LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

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Joel B. Landes, P.E.
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Alan R. Poeppel, P.E.

Christopher Vitolano, P.E.

October 5, 2012

Mr. Douglas MacNeal
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Technical Support, 11th Floor
625 Broadway
Albany, NY 12233

RE: Site Management Plan Annual Review – August 2012
West 42nd Street – River Place I & II
West 41st – West 42nd Streets
New York, New York 110036
NYSDEC BCP Site No. C231012 & C231024
Langan Project No.: 170040901

Dear Mr. MacNeal:

This letter documents ongoing compliance with the July 2006 Site Management Plan (SMP) that was prepared in accordance with the New York State Brownfields Cleanup Program (BCP) for the River Place I & II properties (the "Site"). The Site is located between West 41st Street and West 42nd Street and 11th and 12th Avenues on the west side of Manhattan, New York. Construction activities have been completed at both portions of the Site (River Place I & II). The last review letter was submitted to you on August 2, 2011.

The following is an update on the status of the requirements of the SMP for the Site including: 1) institutional control/engineering controls (IC/EC) and 2) groundwater monitoring. The last round of indoor air sampling was conducted on December 22, 2011. According to correspondence between Mr. MacNeal of the New York State Department of Environmental Conservation (NYSDEC) and Langan dated August 31, 2011, indoor air sampling was discontinued after the December 2011 sampling event.

Institutional Control/Engineering Controls (IC/EC) Inspection

Institutional and engineering controls at the Site include a cover system, a vapor/water barrier and an environmental easement as described below. The signed and completed New York State Department of Environmental Conservation IC/EC Certification Form is provided as Attachment A.

Cover System – The site cover system includes the building foundation slabs, asphalt parking lots, concrete walkways, and top soil used in landscaped areas. The construction of the cover system is complete. Both building slabs and the park portion between the buildings were inspected by Langan on August 30, 2012 and were observed to be intact. Photographs of site cover are provided as Attachment B.

Inspection of Vapor/Water Barrier – The vapor/water barrier at River Place II was completed in October 2007 and a report documenting the installation was provided to NYSDEC. We inspected the basement and sub cellar areas of River Place II on August 30, 2012 during the inspection of the cover system. There were no new penetrations observed through the slab and vapor barrier.

Environmental Easement – Groundwater is not used for any purpose. Land use remains as multi-story residential.

Quarterly Groundwater Monitoring

Quarterly groundwater monitoring was required for the first two years following completion of the remedial construction, as specified in the SMP. On February 28 and March 7, 2009, two groundwater monitoring wells were installed in the park area between RP I and RP II. For this reporting period, Langan performed the first annual monitoring event on October 17, 2011. The first annual groundwater monitoring report is included as Attachment C. The next annual groundwater monitoring event is anticipated to occur in October 2012.

Annual Indoor Air Monitoring

The SMP required annual indoor air sampling in River Place I for three years. The final round of indoor air sampling was conducted by GCI Environmental Advisory, Inc. on December 22, 2011. The Ambient/Indoor Air Monitoring Assessment Survey report was provided as Attachment E in the June 2011 SMP Annual Review document.

Closing

The SMP is being implemented in accordance with the schedules discussed above. Should you have any questions, please contact me at 212-479-5404.

Kindest Regards,
Langan Engineering & Environmental Services, P.C.

Joel B. Landes, P.E.
Senior Associate

Enclosures:

Attachment A	NYSDEC Institutional and Engineering Controls Certification Form
Attachment B	Site Cover Photographs
Attachment C	Annual Groundwater Monitoring Report- 2011

Cc: William R. Dacunto – River Place 2 LLC
Richard Rienzo - Con Edison

Attachment A
NYSDEC Institutional and Engineering Controls Certification Forms

NYSDEC Institutional and Engineering Controls Certification Form for

River Place I
NYSDEC BCP Site No. C231024

Enclosure 1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **C231024**

Site Name CE - W 42nd St. - River Place I

Site Address: 640 W 42nd Street Zip Code: 10036
City/Town: New York
County: New York
Site Acreage: 2.7

Reporting Period: August 06, 2010 to August 06, 2011

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☒

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☒	☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C231024

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
10890001	River Place I, LLC	Ground Water Use Restriction Landuse Restriction Site Management Plan Soil Management Plan

Box 4

Description of Engineering Controls

Parcel	Engineering Control
10890001	Subsurface Barriers

Control Description for Site No. C231024

Parcel: 10890001

Annual reports on quarterly groundwater monitoring and annual indoor air monitoring events are required as well as an annual certifcation that the ground cover is intact as well as the continued effectiveness of the newly-installed vapor barrier and that the gourndwater restrictions are still in force.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☒	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C231024

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 2 and/or 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I William R Dacunto at 7 WTC NY NY 10007.
print name print business address

am certifying as Senior Vice President Operations (Owner or Remedial Party)
Silverstein Properties Inc. as managing Agents for River Place I Holdings, LLC

for the Site named in the Site Details Section of this form.

Signature of Owner or Remedial Party Rendering Certification

10/4/12
Date

IC/EC CERTIFICATIONS

Box 7

Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Joel Landes at 21 Penn Plaza, NY NY 10001.
print name print business address

am certifying as a for the Owner (Owner or Remedial Party)

STATE OF NEW YORK
JOEL B. LANDES
076348
LICENSED PROFESSIONAL ENGINEER

Signature of , for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

10/5/12
Date

NYSDEC Institutional and Engineering Controls Certification Form for

River Place II
NYSDEC BCP Site No. C231012

Enclosure 1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **C231012**

Site Name CE - W 42nd St. - River Place II

Site Address: West 41st - West 42nd Sts. Zip Code: 10036
City/Town: New York
County: New York
Site Acreage: 1.1

Reporting Period: August 06, 2010 to August 06, 2011

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☒

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☒	☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C231012

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
10890003	River Place 2 LLC/C	Ground Water Use Restriction Landuse Restriction Site Management Plan Soil Management Plan

Box 4

Description of Engineering Controls

Parcel	Engineering Control
10890003	Cover System Subsurface Barriers Vapor Mitigation

Control Description for Site No. C231012

Parcel: 10890003

Annual reports on quarterly groundwater monitoring and annual indoor air monitoring events are required as well as an annual certifcation that the ground cover is intact as well as the continued effectiveness of the newly-installed vapor barrier and that the gourndwater restrictions are still in force.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☒	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C231012

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 2 and/or 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I William R Daconto at 7 WTC NY NY 10007.
print name print business address

am certifying as Senior Vice President Operations (Owner or Remedial Party)
Silverstein Properties Inc. as managing Agents for River Place II, LLC

for the Site named in the Site Details Section of this form.

Signature of Owner or Remedial Party Rendering Certification — Date: 10/4/12

IC/EC CERTIFICATIONS

Box 7

Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Joel B Lander at 21 Penn Plaza, NY NY 10001.
print name print business address

am certifying as a for the Owner (Owner or Remedial Party)

STATE OF NEW YORK
JOEL B. LANDES
078348
LICENSED PROFESSIONAL ENGINEER

Signature of , for the Owner or Remedial Party, Rendering Certification — Stamp (Required for PE) — Date: 10/5/12

Attachment B

Site Cover Photographs

Photograph No. 1: View of paved walkway/driveway area located between River Place II buildings (North and South Towers).

Photograph No. 2: View of hallway floor in lower level of River Place II.

Photograph No. 3: View of hallway floor in lower level of River Place II.

Photograph No. 4: View of surface cover inside the boiler room of River Place II.

Photograph No. 5: View of surface cover inside laundry room of River Place II.

Photograph No. 6: View of cellar floor in the pump room of River Place II.

Photograph No. 7: View of cellar floor in the gas meter room of River Place II.

Photograph No. 8: View of basement parking ramp at River Place II.

Photograph No. 9: View of paved walkway area located between River Place I and River Place II on West 42nd Street.

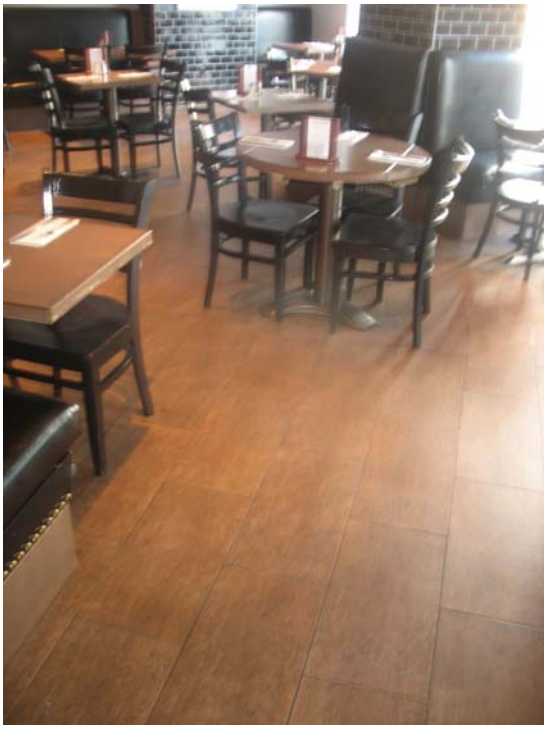
Photograph No. 10: View of landscaped area between River Place I and II buildings.

