager/Sr. Scientist

Figure 1 Site Location Roberto Town Clemente Park 400 Broadway, Brentwood, NY



Source: U.S. Geological Survey, 7.5-Minute Topographic Map, Central Islip, 2013



#### FIGURE 2 GENERAL SITE LAYOUT ROBERTO CLEMENTE TOWN PARK 400 BROADWAY, BRENTWOOD, NY



#### <u>NOTES</u>

- 1. MEASUREMENTS ARE IN ACCORDANCE WITH U.S. STANDARDS.
- 2. THE HORIZONTAL DATUM SHOWN ON THIS PLAN IS REFERENCED TO NYSPCS NAD 83 (2011) LI ZONE AND THE VERTICAL DATUM IS NAVD88 (GEOID12A), RTK GPS.
- UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
- ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S "EMBOSSED" OR "INKED" SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

I hereby certify that this map was made from an actual survey completed by me on 09/29/2014.

DANIEL P. JEDLICKA, P.L.S. NYSPLS No. 50098

SUFFOLK COUNTY REAL PROPERTY TAX MAP NO.:

DISTRICT 0500 **SECTION 185.00** BLOCK 01.00

073.000, 074.000, 097.000, LOTS

094.002 & 101.002

DATE	BY	DESCRIPTION	APPROV. BY							
		REVISIONS								
	<b>.</b>	Town of Islip Suffolk County, New York								
400 Broadway BRENTWOOD, NEW YORK										
			Monitoring Well Plan ROBERTO CLEMENTE PARK							
L. K. McLEAN ASSOCIATES, P.C. CONSULTING ENGINEERS & LAND SURVEYORS 437 SO. COUNTRY ROAD, BROOKHAVEN, NEW YORK										
		Surveyed By: K.G./R.W. Scale: 1"= 200'	Sheet No.							

K.G./B.W.

T.L.S

D.P.J.

Drawn By:

Approved By:

Scale:

File No.

1''= 200'

14073.000

DCTDBER 9 2014

# Table 1 Relative Groundwater Elevation Measurements Roberto Clemente Town Park 400 Broadway, Brentwood, NY

First Monitoring Event: September 30, 2014

Monitoring Well Number	MW-1	MW-2	MW-3					
Location	Upgradient	Soccer Fields	Recharge Basin					
Top of Casing	64.34	63.11	47.18					
Depth to Water	23.40	23.10	8.00					
Water Table Elevation	40.94	40.01	39.18					
Note:								
All measurements are provided as relative measurements recorded in feet.								

# Table 2 Summary of Groundwater Chemical Analytical Results Roberto Clemente Town Park 400 Broadway, Brentwood, NY

First Monitoring Event: September 30, 2014

Monitoring Well	D. (1) A / 1	B414/ 2	D414/ 2	NYSDEC Class GA Ambient						
Number	MW-1	MW-2	MW-3	Water Quality Standards						
Location	Upgradient	Soccer Fields	Recharge Basin	Water Quanty Standards						
Volatile Organic Compou	inds (VOCs) in micr	ograms per liter (ug	<u>/L)</u>							
Chloroform	ND	ND	0.22J	7						
Semi-Volatile Organic Compounds (SVOCs) in micrograms per liter (ug/L)										
Naphthalene	ND	0.0923	0.215	50						
Phenanthrene	ND	ND	0.0615	50						
Pesticides in micrograms	per liter (ug/L)									
Dieldrin	0.0205	ND	ND	0.004						
alpha-Chlordane	0.00699	ND	ND	0.05						
Metals in milligrams per	liter (mg/L)									
Barium	0.030	0.070	0.064	1						
Copper	ND	0.005	0.006	0.2						
Lead	ND	0.005	0.016	0.025						
Manganese	0.285	0.285	0.506	0.3						
Zinc	0.015	0.016	0.020	2						
Notes:										
Only detected compound	ls and metals are su	ımmarized in this ta	ble							
ND: Not Detected				400000000000000000000000000000000000000						
J: Estimated Concentrati	on									
Bold value indicates an e	xceedence of the N	YSDEC Class GA Am	bient Water Qualit	y Standards						

## ATTACHMENT A Well Installation Logs

**Project:** Robert Clemente Park **Notes:** 400 Broadway, Brentwood, NY No soil samples were collected during well installation. Well No: MW-1 Total Depth: 32 ft **Screen Dia:** 2 in 10 ft **Slot Size:** 0.20 Length: No visible signs of contamination were **Drilling Method:** Hollow Stem Auger **Driller:** Depth to water is 23.5 ft Land, Air, Water Environmental Services **Drill Date:** 9/24/14 Log By: Loddengaard PID **Graphic** Depth Well **Description/Soil Classification** (Feet) (reported in Feet Below Grade) (ppm) Construction Log -0-0 0-5': Hand Cleared SW-light brown very fine to -2coarse sand with some gravel -4-5-14': **Drill Cuttings** SW-light brown very fine to -6coarse sand with some gravel 0 -8-14-16': Spilt Spoon -10-SW-light brown very fine to coarse sand with some gravel -12-16-18': Spilt Spoon -14-SW-light brown very fine to 0 coarse sand with some gravel -16-0 entonite 18-21': Spilt Spoon -18-SW-light brown very fine to -20-0 coarse sand with some gravel -22-21-24': Drill Cuttings Water Table SW-light brown very fine to -24-0 coarse sand with some gravel 2 well gravel -26-24-26': Spilt Spoon -28-SW-light brown very fine to 0 coarse sand with some gravel -30-26-32': Drill Cuttings -32-SW-light brown very fine to -34coarse sand with some gravel -36-Well Structure 0-21 Riser -38-21-31' Screen Backfill 0-16' -40-16-18' Bentonite 18-31' Well Gravel