Photograph No. 11: View of landscaped area and capped driveway/walkway around the playground near River Place I building.

Photograph No. 12: View of capped driveway/walkway area located in front of the River Place I building entrance.

Photograph No. 13: View of concrete floor in lowest level of River Place I.

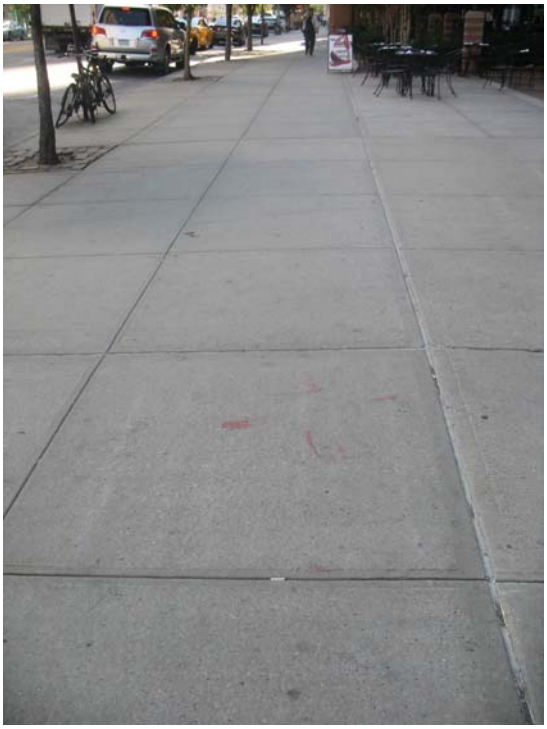
Photograph No. 14: View of hallway floor in lower level of River Place I.



Photograph No. 15: View of surface cover inside restaurant on ground floor of River Place I.

Photograph No. 16: View of concrete floor in mechanical room of River Place I.

Photograph No. 17: View of surface cover inside cleaners on ground floor of River Place I.



Photograph No. 18: View of paved walkway area located in front of the River Place I on West 42nd Street.

Attachment C

Annual Groundwater Monitoring Report - 2011

November 10, 2011

Mr. Douglas MacNeal
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Technical Support, 11th Floor
625 Broadway
Albany, New York 12233

RE: Annual Groundwater Monitoring Report - 2011
River Place I & II
West 42nd Street, New York, New York
BCP Site No. C231024, C231012
Langan Project No.: 170040901

Dear Mr. MacNeal:

Langan Engineering & Environmental Services, PC (Langan) is pleased to present this letter report summarizing groundwater monitoring well sampling activities for River Place I & II located between West 41st and West 42nd Streets and 11th and 12th Avenues in New York, New York (the "Site"). A Site Location Map is attached as Figure 1. A Final Engineering Report (FER) for the site was approved by the New York Stated Department of Environmental Conservation (NYSDEC) and a Certificate of Completion (COC) was issued on June 19, 2007. A Site Management Plan (SMP) dated July 2006 was approved by NYSDEC.

In accordance with the SMP, quarterly groundwater monitoring began on March 16, 2009 and was conducted for two years (June 17, 2009, September 18, 2009, January 7, 2010, March 1, 2010, July 14, 2010, September 8, 2010, and December 15, 2010). Annual sampling is to be conducted until groundwater exhibits consistent or declining levels of contamination. This report summarizes the results of the first annual sampling event conducted on October 17, 2011.

Groundwater Sampling

On October 17, 2011, Langan sampled wells MW-N2 and MW-S2 to represent the 2011 annual sampling event. During sampling, Langan visually inspected the monitoring wells for evidence of tampering or damage, and measured the depth to groundwater. Synoptic water level measurements were taken using a Solinst oil/water interface probe. Water level measurements were repeated at least once to verify the accuracy of the initial measurement.

All measurements were recorded on Langan field sampling forms. Copies of the completed field forms are included in Attachment A.

Prior to collecting groundwater samples, MW-N2 and MW-S2 were purged using low-flow purge and sample techniques. The wells were purged using clean, dedicated, polyethylene tubing attached to a Waterra positive displacement pump. During purging, groundwater was monitored for dissolved oxygen, pH, temperature, turbidity, and specific conductance. These readings are included on the sampling forms in Attachment A. Prior to sampling, the wells were allowed to recover to approximately 80% or more of the static water level.

MW-N2 and MW-S2 were purged until physical and chemical parameters stabilized. Approximately 13.5 and 8 gallons were purged from each monitoring well, respectively. After purging, samples MW-N2-10-17-11 and MW-S2-10-17-11 were collected using a Waterra pump and dedicated tubing.

The groundwater samples, MW-N2-10-17-11 and MW-S2-10-17-11 were collected into laboratory-prepared containers, tightly sealed, uniquely labeled, and then stored on ice for transport to Alpha Analytical (Alpha) in Westborough, Massachusetts, under standard chain-of-custody procedures. One trip blank was included for quality assurance/quality control (QA/QC) purposes. The groundwater samples were analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, Target Analyte List (TAL) metals by EPA SW 6000/7000, cyanide (total) by EPA SW 9012, and cyanide (available) by EPA 9014. The trip blank was analyzed for VOCs by EPA Method 8260.

Findings

Observations

During this sampling event no free product was observed in MW-N2 and MW-S2. The wells were observed to be in good condition.

Groundwater Analytical Results

Analytical results for the first annual 2011 monitoring event that exceeded the NYSDEC TOGS 1.1.1 AWQS Class GA Standards are summarized below.

MW-N2	
VOCs	
• benzene	• naphthalene
• p/m-xylene	• ethylbenzene
• o-xylene	• 1,2,4-trimethylbenzene
• toluene	• 1,3,5-trimethylbenzene

MW-S2	
VOCs	
• benzene	• naphthalene
• p/m-xylene	• ethylbenzene
• o-xylene	• isopropylbenzene
• toluene	• n-propylbenzene
	• 1,2,4-trimethylbenzene

SVOCs	
• acenaphthene	• fluorene
• naphthalene	• phenanthrene
Inorganics	
• iron	• magnesium
• manganese	• cyanide
	• sodium

SVOCs	
• benzo(a)pyrene	• benzo(b)flouranthene
• chrysene	
Inorganics	
• iron	• magnesium
• cyanide	• lead
• sodium	• manganese

Analytical results for the First Quarter 2009 through Annual 2011 sampling rounds are summarized in Tables 1 through 3 and the laboratory analytical report for the Annual 2011 event is included as Attachment B.

Please contact us if you have any questions.

Sincerely,
Langan Engineering & Environmental Services, P.C.

Joel B. Landes, P.E.
Vice President / Senior Associate

Enclosure(s):

Figure 1	Site Location Map
Figure 2	Well Location Map
Table 1	VOC Detections in Groundwater Samples
Table 2	SVOC Detections in Groundwater Samples
Table 3	Total Metals and Cyanide in Groundwater Sample
Attachment A	Groundwater Sampling Forms
Attachment B	Laboratory Analytical Reports, Chain-of-Custody and Certifications

cc:
Richard Rienzo- Con Edison
William R. Dacunto- River Place II LLC
Jason Hayes – Langan

TABLES

Table 1
VOC Exceedances in Groundwater Samples
River Place II
New York, New York
Langan Project No. 170040901