**Project:** Robert Clemente Park **Notes:** 400 Broadway, Brentwood, NY No soil samples were collected during well installation. Well No: *MW-2* **Total Depth:** 31 ft 10 ft **Screen Dia:** 2 in Length: **Slot Size:** 0.20 No visible signs of contamination were **Drilling Method:** Hollow Stem Auger Depth to water is 23.5 ft **Driller:** Land, Air, Water Environmental Services **Drill Date:** 9/24/14 Log By: Loddengaard Depth PID Well **Graphic Description/Soil Classification** (Feet) (reported in Feet Below Grade) (ppm) Construction Log -0-0 0-5': Hand Cleared SW-light brown very fine to -2coarse sand with some gravel -4-5-24': **Drill Cuttings** SW-light brown very fine to -6coarse sand with some gravel 0 -8-24-26': Spilt Spoon -10-SW-light brown very fine to coarse sand with some gravel -12-26-32': Drill Cuttings -14-SW-light brown very fine to 0 coarse sand with some gravel -16-0 Well Structure -18-0-21' Riser -20-0 21-31' Screen Backfill 0-16' -22-Bentonite 16-18' Water Table 18-31' Well Gravel -24-0 2 well grave -26--28-0 -30--32--34--36--38--40**Project:** Robert Clemente Park **Notes:** 400 Broadway, Brentwood, NY No soil samples were collected during well installation. Well No: *MW-3* **Total Depth:** 16 ft 10 ft **Screen Dia:** 2 in Length: **Slot Size:** 0.20 No visible signs of contamination were **Drilling Method:** Hollow Stem Auger Depth to water is 8.00 ft **Driller:** Land, Air, Water Environmental Services **Drill Date:** 9/26/14 Log By: Loddengaard Depth PID Well **Graphic Description/Soil Classification** (Feet) (reported in Feet Below Grade) (ppm) Construction Log -0-0 Hand Cleared 0-5': SW-light brown very fine to -2coarse sand with some gravel -4-5-9': **Drill Cuttings** SW-light brown very fine to -6coarse sand with some gravel Water Table 0 -8-9-11': Spilt Spoon 2 well grave -10-SW-light brown very fine to coarse sand with some gravel -12-11-17': Drill Cuttings -14-SW-light brown very fine to 0 1.1.**.**♥1.1.1.1.1 coarse sand with some gravel -16-0 Well Structure -18-0-6' Riser -20-0 Screen 16-6' 0-2' Backfill -22-4-2' Bentonite 16-4' Well Gravel -24-0 -26--28-0 -30--32--34--36--38--40ATTACHMENT B Laboratory Reports



## **Technical Report**

prepared for:

#### **Enviroscience Consultants, Inc.**

2150 Smithtown Avenue Ronkonkoma NY, 11779 **Attention: Greg Menegio** 

Report Date: 10/01/2014

Client Project ID: 400 Broadway York Project (SDG) No.: 14J0006

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

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Report Date: 10/01/2014 Client Project ID: 400 Broadway York Project (SDG) No.: 14J0006

#### **Enviroscience Consultants, Inc.**

2150 Smithtown Avenue Ronkonkoma NY, 11779 Attention: Greg Menegio

#### **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 October 01, 2014 and listed below. The project was identified as your project: 400 Broadway.

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

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

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

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

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

York Sample ID	Client Sample ID	<u>Matrix</u>	<b>Date Collected</b>	<b>Date Received</b>
14J0006-01	MW-1	Water	09/30/2014	10/01/2014
14J0006-02	MW-2	Water	09/30/2014	10/01/2014
14J0006-03	MW-3	Water	09/30/2014	10/01/2014

#### General Notes for York Project (SDG) No.: 14J0006

- 1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
- 2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
- 3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
- This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
   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:

Date: 10/01/2014

Benjamin Gulizia Laboratory Director





Client Sample ID: MW-1 York Sample ID: 14J0006-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14J0006400 BroadwayWaterSeptember 30, 2014 11:00 am10/01/2014

<u>Chromium, Hexavalent</u> <u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: Analysis Preparation

	Reported to						Date/Time	Date/Time			
CAS N	o. Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference Method	Prepared	Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/L	0.0100	0.0100	1	EPA 7196A	10/01/2014 10:46	10/01/2014 10:55	SC

**Sample Information** 

Client Sample ID: MW-2 York Sample ID: 14J0006-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14J0006400 BroadwayWaterSeptember 30, 2014 12:15 pm10/01/2014

<u>Chromium, Hexavalent</u> <u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: Analysis Preparation

CAS No	o. Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/L	0.0100	0.0100	1	EPA 7196A	10/01/2014 10:46	10/01/2014 10:55	SC

#### **Sample Information**

Client Sample ID: MW-3 York Sample ID: 14J0006-03

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14J0006400 BroadwayWaterSeptember 30, 2014 2:00 pm10/01/2014

<u>Chromium, Hexavalent</u> <u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: Analysis Preparation

CAS No	o. Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/L	0.0100	0.0100	1	EPA 7196A	10/01/2014 10:46	10/01/2014 10:55	SC

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#### **Analytical Batch Summary**

Batch ID: BJ40018	Preparation Method:	Analysis Preparation	Prepared By:	SC
YORK Sample ID	Client Sample ID	Preparation Date		
14J0006-01	MW-1	10/01/14		
14J0006-02	MW-2	10/01/14		
14J0006-03	MW-3	10/01/14		
BJ40018-BLK1	Blank	10/01/14		
BJ40018-BS1	LCS	10/01/14		
BJ40018-DUP1	Duplicate	10/01/14		
BJ40018-MS1	Matrix Spike	10/01/14		



#### Wet Chemistry Parameters - Quality Control Data York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BJ40018 - Analysis Preparation	1										
Blank (BJ40018-BLK1)								ared & Anal	yzed: 10/01/2	2014	
Chromium, Hexavalent	ND	0.0100	mg/L								
LCS (BJ40018-BS1)							Prepa	ared & Anal	yzed: 10/01/2	2014	
Chromium, Hexavalent	0.447	0.0100	mg/L	0.500		89.4	80-120				
Duplicate (BJ40018-DUP1)	*Source sample: 14.	J0006-01 (MV	W-1)				Prepa	ared & Anal	yzed: 10/01/2	2014	
Chromium, Hexavalent	ND	0.0100	mg/L		ND					20	
Matrix Spike (BJ40018-MS1)	*Source sample: 14J0006-01 (MW-1) Prepared &								yzed: 10/01/2	2014	
Chromium, Hexavalent	0.485	0.0100	mg/L	0.500	ND	97.0	75-125				



#### **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.

FAX (203) 357-0166

YORK ANALYTICAL LABORATORIES STRATFORD, CT 06615 120 RESEARCH DR.

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. 14) (DO(

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1	Summary Report Type Summary Report OA Summary	CT RCP Package CTRCP DQA/DUE Pkg NY ASP A Package NY ASP B Package	NJDEP Red. Deliv.	Simple Excel  NYSDEC EQUIS  EQUIS (std)  EZ-EDD (EQUIS)  NJDEP SRP HazSite EDD  GIS/KEY (std)  Other  York Regulatory Comparison  Excel Spreadsheat  Compare to the following Regas (please fill in):    Container    -250m/		Temperature on Receipt
	RUSH - Same Day Summa Summa RUSH - Next Day		NY W NJ Standard(5-7 Days)		- 74	MeOH         HNOs         H,SO         NaOH           P/36//H         Sanpples Received By         Date/Time
Invoice To: YOU	nce	Phone No.	dress:	SE S	The section of the se	4°C V Frozen HCI Asi
Report To:	Company: Sq me	Phone No. Sqm@	dress:	ed in and the turn-around time in and the turn-around time in and the turn-around time in questions by York are resolved.    Matrix Codes   S	The second of th	Check those Applicabl Special TE Instructions Field Filtered
YOUR Information	Company: Sqm & Address:	Phone No.	Cuar	Samples will not begin intil any questions by York are resolved.  Samples will not begin intil any questions by York are resolved.  Matrix Codes  Sample Collected/Authored By (Signature) Sample Collected/Authored By (Signature)  Name (printed)  Sample Identification  Date/Time Sampled  Authored  MW-Z    1215		Page 7 of



### **Technical Report**

prepared for:

#### **Enviroscience Consultants, Inc.**

2150 Smithtown Avenue Ronkonkoma NY, 11779

Attention: Kathryn Loddengaard

Report Date: 10/08/2014

Client Project ID: 400 Broadway York Project (SDG) No.: 14J0057

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

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Report Date: 10/08/2014 Client Project ID: 400 Broadway York Project (SDG) No.: 14J0057

#### **Enviroscience Consultants, Inc.**

2150 Smithtown Avenue Ronkonkoma NY, 11779

Attention: Kathryn Loddengaard

#### **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 October 01, 2014 and listed below. The project was identified as your project: 400 Broadway.

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

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

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

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

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

York Sample ID	Client Sample ID	<u>Matrix</u>	<b>Date Collected</b>	<b>Date Received</b>
14J0057-01	MW-1	Water	09/30/2014	10/01/2014
14J0057-02	MW-2	Water	09/30/2014	10/01/2014
14J0057-03	MW-3	Water	09/30/2014	10/01/2014
1				

#### General Notes for York Project (SDG) No.: 14J0057

- 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:

Der

Benjamin Gulizia Laboratory Director



Date:

10/08/2014



MW-1 **Client Sample ID:** 14J0057-01 York Sample ID:

Matrix York Project (SDG) No. Client Project ID Collection Date/Time Date Received Water September 30, 2014 11:00 am 10/01/2014 14J0057 400 Broadway

#### **Volatile Organics, NYSDEC Part 375 List**

**Log-in Notes:** 

Sample Notes:

Date/Time

Prepared

Date/Time

Analyzed

Analyst

Sample Prepared by Metho	d: EPA 5030B						
					Reported to		
CAS No.	Parameter	Result	Flag	Units	LOD/MDL LOQ	Dilution	Reference Method

0110111	, <u> </u>	resure	1105 0111				Ttererence micenou	ттерштеа		- many se
71-55-6	1,1,1-Trichloroethane	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
75-34-3	1,1-Dichloroethane	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
75-35-4	1,1-Dichloroethylene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
95-63-6	1,2,4-Trimethylbenzene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
95-50-1	1,2-Dichlorobenzene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
107-06-2	1,2-Dichloroethane	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
108-67-8	1,3,5-Trimethylbenzene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
541-73-1	1,3-Dichlorobenzene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
106-46-7	1,4-Dichlorobenzene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
123-91-1	1,4-Dioxane	ND	ug/L	40	80	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
78-93-3	2-Butanone	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
67-64-1	Acetone	ND	ug/L	1.0	2.0	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
71-43-2	Benzene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
56-23-5	Carbon tetrachloride	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
108-90-7	Chlorobenzene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
67-66-3	Chloroform	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
156-59-2	cis-1,2-Dichloroethylene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
100-41-4	Ethyl Benzene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
75-09-2	Methylene chloride	ND	ug/L	1.0	2.0	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
104-51-8	n-Butylbenzene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
103-65-1	n-Propylbenzene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
95-47-6	o-Xylene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
179601-23-1	p- & m- Xylenes	ND	ug/L	0.50	1.0	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
135-98-8	sec-Butylbenzene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
98-06-6	tert-Butylbenzene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
127-18-4	Tetrachloroethylene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
108-88-3	Toluene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
156-60-5	trans-1,2-Dichloroethylene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
79-01-6	Trichloroethylene	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
75-01-4	Vinyl Chloride	ND	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
1330-20-7	* Xylenes, Total	ND	ug/L	0.60	1.5	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:13	SS
	Surrogate Recoveries	Result		Acceptance I	Range					
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	107 %		69-130	)					
460-00-4	Surrogate: p-Bromofluorobenzene	99.6 %		79-122	!					
2037-26-5	Surrogate: Toluene-d8	93.9 %		81-117	,					

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Client Sample ID: MW-1 14J0057-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14J0057400 BroadwayWaterSeptember 30, 2014 11:00 am10/01/2014