		Park Area Northern Well																	
		1st Quarter 2009		2nd Quarter 2009		3rd Quarter 2009*		4th Quarter 2009**		1st Quarter 2010		2nd Quarter 2010		3rd Quarter 2010		4th Quarter 2010		YEAR 1 - 2011	
SAMPLING DATE **LANGAN SAMPLE ID** **LAB SAMPLE ID**	**NYSDEC TOGS 1.1.1 AWQS**	**3/16/2009** **MW-N-3-16-09** **L0903143-01**		**6/17/2009** **MW-N-6-17-09** **L0908040-01**		**9/18/2009** **MW-N-9-18-09** **L0913185-01**		**1/7/2010** **MW-N2-1-07-10** **L1000282-01**		**3/1/2010** **MW-N2-3-01-10** **L1003006-01**		**6/10/2010** **MW-N2-6-10-10** **L1008735-02**		**9/8/2010** **MW-N2-9-8-10** **L1013903-01**		**12/15/2010** **MW-N2-12-15-10** **L1020042-01**		**10/17/2011** **MW-N2-10-17-11** **L1116955-02**	
Volatile Organics by GC/MS (µg/L) **Westborough Lab**																			
1,2,4-Trimethylbenzene	5	1200	U, D^{500}	1200	U, D^{500}	1200	U, D^{500}	1200	U	250	U, D^{100}	500	U, D^{200}	620	U, D^{250}	620	D^{250}	**270**	J
1,3,5-Trimethylbenzene	5	1200	U, D^{500}	1200	U, D^{500}	1200	U, D^{500}	1200	U	250	U, D^{100}	500	U, D^{200}	620	U, D^{250}	620	U, D^{250}	**96**	J
Benzene	1	**19000**	D^{500}	**17000**	D^{500}	**15000**	D^{500}	**2900**	D^{500}	**610**	D^{100}	**1100**		**2100**	D^{250}	**2400**	D^{250}	**2400**	
Ethylbenzene	5	**1900**	D^{500}	**1900**	D^{500}	**1800**	D^{500}	**1400**	D^{500}	**170**	D^{100}	**410**		**810**	D^{250}	**980**	D^{250}	**810**	
Isopropylbenzene	5	250	U, D^{500}	250	U, D^{500}	250	U, D^{500}	250	U	50	U, D^{100}	100	U, D^{200}	120	U, D^{250}	120	U, D^{250}	37	U
Methylene chloride	5	2500	U, D^{500}	2500	U, D^{500}	2500	U	2500	U	500	U, D^{100}	1000	U, D^{200}	1200	U, D^{250}	1200	U, D^{250}	110	U
Naphthalene	10	**15000**	D^{500}	**18000**	D^{500}	**19000**	D^{500}	**22000**	D^{500}	**4200**	D^{100}	**5400**		**12000**	D^{250}	**15000**	D^{250}	**10000**	
n-Butylbenzene	5	250	U, D^{500}	250	U, D^{500}	250	U	250	U	50	U, D^{100}	100	U, D^{200}	120	U, D^{250}	120	U, D^{250}	39	U
n-Propylbenzene	5	250	U, D^{500}	250	U, D^{500}	250	U, D^{500}	250	U	50	U, D^{100}	ND	U, D^{200}	120	U	120	U	35	U
o-Xylene	5	**1400**	D^{500}	**1400**	D^{500}	**1200**	D^{500}	**1000**	D^{500}	**180**	D^{100}	**330**		**590**	D^{250}	**760**	D^{250}	**630**	
p/m-Xylene	5	**3200**	D^{500}	**3100**	D^{500}	**2900**	D^{500}	**2200**	D^{500}	**330**	D^{100}	**600**		**1100**	D^{250}	**1400**	D^{250}	**1200**	
p-Isopropyltoluene	5	250	U, D^{500}	250	U, D^{500}	250	U	250	U	50	U, D^{100}	100	U, D^{200}	120	U, D^{250}	120	U, D^{250}	38	U
Styrene	5	500	U, D^{500}	500	U, D^{500}	500	U	500	U	100	U, D^{100}	200	U, D^{200}	250	U, D^{250}	250	U, D^{250}	72	U
Toluene	5	**4200**	D^{500}	**4400**	D^{500}	**4100**	D^{500}	**740**	D^{500}	75	U, D^{100}	150	U, D^{200}	**290**	D^{250}	**420**	D^{250}	**410**	

Notes:

- Groundwater samples were compared to New York State Department of Environmental Conservation (NYSDEC) Technical and Operations Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards (AWQS).
- Values exceeding NYSDEC TOGS 1.1.1 AWQS are highlighted and BOLD.
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D^x - Dillution factor of X

Table 1
VOC Exceedances in Groundwater Samples
River Place II
New York, New York
Langan Project No. 170040901

		Park Area Southern Well*																	
		1st Quarter 2009		1st Quarter 2009		2nd Quarter 2009		4th Quarter 2009**		1st Quarter 2010		2nd Quarter 2010		3rd Quarter 2010		4th Quarter 2010		YEAR 1 - 2011	
SAMPLING DATE **LANGAN SAMPLE ID** **LAB SAMPLE ID**	**NYSDEC TOGS 1.1.1 AWQS**	**3/16/2009** **MW-S-3-16-09** **L0903143-02**		**3/16/2009** **DUP-3-16-09** **L0903143-03**		**6/17/2009** **MW-S-6-17-09** **L0908040-02**		**1/7/2010** **MW-S2-1-07-10** **L1000282-02**		**3/1/2010** **MW-S2-3-01-10** **L1003006-02**		**6/10/2010** **MW-S2-6-10-10** **L1008735-01**		**9/8/2010** **MW-S2-9-8-10** **L1013903-02**		**12/15/2010** **MW-S2-12-15-10** **L1020042-02**		**10/17/2011** **MW-S2-10-17-11** **L1116955-01**	
Volatile Organics by GC/MS (µg/L) **Westborough Lab**				Duplicate of MW-N-3-16-09															
1,2,4-Trimethylbenzene	5	**76**	D^{25}	1200	U, D^{500}	25	U, D^{10}	**280**	D^{10}	**130**	D^{50}	**180**	D^{50}	**150**	U, D^{50}	**200**	D^{50}	**45**	
1,3,5-Trimethylbenzene	5	62	U, D^{25}	1200	U, D^{500}	25	U, D^{10}	**61**	D^{10}	120	U, D^{50}	120	U, D^{50}	120	U, D^{50}	120	U, D^{50}	1	U
Benzene	1	**140**	D^{25}	**19000**	D^{500}	**170**	D^{10}	**200**	D^{10}	**75**	D^{50}	**120**	D^{50}	**110**	D^{50}	**120**	D^{50}	**23**	
Ethylbenzene	5	**160**	D^{25}	**1900**	D^{500}	**20**	D^{10}	**710**	D^{10}	**330**	D^{50}	**590**	D^{50}	**460**	D^{50}	**560**	D^{50}	**100**	
Isopropylbenzene	5	**35**	D^{25}	250	U, D^{500}	**5.4**	D^{10}	**64**	D^{10}	**30**	D^{50}	**61**	D^{50}	**44**	D^{50}	**63**	D^{50}	**13**	
Methylene chloride	5	120	U, D^{25}	2500	U, D^{500}	50	U, D^{10}	**420**	D^{10}	250	U, D^{50}	250	U, D^{50}	250	U, D^{50}	250	U, D^{50}	2.7	U
Naphthalene	10	**610**	D^{25}	**15000**	D^{500}	**350**	D^{10}	**4900**	D^{10}	**1800**	D^{50}	**1700**	D^{50}	**1900**	D^{50}	**1100**	D^{50}	**170**	
n-Butylbenzene	5	12	U, D^{25}	250	U, D^{500}	5	U, D^{10}	**6.2**	D^{10}	25	U, D^{50}	25	U, D^{50}	25	U, D^{50}	25	U, D^{50}	0.98	U
n-Propylbenzene	5	**19**	D^{25}	250	U, D^{500}	5	U, D^{10}	**42**	D^{10}	25	U, D^{50}	**37**	D^{50}	**30**		**37**	D^{50}	**8.5**	
o-Xylene	5	**43**	D^{25}	**1300**	D^{500}	**16**	D^{10}	**320**	D^{10}	**110**	D^{50}	**150**	D^{50}	**70**	D^{50}	50	U, D^{50}	**24**	
p/m-Xylene	5	**50**	D^{25}	**3100**	D^{500}	**21**	D^{10}	**410**	D^{10}	**150**	D^{50}	**150**	D^{50}	**82**	D^{50}	50	U, D^{50}	**17**	
p-Isopropyltoluene	5	12	U, D^{25}	250	U, D^{500}	5	U, D^{10}	**11**	D^{10}	25	U, D^{50}	25	U, D^{50}	25	U, D^{50}	25	U, D^{50}	0.94	U
Styrene	5	25	U, D^{25}	500	U, D^{500}	10	U, D^{10}	**40**		50	U, D^{50}	50	U, D^{50}	50	U, D^{50}	50	U, D^{50}	1.8	U
Toluene	5	19	U, D^{25}	**4000**	D^{500}	**29**	D^{10}	**180**	D^{10}	**46**	D^{50}	38	U, D^{50}	38	U, D^{50}	38	U, D^{50}	**8.5**	