#### Semi-Volatiles, NYSDEC Part 375 List

**Log-in Notes:** 

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
208-96-8	Acenaphthylene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
120-12-7	Anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
218-01-9	Chrysene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
132-64-9	Dibenzofuran	ND		ug/L	2.56	5.13	1	EPA 8270D	10/03/2014 08:03	10/03/2014 19:40	KH
206-44-0	Fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
86-73-7	Fluorene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
118-74-1	Hexachlorobenzene	ND		ug/L	0.0205	0.0205	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
95-48-7	2-Methylphenol	ND		ug/L	2.56	5.13	1	EPA 8270D	10/03/2014 08:03	10/03/2014 19:40	KH
65794-96-9	3- & 4-Methylphenols	ND		ug/L	2.56	5.13	1	EPA 8270D	10/03/2014 08:03	10/03/2014 19:40	KH
91-20-3	Naphthalene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
87-86-5	Pentachlorophenol	ND		ug/L	0.256	0.256	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
85-01-8	Phenanthrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
108-95-2	Phenol	ND		ug/L	2.56	5.13	1	EPA 8270D	10/03/2014 08:03	10/03/2014 19:40	KH
129-00-0	Pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:21	KH
	Surrogate Recoveries	Result		Acc	eptance Ran	ge					
367-12-4	Surrogate: 2-Fluorophenol	20.0 %			10-53						
4165-62-2	Surrogate: Phenol-d5	12.4 %			10-39						
4165-60-0	Surrogate: Nitrobenzene-d5	76.3 %			10-120						
321-60-8	Surrogate: 2-Fluorobiphenyl	54.5 %			10-108						
118-79-6	Surrogate: 2,4,6-Tribromophenol	58.3 %			10-150						
1718-51-0	Surrogate: Terphenyl-d14	55.0 %			10-143						

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Client Sample ID: MW-1 York Sample ID: 14J0057-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14J0057400 BroadwayWaterSeptember 30, 2014 11:00 am10/01/2014

#### Pesticides, NYSDEC Part 375 Target List

**Log-in Notes:** 

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No	o. Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
72-55-9	4,4'-DDE	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
50-29-3	4,4'-DDT	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
309-00-2	Aldrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
319-84-6	alpha-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
319-85-7	beta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
319-86-8	delta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
60-57-1	Dieldrin	0.0205		ug/L	0.00205	0.00205	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
959-98-8	Endosulfan I	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
33213-65-9	Endosulfan II	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
72-20-8	Endrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
76-44-8	Heptachlor	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
5103-71-9	alpha-Chlordane	0.00699		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:26	JW
	Surrogate Recoveries	Result		Acc	eptance Ran	ge					
2051-24-3	Surrogate: Decachlorobiphenyl	36.9 %			30-120						
877-09-8	Surrogate: Tetrachloro-m-xylene	76.5 %			30-120						

#### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA SW846-3510C Low Level

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

CAS No	o. Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:36	AMC
11104-28-2	Aroclor 1221	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:36	AMC
11141-16-5	Aroclor 1232	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:36	AMC
53469-21-9	Aroclor 1242	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:36	AMC
12672-29-6	Aroclor 1248	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:36	AMC
11097-69-1	Aroclor 1254	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:36	AMC
11096-82-5	Aroclor 1260	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:36	AMC
1336-36-3	* Total PCBs	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:36	AMC
	Surrogate Recoveries	Result		Acc	eptance Ran	ge					
877-09-8	Surrogate: Tetrachloro-m-xylene	74.0 %			30-120						
2051-24-3	Surrogate: Decachlorobiphenyl	56.0 %			30-120						

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**Client Sample ID:** MW-1 **York Sample ID:** 14J0057-01

Client Project ID Date Received York Project (SDG) No. Matrix Collection Date/Time 14J0057 400 Broadway Water September 30, 2014 11:00 am 10/01/2014

Herbicides, NYSDEC Part 375 Target List

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

Sample Prepared by Method: EPA 3535A

						Reported t			Date/Time	Date/Time	
CAS No	. Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference Method	Prepared	Analyzed	Analyst
93-72-1	2,4,5-TP (Silvex)	ND		ug/L	5.00	5.00	1	EPA 8151A m	10/06/2014 13:45	10/07/2014 14:56	JW
	Surrogate Recoveries	Result		Acc	eptance Ran	ge					
19719-28-9	Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	131 %			30-150						

**Log-in Notes:** 

#### Metals, NYSDEC Part 375

Sample Prepared by Method: EPA 3010A

LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/ Ana

**Sample Notes:** 

CAS N	o. Paramet	er Result	Flag Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND	mg/L	0.004	0.004	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:31	MW
7440-39-3	Barium	0.030	mg/L	0.010	0.010	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:31	MW
7440-41-7	Beryllium	ND	mg/L	0.001	0.001	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:31	MW
7440-43-9	Cadmium	ND	mg/L	0.003	0.003	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:31	MW
7440-47-3	Chromium	ND	mg/L	0.005	0.005	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:31	MW
7440-50-8	Copper	ND	mg/L	0.003	0.003	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:31	MW
7439-92-1	Lead	ND	mg/L	0.003	0.003	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:31	MW
7439-96-5	Manganese	0.285	mg/L	0.005	0.005	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:31	MW
7440-02-0	Nickel	ND	mg/L	0.005	0.005	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:31	MW
7782-49-2	Selenium	ND	mg/L	0.010	0.010	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:31	MW
7440-22-4	Silver	ND	mg/L	0.005	0.005	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:31	MW
7440-66-6	Zinc	0.015	mg/L	0.010	0.010	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:31	MW

#### **Log-in Notes: Sample Notes:** Mercury by 7473

Sample Prepared by Method: EPA 7473 water

							Reported to			Date/Time	Date/Time	
CAS N	0.	Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference Method	Prepared	Analyzed	Analyst
7439-97-6	Mercury		ND		mg/L	0.00020	0.00020	1	EPA 7473	10/06/2014 13:43	10/06/2014 18:37	ALD

#### **Log-in Notes: Sample Notes:** Chromium, Trivalent

Sample Prepared by Method: \*\*\* DEFAULT PREP \*\*\*

CAS No	o. Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	* Chromium, Trivalent	ND		mg/L	0.00800	0.0100	1	Calculation	10/08/2014 15:57	10/08/2014 16:00	SC

#### **Log-in Notes: Sample Notes:** Cyanide, Total

Sample Prepared by Method: Analysis Preparation

							Reported to			Date/Time	Date/Time	
CAS N	0.	Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference Method	Prepared	Analyzed	Analyst
57-12-5	Cyanide, total		ND		mg/L	0.0100	0.0100	1	SM 4500 CN C/E	10/07/2014 09:03	10/07/2014 14:52	AD

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Client Sample ID: MW-1 York Sample ID: 14J0057-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14J0057400 BroadwayWaterSeptember 30, 2014 11:00 am10/01/2014