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VOC Exceedances in Groundwater Samples
River Place II
New York, New York
Langan Project No. 170040901

		Quality Control																	
		1st Quarter 2009		1st Quarter 2009		2nd Quarter 2009		3rd Quarter 2009		4th Quarter 2009		1st Quarter 2010		2nd Quarter 2010		3rd Quarter 2010		4th Quarter 2010		YEAR 1 - 2011	
SAMPLING DATE **LANGAN SAMPLE ID** **LAB SAMPLE ID**	**NYSDEC TOGS 1.1.1 AWQS**	**3/16/2009** **FB-3-16-09** **L0903143-04**		**3/16/2009** **TRIP BLANK** **L0903143-05**		**6/17/2009** **TRIP BLANK** **L0908040-03**		**6/17/2009** **TRIP BLANK** **L0913185-02**		**1/7/2010** **TRIP BLANK** **L1000282-03**		**3/1/2010** **TRIP BLANK** **L1003006-03**		**6/10/2010** **TRIP BLANK** **L1008735-03**		**9/8/2010** **TRIP BLANK** **L1013903-03**		**12/15/2010** **TRIP BLANK** **L1020042-03**		**10/17/2011** **TRIP BLANK** **L1116955-03**	
Volatile Organics by GC/MS (µg/L) **Westborough Lab**																					
1,2,4-Trimethylbenzene	5	2.5	U	2.5	U	2.5	U	0.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	0.27	U
1,3,5-Trimethylbenzene	5	2.5	U	2.5	U	2.5	U	0.75	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	0.21	U
Benzene	1	0.5	U	0.5	U	0.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.19	U
Ethylbenzene	5	0.5	U	0.5	U	0.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.26	U
Isopropylbenzene	5	0.5	U	0.5	U	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.19	U
Methylene chloride	5	5	U	5	U	5	U	0.5	U	5	U	5	U	5	U	5	U	5	U	0.54	U
Naphthalene	10	2.5	U	2.5	U	2.5	U	1	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	0.22	U
n-Butylbenzene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.20	U
n-Propylbenzene	5	0.5	U	0.5	U	0.5	U	2.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.19	U
o-Xylene	5	1	U	1	U	1	U	2	U	1	U	1	U	1	U	1	U	1	U	0.33	U
p/m-Xylene	5	1	U	1	U	1	U	0.5	U	1	U	1	U	1	U	1	U	1	U	0.35	U
p-Isopropyltoluene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.19	U
Styrene	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.36	U
Toluene	5	0.75	U	0.75	U	0.75	U	2.5	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.23	U

Notes:

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Table 2
SVOC Exceedances in Groundwater Samples
River Place II
New York, New York
Langan Project No. 170040901

		Park Area Northern Well																	
		1st Quarter		2nd Quarter		3rd Quarter		4th Quarter**		1st Quarter 2010		2nd Quarter 2010		3rd Quarter 2010		4th Quarter 2010		YEAR 1 - 2011	
SAMPLING DATE **LANGAN SAMPLE ID** **LAB SAMPLE ID**	**NYSDEC TOGS 1.1.1 AWQS**	**3/16/2009** **MW-N-3-16-09** **L0903143-01**		**6/17/2009** **MW-N-6-17-09** **L0908040-01**		**9/18/2009** **MW-N-9-18-09** **L0913185-01**		**1/7/2010** **MW-N2-1-7-10** **L1000282-01**		**3/1/2010** **MW-N2-3-1-10** **L1003006-01**		**6/10/2010** **MW-N2-6-10-10** **L1008735-02**		**9/8/2010** **MW-N2-9-8-10** **L1013903-01**		**12/15/2010** **MW-N2-12-15-10** **L1020042-01**		**10/17/2011** **MW-N2-10-17-11** **L1116955-02**	
Semi-Volatile Organics (µg/L) **Westborough Lab**																			
2,4-Dimethylphenol	50	**1800**	D^{50}	**830**	D^{5}	**1200**	D^{100}	**270**	D^{5}	500	U, D^{50}	29		**160**		10	U, D^{1}	1.4	U
Acenaphthene	20	**120**	D^{20}	**95**	D^{40}	**99**	D^{50}	**61**	D^{200}	**65**	D^{50}	17		**97**		**170**	D^{500}	**140**	
Benzo(a)pyrene	0	**7.2**	D^{20}	8.2	U, D^{40}	9.6	U, D^{50}	40	U, D^{200}	10	U, D^{50}	5	U	80	U	100	U, D^{500}	28	U
Benzo(b)fluoranthene	0.002	**8.4**	D^{20}	8.2	U, D^{40}	9.6	U, D^{50}	40	U, D^{200}	10	U, D^{50}	7.2	D^{20}	80	U	100	U, D^{500}	28	U
Bis(2-Ethylhexyl)phthalate	5	24	U, D^{5}	26	U, D^{5}	**46**	D^{5}	25	U, D^{5}	250	U, D^{50}	5	U	5	U	**5**	D^{1}	1.4	U
Chrysene	0.002	**4.1**	D^{20}	8.2	U, D^{40}	9.6	U, D^{50}	40	U, D^{200}	10	U, D^{50}	**4200**	R1, D^{400}	80	U	100	U, D^{500}	20	U
Fluorene	50	**56**	D^{20}	**59**	D^{40}	47	D^{50}	40	U, D^{200}	39	D^{50}	7.2	D^{20}	80	U	100	D^{500}	**58**	J
Indeno(1,2,3-cd)Pyrene	---	NA		NA		NA		NA		10	U, D^{50}	29	D^{20}	NA		NA		32	U
Naphthalene	10	**12000**	D^{400}	**8900**	D^{400}	**9400**	D^{1000}	**2200**	D^{200}	**2700**	D^{50}	8.9	D^{20}	**6900**		**9100**	D^{500}	**6800**	
Phenanthrene	50	**100**	D^{20}	**53**	D^{40}	**62**	D^{50}	40	D^{200}	**52**	D^{50}	**84**	D^{20}	80	U	100	D^{500}	**97**	
Phenol	1	**120**	D^{5}	**61**	D^{5}	**87**	D^{5}	35	U, D^{5}	350	U, D^{50}	**17**		**27**		**16**	D^{1}	0.26	U

Notes:

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R1 - Analyte Results are from sample re-analysis

Table 2
SVOC Exceedances in Groundwater Samples
River Place II
New York, New York
Langan Project No. 170040901

		Park Area Southern Well*																Quality Control	
		1st Quarter		1st Quarter		2nd Quarter		4th Quarter**		1st Quarter 2010		2nd Quarter 2010		3rd Quarter 2010		4th Quarter 2010		YEAR 1 - 2011		1st Quarter	
SAMPLING DATE **LANGAN SAMPLE ID** **LAB SAMPLE ID**	**NYSDEC TOGS 1.1.1 AWQS**	**3/16/2009** **MW-S-3-16-09** **L0903143-02**		**3/16/2009** **DUP-3-16-09** **L0903143-03**		**6/17/2009** **MW-S-6-17-09** **L0908040-02**		**1/7/2010** **MW-S2-1-7-10** **L0908040-02**		**3/1/2010** **MW-S2-3-1-10** **L1003006-02**		**6/10/2010** **MW-S2-6-10-10** **L1008735-01**		**9/8/2010** **MW-S2-9-8-10** **L1013903-02**		**12/15/2010** **MW-S2-12-15-10** **L1020042-02**		**10/17/2011** **MW-S2-10-17-11** **L1116955-01**		**3/16/2009** **FB-3-16-09** **L0903143-04**	
Semi-Volatile Organics (µg/L) **Westborough Lab**				Duplicate of MW-N-3-16-09																	
2,4-Dimethylphenol	50	10	U	**1800**	D^{25}	10	U	10	U	500	U, D^{50}	10	U	10	U	10	D^{50}	1.2	U	9.6	U
Acenaphthene	20	14		**160**	D^{200}	0.2	U	200	U, D^{1000}	**63**	D^{50}	7	U	**41**		**63**	D^{50}	15		0.19	U
Benzo(a)pyrene	0	0.2	U	39	U, D^{5}	0.2	U	200	U, D^{1000}	15	D^{50}	5	U	10	U	100	U, D^{50}	**4.0**		0.19	U
Benzo(b)fluoranthene	0.002	0.2	U	39	U, D^{5}	0.2	U	200	U, D^{1000}	**14**	D^{50}	**4**	D^{10}	10	U	**17**	D^{50}	**2.9**		0.19	U
Bis(2-Ethylhexyl)phthalate	5	5	U	24	U, D^{5}	5.1	U	5	U	250	U, D^{50}	5	U	5	U	5	U, D^{5}	1.4	U	4.8	U
Chrysene	0.002	0.2	U	39	U, D^{5}	0.2	U	200	U, D^{1000}	10	U, D^{50}	**1600**	D^{100}	10	U	10	U, D^{5}	**3.2**		0.19	U
Fluorene	50	8.9		**80**	D^{5}	0.2	U	200	U, D^{1000}	**61**	D^{50}	4	D^{10}	36		42	U, D^{5}	13		0.19	U
Indeno(1,2,3-cd)Pyrene	---	NA		NA		NA		NA		10	U, D^{50}	10	D^{10}	NA		**15**	D^{50}	1.8		NA	
Naphthalene	10	**300**	D^{10}	**14000**	D^{400}	0.62		**11000**	D^{1000}	**1400**	D^{100}	4.8	D^{10}	**990**		**400**	D^{50}	9.3		0.34	
Phenanthrene	50	11		**150**	D^{5}	0.2	U	200	U, D^{1000}	**120**	D^{50}	74	D^{10}	**52**		**63**	D^{50}	16		0.19	U
Phenol	1	7	U	**110**	D^{5}	7.2	U	**7.7**		350	U, D^{50}	7	U	7	U	7	D^{50}	0.26	U	6.7	U

Notes:

- Groundwater samples were compared to New York State Department of Environmental Conservation (NYSDEC) Technical and Operations Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards (AWQS).
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Table 3
Total Metals and Cyanide Exceedances in Groundwater Samples
River Place II
New York, New York
Langan Project No. 170040901

		Park Area Northern Well																	
		1st Quarter		2nd Quarter		3rd Quarter		4th Quarter**		1st Quarter 2010		2nd Quarter 2010		3rd Quarter 2010		4th Quarter 2010		YEAR 1 - 2011	
LANGAN SAMPLE ID **SAMPLING DATE** **LAB SAMPLE ID**	**NYSDEC TOGS 1.1.1 AWQS**	**MW-N-3-16-09** **3/16/2009** **L0903143-01**		**MW-N-6-17-09** **6/17/2009** **L0908040-01**		**MW-N-9/18/09** **9/18/2009** **L0913185-01**		**MW-N2-1-7-2010** **1/7/2010** **L1000282-01**		**MW-N2-3-1-2010** **3/1/2010** **L1000282-01**		**MW-N2-6-10-10** **6/10/2010** **L1008735-02**		**MW-N2-9-8-10** **9/8/2010** **L1013903-01**		**MW-N2-12-15-10** **12/15/2010** **L1020042-01**		**MW-N2-10-17-11** **10/17/2011** **L1116955-02**	
Total Metals (µg/L) **Wesborough Lab**																			
Iron, Total	300	**5300**		**1900**		**1200**		**3500**		**4000**		**4800**		**2600**		**12000**		**3300**	
Lead, Total	25	15		10	U	10	U	10	U	10	U	10	U	10	U	**67**		3	U
Magnesium, Total	35000	**70000**		**70000**		**59000**		**83000**		**46000**		**46000**		**51000**		**86000**		**64000**	
Manganese, Total	300	**1570**		**1570**		**1340**		**746**		**603**		**632**		**528**		**816**		**582**	
Mercury, Total	0.7	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	ND		ND		0.3	U	0.1	U
Sodium, Total	20000	**300000**	D^{5}	**270000**		**250000**		**240000**		**110000**		**160000**		**200000**		**240000**		**210000**	
Cyanide (ug/L) - Wesborough Lab																			
Cyanide, Total	200	**1100**	D^{10}	**789**	D^{5}	**799**	D^{2}	**890**	D^{10}	**1780**	D^{10}	**1500**	D^{5}	**1060**	D^{10}	**1680**	D^{10}	**612**	

Notes:

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River Place II
New York, New York
Langan Project No. 170040901

		Park Area Southern Well*																Quality Control	
		1st Quarter		1st Quarter		2nd Quarter		4th Quarter**		1st Quarter 2010		2nd Quarter 2010		3rd Quarter 2010		4th Quarter 2010		YEAR 1 - 2011		1st Quarter	
LANGAN SAMPLE ID SAMPLING DATE LAB SAMPLE ID	**NYSDEC TOGS 1.1.1 AWQS**	**MW-S-3-16-09 3/16/2009 L0903143-02**		**DUP-3-16-09 3/16/2009 L0903143-03**		**MW-S-6-17-09 6/17/2009 L0908040-02**		**MW-S2-1-7-2010 1/7/2010 L1000282-02**		**MW-N2-3-1-2010 3/1/2010 L1000282-01**		**MW-S2-6-10-10 6/10/2010 L1008735-01**		**MW-S2-9-8-10 9/8/2010 L1013903-02**		**MW-S2-12-15-10 12/15/2010 L1020042-02**		**MW-S2-10-17-11 10/17/2011 L1116955-02**		**FB-3-16-09 3/16/2009 L0903143-04**	
Total Metals (µg/L) Wesborough Lab				Duplicate of MW-N-3-16-09																	
Iron, Total	300	**21000**		**2700**		**9200**		**3200**		**11000**		**5000**		**9800**		**12000**		**9900**		50	U
Lead, Total	25	**158**		10	U	**45**		17		**117**		**29**		**86**		**166**		**42**		10	U
Magnesium, Total	35000	**71000**		**72000**		**48000**		**120000**		**87000**		**85000**		**93000**		**84000**		**68000**		100	U
Manganese, Total	300	**598**		**1430**		**403**		**327**		**636**		**430**		**492**		**558**		**537**		10	U
Mercury, Total	0.7	0.5		0.2	U	0.2	U	0.3		0.6		0.0002		0.00005		**0.9**		0.1	U	0.2	U
Sodium, Total	20000	**96000**		**320000**	D^5	**100000**		**98000**		**89000**		**68000**		**76000**		**67000**		**42000**		2000	U
Cyanide (ug/L) - Wesborough Lab																					
Cyanide, Total	200	**1920**	D^{10}	**1090**	D^{10}	**1920**	D^5	**1090**	D^{10}	**973**	D^5	**1110**	D^5	**1540**	D^{10}	**1410**	D^{10}	**798**		5	U, D^5

Notes:

- Groundwater samples were compared to New York State Department of Environmental Conservation (NYSDEC) Technical and Operations Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards (AWQS).
- Values exceeding NYSDEC TOGS 1.1.1 AWQS are highlighted and BOLD.
- Method Detection Limits (MDLs) are elevated above TOGS criteria in the majority of the samples due to high levels of contamination
- µg/L: Micrograms per liter

* Monitoring well MW-S was destroyed during construction activities. No data is available for the 3rd Quarter 2009.

** Monitoring wells MW-N and MW-S were destroyed due to construction activities. Monitoring wells MW-N2 and MW-S2 were installed in the approximate locations of MW-N and MW-S once construction was complete. New monitoring well locations are shown on Figure 2.