**Sample Information** 

Client Sample ID: MW-2 York Sample ID: 14J0057-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14J0057400 BroadwayWaterSeptember 30, 2014 12:15 pm10/01/2014

#### **Volatile Organics, NYSDEC Part 375 List**

Sample Prepared by Method: EPA 5030B

**Log-in Notes:** 

**Sample Notes:** 

Reported to Date/Time Date/Time Dilution LOD/MDL CAS No. Parameter Result Flag Units LOO Reference Method Prepared Analyzed Analyst 0.20 0.50 10/07/2014 06:45 71-55-6 ug/L EPA 82600 10/06/2014 16:55 1,1,1-Trichloroethane ND SS EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 75-34-3 1.1-Dichloroethane ND ug/L 0.20 0.50 SS 0.20 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 75-35-4 1,1-Dichloroethylene ND ug/L SS ug/L 0.20 0.50 1 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 95-63-6 1,2,4-Trimethylbenzene ND SS 95-50-1 1.2-Dichlorobenzene ND ug/L 0.20 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 107-06-2 0.20 0.50 1,2-Dichloroethane ND ug/L SS 108-67-8 1,3,5-Trimethylbenzene ND ug/L 0.20 0.50 1 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS 10/06/2014 16:55 0.50 EPA 8260C 10/07/2014 06:45 541-73-1 1,3-Dichlorobenzene ND ug/L 0.20 SS EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 106-46-7 1,4-Dichlorobenzene ND ug/L 0.20 0.50 SS 10/06/2014 16:55 10/07/2014 06:45 123-91-1 1,4-Dioxane ND ug/L 40 80 EPA 8260C SS 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 78-93-3 2-Butanone ND ug/L 0.20 SS 67-64-1 Acetone ND ug/L 1.0 2.0 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS 0.20 0.50 10/07/2014 06:45 71-43-2 Benzene ND ug/L EPA 8260C 10/06/2014 16:55 SS 10/06/2014 16:55 10/07/2014 06:45 56-23-5 Carbon tetrachloride ND ug/L 0.20 0.50 EPA 8260C SS 10/07/2014 06:45 108-90-7 Chlorobenzene ND ug/L 0.20 0.50 EPA 8260C 10/06/2014 16:55 SS 67-66-3 Chloroform ND ug/L 0.20 0.50 1 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS 156-59-2 cis-1,2-Dichloroethylene ND ug/L 0.20 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS 10/06/2014 16:55 100-41-4 Ethyl Benzene ND ug/L 0.20 0.50 EPA 8260C 10/07/2014 06:45 SS 1634-04-4 Methyl tert-butyl ether (MTBE) ug/L 0.20 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS ND 75-09-2 Methylene chloride ND ug/L 1.0 2.0 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS 104-51-8 n-Butylbenzene ug/L 0.20 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS ND 103-65-1 n-Propylbenzene ND ug/L 0.20 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS 95-47-6 ND ug/L 0.20 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS o-Xylene 179601-23-1 ug/L 0.50 1.0 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS p- & m- Xylenes ND 135-98-8 ug/L 0.20 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 sec-Butylbenzene ND SS 98-06-6 0.20 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS tert-Butylbenzene ND ug/L 127-18-4 0.20 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS Tetrachloroethylene ND ug/L 108-88-3 ug/L 0.20 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 Toluene ND SS 156-60-5 0.20 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 trans-1,2-Dichloroethylene ND ug/L SS 79-01-6 0.20 0.50 EPA 8260C 10/06/2014 16:55 10/07/2014 06:45 SS ND ug/L Trichloroethylene

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Client Sample ID: MW-2 York Sample ID: 14J0057-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14J0057400 BroadwayWaterSeptember 30, 2014 12:15 pm10/01/2014

#### **Volatile Organics, NYSDEC Part 375 List**

Sample Prepared by Method: EPA 5030B

#### **Log-in Notes:**

#### **Sample Notes:**

CAS No	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:45	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	10/06/2014 16:55	10/07/2014 06:45	SS
	Surrogate Recoveries	Result		Acc	eptance Ran	ge					
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	97.2 %			69-130						
460-00-4	Surrogate: p-Bromofluorobenzene	103 %			79-122						
2037-26-5	Surrogate: Toluene-d8	93.8 %			81-117						

#### Semi-Volatiles, NYSDEC Part 375 List

Sample Prepared by Method: EPA 3510C

Log-in Notes:	<b>Sample Notes:</b> EXT-EM
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CAS No.	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
3-32-9	Acenaphthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
08-96-8	Acenaphthylene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
20-12-7	Anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
6-55-3	Benzo(a)anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
0-32-8	Benzo(a)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
05-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
91-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
07-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
18-01-9	Chrysene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
3-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
32-64-9	Dibenzofuran	ND		ug/L	2.56	5.13	1	EPA 8270D	10/03/2014 08:03	10/03/2014 20:10	KH
06-44-0	Fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
6-73-7	Fluorene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
18-74-1	Hexachlorobenzene	ND		ug/L	0.0205	0.0205	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
93-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
5-48-7	2-Methylphenol	ND		ug/L	2.56	5.13	1	EPA 8270D	10/03/2014 08:03	10/03/2014 20:10	KH
5794-96-9	3- & 4-Methylphenols	ND		ug/L	2.56	5.13	1	EPA 8270D	10/03/2014 08:03	10/03/2014 20:10	KH
01-20-3	Naphthalene	0.0923		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
7-86-5	Pentachlorophenol	ND		ug/L	0.256	0.256	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
5-01-8	Phenanthrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
08-95-2	Phenol	ND		ug/L	2.56	5.13	1	EPA 8270D	10/03/2014 08:03	10/03/2014 20:10	KH
29-00-0	Pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/03/2014 16:53	KH
	Surrogate Recoveries	Result		Acc	eptance Ran	ge					
67-12-4	Surrogate: 2-Fluorophenol	19.9 %			10-53						
165-62-2	Surrogate: Phenol-d5	10.9 %			10-39						
165-60-0	Surrogate: Nitrobenzene-d5	64.9 %			10-120						
21-60-8	Surrogate: 2-Fluorobiphenyl	50.1 %			10-108						
18-79-6	Surrogate: 2,4,6-Tribromophenol	71.4 %			10-150						
400.1	DESEVDUR UDIVE	STDATEOR	ND 0T 00	045			(202) 225	4074	EVA (303) 3E.	7.0400	