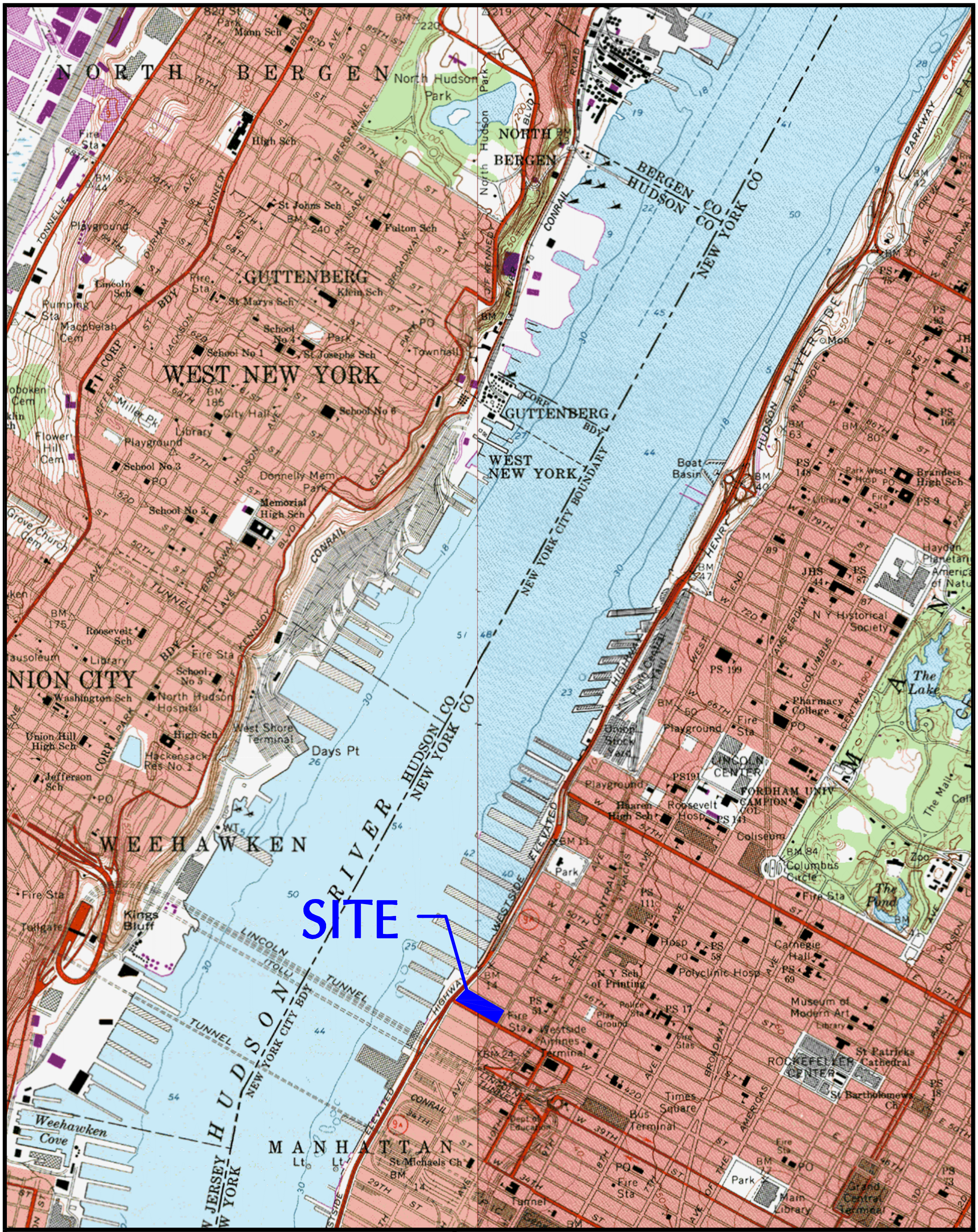
Qualifiers:

U - Indicates the minimum detection Limit (MDL) is reported. The concentration of the analyte is less than the MDL.

D^X - Dillution factor of X

R1 - Analytical Results are from sample re-analysis

FIGURES



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NEW JERSEY PENNSYLVANIA NEW YORK CONNECTICUT FLORIDA NEVADA

NJ Certificate of Authorization No: 24GA27996400

Project

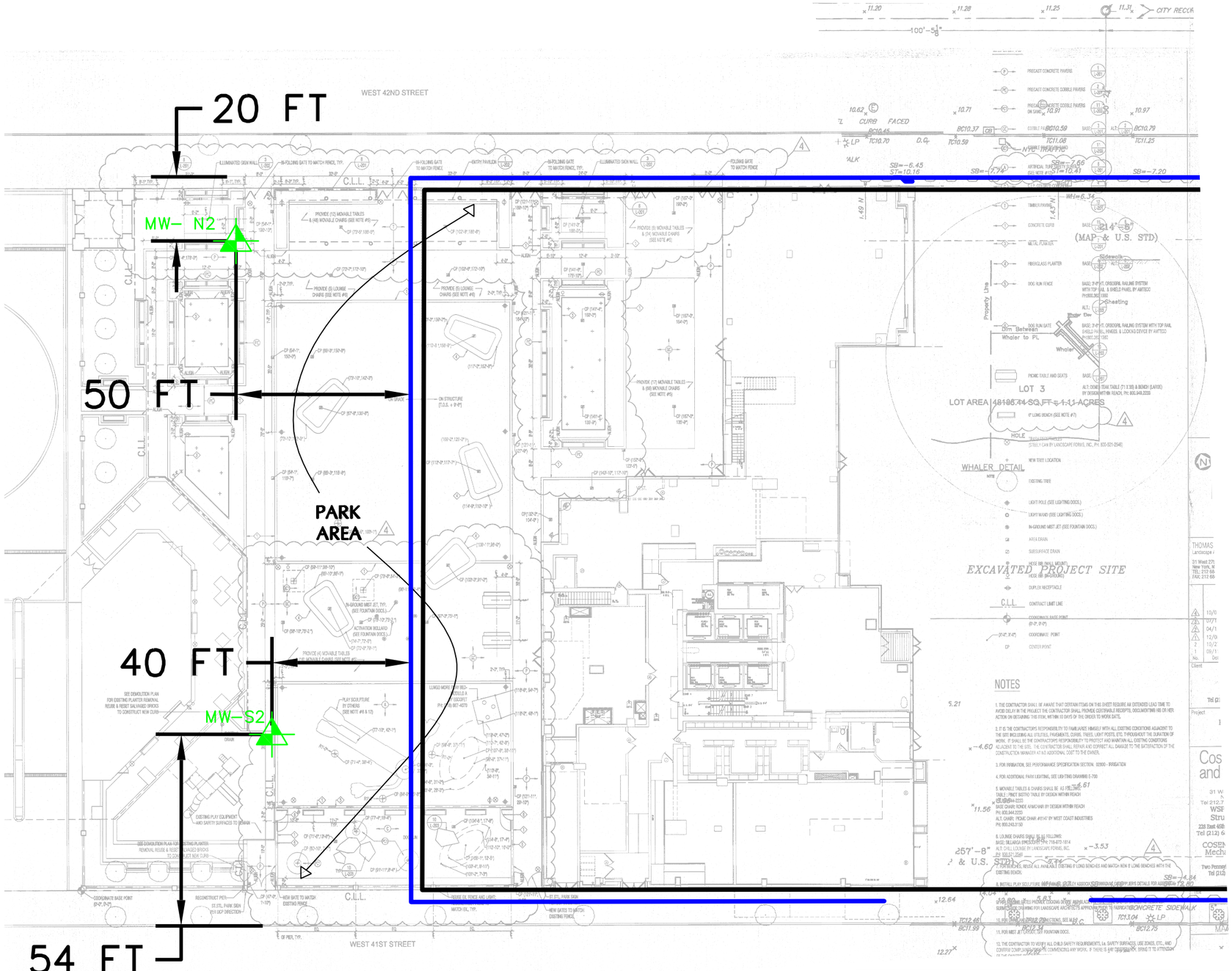
SITE LOCATION MAP

RIVER PLACE I AND II

NEW YORK NEW YORK

Project No.	Date	Scale	Dwg. No.
170040901	04/07/09	NTS	1

Filename: U:\Data9\170040901\Cadd Data - 170040901\Dwg\site location map.dwg Date: 5/5/2009 Time: 16:05 User: JGood Style Table: Langan.stb Layout: A Size Sheet (Bottom)



NOTES:

1. BASEMAP TAKEN FROM MANHATTAN-SURVEYING ARCHITECTURAL SURVEY DATED JUNE 3, 2006 AND PARK LAYOUT AND MATERIALS PLAN BY COSTAS KONDYLIS AND PARTNERS LLP ARCHITECTS DATED OCTOBER 1, 2008.

2. MONITORING WELLS WERE RE-INSTALLED ON DECEMBER 28, 2009. LOCATIONS ARE APPROXIMATE.

LEGEND

MW– N2 — APPROXIMATE LOCATION OF MONITORING WELLS IN ACCORDANCE WITH SITE MANAGEMENT PLAN

SHEET PILE WALL

PROPERTY BOUNDARY (RIVER PLACE II)

30 0 15 30

SCALE IN FEET

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Project

MONITORING WELL LOCATION MAP

RIVER PLACE I & II

NEW YORK NEW YORK

Project No.	Date	Scale	Dwg. No.
170040901	01/21/2010	1" = 30'	2

ATTACHMENT A
GROUNDWATER SAMPLING FORMS

GROUND WATER SAMPLE FIELD INFORMATION FORM

Site:	Riverplace I and II	**Well#/Location:**	MW-N2	**Job No.**	170040901
Date:	10/17/2011	**Weather:**	Low 60s - Sunny	**Sampling Personnel:**	N.Rochna

Well Information	
Sample ID	MW-N2-10-17-11
Well Depth (ft)	19.45
Screened Interval (ft)	---
Casing Elevation (msl)	---
Casing Diameter (in)	2
Depth to Water (ft)	9.90
Water Elevation (msl)	---
Casing Volume (gal)	1.56
PID/FID Reading (ppm)	---

Purging Information	
Purging Method	Wattera Pump
Purging Rate (gpm)	0.2
Start Purge Time	14:00
End Purge Time	15:50
Volume Purged (gal)	13.5

Sampling Information	
Sampling Method	Wettera Pump
Start Sampling Time	15:55
End Sampling Time	16:10
Depth Before Sampling (ft)	10.65
Number Bottles Collected	8

	Parameters								
Sample Time	**pH**	**Conductivity (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temp (◦C)**	**ORP (mV)**	**Depth to Water (ft)**	**Purged Volume (gallons)**	**Notes**
14:00	***Start Purging Well***								
14:15	6.71	2.33	-5.0	0.00	18.37	-160	9.90	2.00	
14:20	6.74	2.30	-5.0	0.00	18.57	-162	9.90	2.15	
Pump Malfunction - Change Our Foot Valve									
15:00	***Start Purging Well***								
15:05	7.03	2.52	660.0	0.00	17.71	-162	10.06	5.00	
15:10	7.02	2.53	556.0	0.00	17.72	-180	10.25	6.00	
15:15	7.01	2.64	488.0	0.00	17.74	-200	10.55	7.00	
15:20	7.00	2.61	333.0	0.00	17.72	-219	10.71	8.00	
15:25	7.01	2.59	312.0	0.00	17.77	-232	10.85	9.00	
15:30	7.02	2.60	336.0	0.00	17.75	-240	10.7	10.00	
15:35	7.02	2.63	296.0	0.00	17.70	-261	10.71	11.00	
15:40	7.03	2.62	300.0	0.00	17.67	-273	10.71	12.00	
15:45	7.04	2.60	295.0	0.00	17.89	-279	10.73	13.00	
15:50	7.04	2.62	295.0	0.00	18.00	-284	10.65	13.50	
15:55	***Collect Sample***								

Notes/Remarks

GROUND WATER SAMPLE FIELD INFORMATION FORM

Site:	Riverplace I and II	**Well#/Location:**	MW-S2	**Job No.**	170040901
Date:	10/17/2011	**Weather:**	Low 60s - Sunny	**Sampling Personnel:**	N.Rochna

Well Information	
Sample ID	MW-S2-10-17-11
Well Depth (ft)	19.45
Screened Interval (ft)	---
Casing Elevation (msl)	---
Casing Diameter (in)	2
Depth to Water (ft)	8.83
Water Elevation (msl)	---
Casing Volume (gal)	1.73
PID/FID Reading (ppm)	---

Purging Information	
Purging Method	Wattera Pump
Purging Rate (gpm)	0.08
Start Purge Time	11:25
End Purge Time	13:00
Volume Purged (gal)	8

Sampling Information	
Sampling Method	Wettera Pump
Start Sampling Time	13:00
End Sampling Time	13:20
Depth Before Sampling (ft)	10.12
Number Bottles Collected	8

	Parameters								
Sample Time	**pH**	**Conductivity (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temp (◦C)**	**ORP (mV)**	**Depth to Water (ft)**	**Purged Volume (gallons)**	**Notes**
11:25	***Start Purging Well***								
11:40	7.06	1.80	507.0	2.71	18.99	-106	8.91	1.00	
11:45	7.09	3.05	456.0	0.57	18.71	-124	9.15	1.25	
11:50	7.09	2.74	414.0	0.39	18.81	-125	9.29	1.50	
11:55	7.09	2.70	307.0	0.15	18.82	-127	9.36	1.75	
12:00	7.08	2.02	257.0	0.03	19.07	-127	9.40	2.00	
12:05	7.09	2.22	200.0	0.00	18.88	-130	9.44	2.50	
12:10	7.08	2.01	155.0	0.00	18.88	-132	9.51	2.85	
12:15	7.10	1.91	142.0	0.00	18.88	-135	9.59	3.15	
12:20	7.08	1.89	131.0	0.00	18.92	-136	9.67	3.50	
12:25	7.07	1.86	123.0	0.00	19.01	-138	9.72	4.00	
12:30	7.08	1.81	116.0	0.00	18.92	-140	9.79	4.50	
12:35	7.06	1.79	116.0	0.00	18.88	-140	9.85	5.00	
12:40	7.05	1.77	96.8	0.00	18.89	-144	9.91	5.50	
12:45	7.04	1.74	86.2	0.00	18.91	-151	9.97	6.00	
12:50	7.05	1.72	80.1	0.00	18.98	-155	10.06	7.00	
12:55	7.04	1.71	71.3	0.00	19.18	-160	10.08	7.50	
13:00	7.04	1.69	68.5	0.00	19.21	-161	10.12	8.00	
Collect Sample									

Notes/Remarks

ATTACHMENT B
LABORATORY ANALYTICAL REPORTS, CHAIN-OF-CUSTODY AND CERTIFICATIONS

ANALYTICAL REPORT

Lab Number:	L1116955
Client:	Langan Engineering and Environmental Ser 21 Penn Plaza 360 W. 31st Street 8th Floor New York, NY 10001-2727
ATTN:	Jason Hayes
Phone:	(212) 479-5427
Project Name:	RIVER PLACE
Project Number:	170040901
Report Date:	10/25/11

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1116955-01	MW-S2-10-17-11	W. 42ND ST., NY, NY	10/17/11 13:00
L1116955-02	MW-N2-10-17-11	W. 42ND ST., NY, NY	10/17/11 15:55
L1116955-03	TRIP BLANK-101711	W. 42ND ST., NY, NY	10/17/11 00:00

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1116955-01 and -02 have elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.

The WG497118-1/-2 LCS/LCSD RPDs, associated with L1116955-01, are above the acceptance criteria for Benzene (21%), 1,1-Dichloroethene (31%), and Trichloroethene (21%).

Project Name: RIVER PLACE **Lab Number:** L1116955
Project Number: 170040901 **Report Date:** 10/25/11

Case Narrative (continued)

Semivolatile Organics

L1116955-02 was re-analyzed on dilution in order to quantitate the sample within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.

Semivolatile Organics by SIM

L1116955-02 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

The surrogate recoveries for L1116955-02 are below the acceptance criteria for 2-Fluorophenol, Phenol-d6, Nitrobenzene-d5, 2-Fluorobiphenyl, 2,4,6-Tribromophenol, and 4-Terphenyl-d14 (all at 0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Metals

L1116955-01 and -02 have elevated detection limits for Antimony, Beryllium, and Thallium due to the dilutions required by the high concentrations of non-target analytes. The requested reporting limit was not achieved for Thallium.

Cyanide, Total

L1116955-01 and -02 have elevated detection limits due to the prep dilutions required to quantitate the results within the calibration range.

The WG496773-1/-2 LCS/LCSD RPD (33%), associated with L1116955-01 and -02, is above the acceptance criteria; however, the individual LCS/LCSD recoveries are within method limits.

Cyanide, Physiologically Available

L1116955-01 and -02 have elevated detection limits due to the prep dilutions required to quantitate the results within the calibration range.

Project Name:	RIVER PLACE	**Lab Number:**	L1116955
Project Number:	170040901	**Report Date:**	10/25/11

Case Narrative (continued)

The WG496772-4 MS recovery (141%), performed on L1116955-01, is above the acceptance criteria; however, the associated LCS recovery was within criteria. No further action was taken.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 10/25/11

ORGANICS

VOLATILES

Project Name: RIVER PLACE **Lab Number:** L1116955

Project Number: 170040901 **Report Date:** 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-01 D
Client ID: MW-S2-10-17-11
Sample Location: W. 42ND ST., NY, NY
Matrix: Water
Analytical Method: 1,8260B
Analytical Date: 10/20/11 14:54
Analyst: PD