Client Sample ID: MW-2 York Sample ID: 14J0057-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14J0057400 BroadwayWaterSeptember 30, 2014 12:15 pm10/01/2014

Semi-Volatiles, NYSDEC Part 375 List

Sample Prepared by Method: EPA 3510C

**Log-in Notes: Sample Notes: EXT-EM** 

					Reported to			Date/Time	Date/Time	
CAS No.	Parameter	Result	Flag	Units	LOD/MDL LOQ	Dilution	Reference Method	Prepared	Analyzed	Analyst

1718-51-0 Surrogate: Terphenyl-d14 74.1 % 10-143

#### Pesticides, NYSDEC Part 375 Target List

Sample Prepared by Method: EPA SW846-3510C Low Level

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

CAS No	o. Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
72-55-9	4,4'-DDE	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
50-29-3	4,4'-DDT	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
309-00-2	Aldrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
319-84-6	alpha-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
319-85-7	beta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
319-86-8	delta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
60-57-1	Dieldrin	ND		ug/L	0.00205	0.00205	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
959-98-8	Endosulfan I	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
33213-65-9	Endosulfan II	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
72-20-8	Endrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
76-44-8	Heptachlor	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
5103-71-9	alpha-Chlordane	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:41	JW
	Surrogate Recoveries	Result		Acc	eptance Ran	ge					
2051-24-3	Surrogate: Decachlorobiphenyl	25.6 %	GC-Su r	r	30-120						
877-09-8	Surrogate: Tetrachloro-m-xylene	64.6 %			30-120						

#### **Polychlorinated Biphenyls (PCB)**

Sample Prepared by Method: EPA SW846-3510C Low Level

Log-in Notes:	Sample	Notes

CAS N	To. Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:55	AMC
11104-28-2	Aroclor 1221	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:55	AMC
11141-16-5	Aroclor 1232	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:55	AMC
53469-21-9	Aroclor 1242	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:55	AMC
12672-29-6	Aroclor 1248	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:55	AMC
11097-69-1	Aroclor 1254	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:55	AMC
11096-82-5	Aroclor 1260	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:55	AMC
1336-36-3	* Total PCBs	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 04:55	AMC
	Surrogate Recoveries	Result		Acc	eptance Ran	ge					

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**Client Sample ID:** MW-2 York Sample ID: 14J0057-02

Client Project ID Date Received York Project (SDG) No. Matrix Collection Date/Time 14J0057 400 Broadway Water September 30, 2014 12:15 pm 10/01/2014

**Sample Notes:** 

Polychlorinated Biphenyls (PCB)

**Log-in Notes:** 

Sample Prepared by Method: EPA SW846-3510C Low Level

					Reported to	Date/Time	Date/Time			
CAS No	. Parameter	Result	Flag	Units	LOD/MDL LOQ	Dilution	Reference Method	Prepared	Analyzed	Analyst
877-09-8	Surrogate: Tetrachloro-m-xylene	61.0 %			30-120					
2051-24-3	Surrogate: Decachlorobiphenyl	39.5 %			30-120					

#### Herbicides, NYSDEC Part 375 Target List

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

Sample Prepared by Method: EPA 3535A

CAS No	o. Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference Method	Prepared	Date/Time Analyzed	Analyst
93-72-1	2,4,5-TP (Silvex)	ND		ug/L	5.00	5.00	1	EPA 8151A m	10/06/2014 13:45	10/07/2014 15:11	JW
	Surrogate Recoveries	Result		Acc	ceptance Ran	ge					
19719-28-9	Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	139 %			30-150						

#### Metals, NYSDEC Part 375

**Log-in Notes: Sample Notes:** Sample Prepared by Method: EPA 3010A

CAS No	o. Parameto	er Result	Flag Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND	mg/L	0.004	0.004	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:36	MW
7440-39-3	Barium	0.070	mg/L	0.010	0.010	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:36	MW
7440-41-7	Beryllium	ND	mg/L	0.001	0.001	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:36	MW
7440-43-9	Cadmium	ND	mg/L	0.003	0.003	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:36	MW
7440-47-3	Chromium	ND	mg/L	0.005	0.005	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:36	MW
7440-50-8	Copper	0.005	mg/L	0.003	0.003	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:36	MW
7439-92-1	Lead	0.005	mg/L	0.003	0.003	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:36	MW
7439-96-5	Manganese	0.285	mg/L	0.005	0.005	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:36	MW
7440-02-0	Nickel	ND	mg/L	0.005	0.005	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:36	MW
7782-49-2	Selenium	ND	mg/L	0.010	0.010	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:36	MW
7440-22-4	Silver	ND	mg/L	0.005	0.005	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:36	MW
7440-66-6	Zinc	0.016	mg/L	0.010	0.010	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:36	MW

#### **Log-in Notes:** Mercury by 7473 **Sample Notes:**

Sample Prepared by Method: EPA 7473 water

							Date/Time	Date/Time				
CAS	No.	Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference Method	Prepared	Analyzed	Analyst
7439-97-6	Mercury		ND		mg/L	0.00020	0.00020	1	EPA 7473	10/06/2014 13:43	10/06/2014 18:37	ALD

#### Chromium, Trivalent **Log-in Notes: Sample Notes:**

Sample Prepared by Method: \*\*\* DEFAULT PREP \*\*\*

					Reported to	Date/Time	Date/Time			
CAS No.	Parameter	Result	Flag	Units	LOD/MDL LOQ	Dilution	Reference Method	Prepared	Analyzed	Analyst

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**Client Sample ID:** MW-2 York Sample ID: 14J0057-02

Client Project ID Date Received York Project (SDG) No. Matrix Collection Date/Time 14J0057 400 Broadway Water September 30, 2014 12:15 pm 10/01/2014

**Log-in Notes: Sample Notes:** Chromium, Trivalent

Sample Prepared by Method: \*\*\* DEFAULT PREP \*\*\*

Reported to Date/Time Date/Time Dilution CAS No. Parameter Result Flag Units LOD/MDL LOQ Reference Method Prepared Analyzed Analyst 16065-83-1 0.00800 10/08/2014 15:57 10/08/2014 16:00 \* Chromium, Trivalent ND mg/L 0.0100 Calculation SC

**Log-in Notes: Sample Notes:** Cyanide, Total

Sample Prepared by Method: Analysis Preparation

Date/Time Reported to Date/Time Dilution LOD/MDL CAS No. Parameter Result Flag Units LOQ Reference Method Prepared Analyzed Analyst 57-12-5 0.0100 SM 4500 CN C/E 10/07/2014 09:03 10/07/2014 14:52 ND mg/L 0.0100 AD Cyanide, total

**Sample Information** 

**Client Sample ID:** MW-3 York Sample ID: 14J0057-03

Client Project ID Date Received York Project (SDG) No. Matrix Collection Date/Time 14J0057 400 Broadway Water September 30, 2014 2:00 pm 10/01/2014

**Volatile Organics, NYSDEC Part 375 List** 

**Log-in Notes: Sample Notes:** Sample Prepared by Method: EPA 5030B

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	80	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
67-66-3	Chloroform	0.22	J	ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS

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Client Sample ID: MW-3 York Sample ID: 14J0057-03

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14J0057400 BroadwayWaterSeptember 30, 2014 2:00 pm10/01/2014

#### **Volatile Organics, NYSDEC Part 375 List**

Sample Prepared by Method: EPA 5030B

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

CAS No.	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	10/06/2014 16:55	10/07/2014 07:18	SS
	Surrogate Recoveries	Result		Acc	eptance Ran	ge					
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	106 %			69-130						
460-00-4	Surrogate: p-Bromofluorobenzene	97.4 %			79-122						
2037-26-5	Surrogate: Toluene-d8	93.1 %			81-117						

#### Semi-Volatiles, NYSDEC Part 375 List

Sample Prepared by Method: EPA 3510C

**Log-in Notes: Sample Notes: EXT-EM** 

Sample Freparec	Toy Method. EFA 3310C										
CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
208-96-8	Acenaphthylene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
120-12-7	Anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
218-01-9	Chrysene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
132-64-9	Dibenzofuran	ND		ug/L	2.56	5.13	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	SR
206-44-0	Fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
86-73-7	Fluorene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
118-74-1	Hexachlorobenzene	ND		ug/L	0.0205	0.0205	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
95-48-7	2-Methylphenol	ND		ug/L	2.56	5.13	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	2.56	5.13	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	SR



Client Sample ID: MW-3 York Sample ID: 14J0057-03

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14J0057400 BroadwayWaterSeptember 30, 2014 2:00 pm10/01/2014

Semi-Volatiles, NYSDEC Part 375 List

Sample Prepared by Method: EPA 3510C

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	α in	Notes	•
- 1	12-III	10162	

Sample Notes: EXT-EM

CAS No.	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-20-3	Naphthalene	0.215		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
87-86-5	Pentachlorophenol	ND	ug/L		0.256	0.256	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
85-01-8	Phenanthrene	0.0615	ug/L		0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
108-95-2	Phenol	ND		ug/L	2.56	5.13	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	SR
129-00-0	Pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	10/03/2014 08:03	10/06/2014 10:10	KH
	Surrogate Recoveries	Result		Acc	eptance Ran	ge					
367-12-4	Surrogate: 2-Fluorophenol	19.1 %			10-53						
4165-62-2	Surrogate: Phenol-d5	11.8 %			10-39						
4165-60-0	Surrogate: Nitrobenzene-d5	43.3 %			10-120						
321-60-8	Surrogate: 2-Fluorobiphenyl	52.3 %			10-108						
118-79-6	Surrogate: 2,4,6-Tribromophenol	52.3 %			10-150						
1718-51-0	Surrogate: Terphenyl-d14	61.7 %			10-143						

#### Pesticides, NYSDEC Part 375 Target List

Sample Prepared by Method: EPA SW846-3510C Low Level

<b>Log-in Notes:</b>	Sample Notes:
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CAS No	o. Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
72-55-9	4,4'-DDE	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
50-29-3	4,4'-DDT	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
309-00-2	Aldrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
319-84-6	alpha-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
319-85-7	beta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
319-86-8	delta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
60-57-1	Dieldrin	ND		ug/L	0.00205	0.00205	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
959-98-8	Endosulfan I	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
33213-65-9	Endosulfan II	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
72-20-8	Endrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
76-44-8	Heptachlor	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
5103-71-9	alpha-Chlordane	ND		ug/L	0.00410	0.00410	1	EPA 8081B	10/03/2014 08:26	10/06/2014 11:56	JW
	Surrogate Recoveries	Result		Acc	eptance Ran	ge					
2051-24-3	Surrogate: Decachlorobiphenyl	27.0 %	GC-Sur	r	30-120						
877-09-8	Surrogate: Tetrachloro-m-xylene	54.8 %			30-120						

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Client Sample ID: MW-3 York Sample ID: 14J0057-03

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 14J0057 September 30, 2014 2:00 pm 10/01/2014 400 Broadway Water

Polychlorinated Biphenyls (PCB)

**Log-in Notes:** 

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS N	o. Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 05:14	AMC
11104-28-2	Aroclor 1221	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 05:14	AMC
11141-16-5	Aroclor 1232	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 05:14	AMC
53469-21-9	Aroclor 1242	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 05:14	AMC
12672-29-6	Aroclor 1248	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 05:14	AMC
11097-69-1	Aroclor 1254	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 05:14	AMC
11096-82-5	Aroclor 1260	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 05:14	AMC
1336-36-3	* Total PCBs	ND		ug/L	0.0513	0.0513	1	EPA 8082A	10/03/2014 08:26	10/07/2014 05:14	AMC
	Surrogate Recoveries	Result		Acc	eptance Ran	ge					
877-09-8	Surrogate: Tetrachloro-m-xylene	48.5 %			30-120						
2051-24-3	Surrogate: Decachlorobiphenyl	36.5 %			30-120						

#### Herbicides, NYSDEC Part 375 Target List

**Log-in Notes:** 

**Sample Notes:** 

Sample Prepar	Sample Prepared by Method: EPA 3535A										
CACN				Reported to						Date/Time	
CAS N	lo. Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference Method	Prepared	Analyzed	Analyst
93-72-1	2,4,5-TP (Silvex)	ND		ug/L	5.00	5.00	1	EPA 8151A m	10/06/2014 13:45	10/07/2014 15:25	JW
	Surrogate Recoveries Result			Acc	eptance Ran	ge					

19719-28-9 Surrogate: 2,4-Dichlorophenylacetic 133 % 30-150

acid (DCAA)

**Log-in Notes:** 

**Sample Notes:** 

Metals, NYSDEC Part 375 Sample Prepared by Method: EPA 3010A

Sample 1 repai	red by Method. EFA 30	OTOA										
CAS N	lo.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic		ND		mg/L	0.004	0.004	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:41	MW
7440-39-3	Barium		0.064		mg/L	0.010	0.010	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:41	MW
7440-41-7	Beryllium		ND		mg/L	0.001	0.001	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:41	MW
7440-43-9	Cadmium		ND		mg/L	0.003	0.003	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:41	MW
7440-47-3	Chromium		ND		mg/L	0.005	0.005	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:41	MW
7440-50-8	Copper		0.006		mg/L	0.003	0.003	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:41	MW
7439-92-1	Lead		0.016		mg/L	0.003	0.003	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:41	MW
7439-96-5	Manganese		0.506		mg/L	0.005	0.005	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:41	MW
7440-02-0	Nickel		ND		mg/L	0.005	0.005	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:41	MW
7782-49-2	Selenium		ND		mg/L	0.010	0.010	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:41	MW
7440-22-4	Silver		ND		mg/L	0.005	0.005	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:41	MW
7440-66-6	Zinc		0.020		mg/L	0.010	0.010	1	EPA 6010C	10/03/2014 14:46	10/04/2014 01:41	MW

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**Client Sample ID:** MW-3 York Sample ID: 14J0057-03

Client Project ID Date Received York Project (SDG) No. Matrix Collection Date/Time 14J0057 400 Broadway Water September 30, 2014 2:00 pm 10/01/2014

**Log-in Notes: Sample Notes:** Mercury by 7473

Sample Prepared by Method: EPA 7473 water

Reported to Date/Time Date/Time Dilution LOD/MDL CAS No. Parameter Result Flag Units LOQ Reference Method Prepared Analyzed Analyst 10/06/2014 18:37 7439-97-6 0.00020 0.00020 EPA 7473 10/06/2014 13:43 ALD Mercury ND mg/L

**Log-in Notes: Sample Notes:** Chromium, Trivalent

Sample Prepared by Method: \*\*\* DEFAULT PREP \*\*\*

Date/Time Date/Time Reported to Dilution LOD/MDL Parameter Result Flag Units LOQ Reference Method Prepared Analyzed Analyst 16065-83-1 mg/L 0.00800 0.0100 Calculation 10/08/2014 15:57 10/08/2014 16:00 \* Chromium, Trivalent ND SC

**Log-in Notes: Sample Notes:** Cyanide, Total

Sample Frepa	ired by Method. Allary	sis r reparation										
				Reported to							Date/Time	
CAS N	No.	Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference Method	Prepared	Analyzed	Analyst
57-12-5	Cyanide, total		ND		mg/L	0.0100	0.0100	1	SM 4500 CN C/E	10/08/2014 07:59	10/08/2014 16:17	AD

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

Lab ID	Client Sample ID	Volatile Sample Container
14J0057-01	MW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
14J0057-02	MW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
14J0057-03	MW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



#### Notes and Definitions

	Notes and Definitions
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.
GC-Surr	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the alternate surrogate.
EXT-EM	The sample exhibited emulsion formation during the extraction process. This may affect surrogate recoveries.
В	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.
*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
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.



Corrective Action: Client submitted samples for Hexavalent Chromium separately via FED EX. Samples received 10/1/14 and logged under York WO 14J0006. Remaining sample parameters received via York courier on 10/1/14 PM.

YORK ANALYTICAL LABORATURIES STRATFORD, CT 06615 (ZO3) 325-1371 FAX (203) 357-0166 120 RESEARCH DR.

# Field Chain-of-Custody Record

Page

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. 14 Joo57

+ Report To: Invoice To: YOUR Project ID Turn-Around Time Report Type	Company: Same	Phone No.  Phone No.  Attention: Greg m enegic  Same  RUSH - Two Day  RUSH - Four Day	Less: Samples from: CT NY V NJ Standard(5-7 Days)	tion must be complete. See full TICs STOR 625 8082PCB RCRA8 TPH GRO Pri.Poll. Comosivity the turn-around time 624 SIE Spec. STARS list 8081Pest PP13 list TPH DRO TCL Ognis Reactivity S by York are resolved. STARS list Nassau Co. BN Only 8151Herb TAL CTETPH TAL MedCN Ignitability	BTEX         Suffolk Co.         Aceds Only         CT RCP         CT15 list         NY 310-13         Full TCLP           MTBE         Ketones         PAH list         App. IX         TAGM list         TPH 1664         Full App. IX           TCL list         CT RCP list         Site Spec.         NJDEP list         Air TO15         Pat 360-Back           CT RCP list         TCL list         TCL list         TCL Pest         Dissolved         Air TO15         Pat 360-Back           Arom. only         502.2         NJDEP list         TCL lest         Chlordane         Air NPH         Pat 360-Back           Halog.only         NJDEP list         App. IX         Chlordane         Infix.Metas         Air TICs           App.IX         IST Paper TCLP         TCL Back         LIST Below         Methane         NYSDECsever	rix Choose Analy	9/30/14 GW Full Part 375 List #-14th Born 3-40 ml	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
		1 1 2 9	3-Mail Address:	Information must be in and the turn-ar auestions by York ar	Marian Marian San Other Www. Signature) GW-DW-Air-A			\rightarrow \right		
YOUR Information		Person: Kathryn Hendeard	E-Mail Address:	Print Clearly and Legibly. All Samples will NOT be logged clock will not begin until any	Samples Collected/Authorized By Kathrym Lodd Name (printed)	Sample Identification Dz	MW-1	MW-1 MW-3		

FAX (203) 357-0166

YORK ANALYTIGAL LABORATORIES STRATFORD, CT 06615 (203) 325-137) 120 RESEARCH DR.

Field Chain-of-Custody Record

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York Project No. 14) COO(0