Date Collected: 10/17/11 13:00
Date Received: 10/18/11
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	25	2.7	5
1,1-Dichloroethane	ND		ug/l	3.8	1.1	5
Chloroform	ND		ug/l	3.8	0.99	5
Carbon tetrachloride	ND		ug/l	2.5	0.83	5
1,2-Dichloropropane	ND		ug/l	8.8	1.5	5
Dibromochloromethane	ND		ug/l	2.5	0.95	5
1,1,2-Trichloroethane	ND		ug/l	3.8	1.3	5
Tetrachloroethene	ND		ug/l	2.5	0.91	5
Chlorobenzene	ND		ug/l	2.5	0.96	5
Trichlorofluoromethane	ND		ug/l	12	1.3	5
1,2-Dichloroethane	ND		ug/l	2.5	0.80	5
1,1,1-Trichloroethane	ND		ug/l	2.5	0.79	5
Bromodichloromethane	ND		ug/l	2.5	0.96	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	0.82	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	0.72	5
1,1-Dichloropropene	ND		ug/l	12	1.3	5
Bromoform	ND		ug/l	10	1.2	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	0.96	5
Benzene	23		ug/l	2.5	0.97	5
Toluene	8.5		ug/l	3.8	1.1	5
Ethylbenzene	100		ug/l	2.5	1.3	5
Chloromethane	ND		ug/l	12	1.4	5
Bromomethane	ND		ug/l	5.0	1.3	5
Vinyl chloride	ND		ug/l	5.0	1.1	5
Chloroethane	ND		ug/l	5.0	1.2	5
1,1-Dichloroethene	ND		ug/l	2.5	0.90	5
trans-1,2-Dichloroethene	ND		ug/l	3.8	1.0	5
Trichloroethene	ND		ug/l	2.5	0.87	5
1,2-Dichlorobenzene	ND		ug/l	12	0.92	5
1,3-Dichlorobenzene	ND		ug/l	12	0.93	5
1,4-Dichlorobenzene	ND		ug/l	12	1.1	5

Project Name: RIVER PLACE **Lab Number:** L1116955

Project Number: 170040901 **Report Date:** 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-01 D Date Collected: 10/17/11 13:00

Client ID: MW-S2-10-17-11 Date Received: 10/18/11

Sample Location: W. 42ND ST., NY, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	5.0	0.80	5
p/m-Xylene	17		ug/l	5.0	1.7	5
o-Xylene	24		ug/l	5.0	1.6	5
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.93	5
Dibromomethane	ND		ug/l	25	1.8	5
1,2,3-Trichloropropane	ND		ug/l	25	2.1	5
Acrylonitrile	ND		ug/l	25	2.1	5
Styrene	ND		ug/l	5.0	1.8	5
Dichlorodifluoromethane	ND		ug/l	25	1.5	5
Acetone	ND		ug/l	25	7.8	5
Carbon disulfide	ND		ug/l	25	1.5	5
2-Butanone	ND		ug/l	25	9.7	5
Vinyl acetate	ND		ug/l	25	1.6	5
4-Methyl-2-pentanone	ND		ug/l	25	2.1	5
2-Hexanone	ND		ug/l	25	2.9	5
Bromochloromethane	ND		ug/l	12	1.6	5
2,2-Dichloropropane	ND		ug/l	12	2.0	5
1,2-Dibromoethane	ND		ug/l	10	0.96	5
1,3-Dichloropropane	ND		ug/l	12	1.1	5
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.83	5
Bromobenzene	ND		ug/l	12	0.92	5
n-Butylbenzene	ND		ug/l	2.5	0.98	5
sec-Butylbenzene	ND		ug/l	2.5	0.90	5
tert-Butylbenzene	ND		ug/l	12	1.5	5
o-Chlorotoluene	ND		ug/l	12	0.91	5
p-Chlorotoluene	ND		ug/l	12	0.92	5
1,2-Dibromo-3-chloropropane	ND		ug/l	12	1.6	5
Hexachlorobutadiene	ND		ug/l	3.0	1.2	5
Isopropylbenzene	13		ug/l	2.5	0.94	5
p-Isopropyltoluene	ND		ug/l	2.5	0.94	5
Naphthalene	170		ug/l	12	1.1	5
n-Propylbenzene	8.5		ug/l	2.5	0.87	5
1,2,3-Trichlorobenzene	ND		ug/l	12	1.2	5
1,2,4-Trichlorobenzene	ND		ug/l	12	1.1	5
1,3,5-Trimethylbenzene	ND		ug/l	12	1.0	5
1,2,4-Trimethylbenzene	45		ug/l	12	1.3	5
1,4-Diethylbenzene	1.6	J	ug/l	10	0.54	5
4-Ethyltoluene	8.7	J	ug/l	10	2.1	5
1,2,4,5-Tetramethylbenzene	2.6	J	ug/l	10	0.48	5

Project Name: RIVER PLACE **Lab Number:** L1116955

Project Number: 170040901 **Report Date:** 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-01 D Date Collected: 10/17/11 13:00

Client ID: MW-S2-10-17-11 Date Received: 10/18/11

Sample Location: W. 42ND ST., NY, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/l	12	1.0	5
trans-1,4-Dichloro-2-butene	ND		ug/l	12	0.87	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	129		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	115		70-130

Project Name: RIVER PLACE **Lab Number:** L1116955

Project Number: 170040901 **Report Date:** 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-02 D
Client ID: MW-N2-10-17-11
Sample Location: W. 42ND ST., NY, NY
Matrix: Water
Analytical Method: 1,8260B
Analytical Date: 10/19/11 19:52
Analyst: PD

Date Collected: 10/17/11 15:55
Date Received: 10/18/11
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	1000	110	200
1,1-Dichloroethane	ND		ug/l	150	43.	200
Chloroform	ND		ug/l	150	40.	200
Carbon tetrachloride	ND		ug/l	100	33.	200
1,2-Dichloropropane	ND		ug/l	350	59.	200
Dibromochloromethane	ND		ug/l	100	38.	200
1,1,2-Trichloroethane	ND		ug/l	150	52.	200
Tetrachloroethene	ND		ug/l	100	36.	200
Chlorobenzene	ND		ug/l	100	38.	200
Trichlorofluoromethane	ND		ug/l	500	53.	200
1,2-Dichloroethane	ND		ug/l	100	32.	200
1,1,1-Trichloroethane	ND		ug/l	100	32.	200
Bromodichloromethane	ND		ug/l	100	38.	200
trans-1,3-Dichloropropene	ND		ug/l	100	33.	200
cis-1,3-Dichloropropene	ND		ug/l	100	29.	200
1,1-Dichloropropene	ND		ug/l	500	51.	200
Bromoform	ND		ug/l	400	50.	200
1,1,2,2-Tetrachloroethane	ND		ug/l	100	38.	200
Benzene	2400		ug/l	100	39.	200
Toluene	410		ug/l	150	45.	200
Ethylbenzene	810		ug/l	100	53.	200
Chloromethane	ND		ug/l	500	56.	200
Bromomethane	ND		ug/l	200	51.	200
Vinyl chloride	ND		ug/l	200	45.	200
Chloroethane	ND		ug/l	200	47.	200
1,1-Dichloroethene	ND		ug/l	100	36.	200
trans-1,2-Dichloroethene	ND		ug/l	150	42.	200
Trichloroethene	ND		ug/l	100	35.	200
1,2-Dichlorobenzene	ND		ug/l	500	37.	200
1,3-Dichlorobenzene	ND		ug/l	500	37.	200
1,4-Dichlorobenzene	ND		ug/l	500	43.	200

Project Name: RIVER PLACE **Lab Number:** L1116955

Project Number: 170040901 **Report Date:** 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-02 D Date Collected: 10/17/11 15:55

Client ID: MW-N2-10-17-11 Date Received: 10/18/11

Sample Location: W. 42ND ST., NY, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	200	32.	200
p/m-Xylene	1200		ug/l	200	70.	200
o-Xylene	630		ug/l	200	66.	200
cis-1,2-Dichloroethene	ND		ug/l	100	37.	200
Dibromomethane	ND		ug/l	1000	73.	200
1,2,3-Trichloropropane	ND		ug/l	1000	86.	200
Acrylonitrile	ND		ug/l	1000	86.	200
Styrene	ND		ug/l	200	72.	200
Dichlorodifluoromethane	ND		ug/l	1000	60.	200
Acetone	ND		ug/l	1000	310	200
Carbon disulfide	ND		ug/l	1000	60.	200
2-Butanone	ND		ug/l	1000	390	200
Vinyl acetate	ND		ug/l	1000	62.	200
4-Methyl-2-pentanone	ND		ug/l	1000	83.	200
2-Hexanone	ND		ug/l	1000	120	200
Bromochloromethane	ND		ug/l	500	66.	200
2,2-Dichloropropane	ND		ug/l	500	80.	200
1,2-Dibromoethane	ND		ug/l	400	38.	200
1,3-Dichloropropane	ND		ug/l	500	42.	200
1,1,1,2-Tetrachloroethane	ND		ug/l	100	33.	200
Bromobenzene	ND		ug/l	500	37.	200
n-Butylbenzene	ND		ug/l	100	39.	200
sec-Butylbenzene	ND		ug/l	100	36.	200
tert-Butylbenzene	ND		ug/l	500	60.	200
o-Chlorotoluene	ND		ug/l	500	36.	200
p-Chlorotoluene	ND		ug/l	500	37.	200
1,2-Dibromo-3-chloropropane	ND		ug/l	500	65.	200
Hexachlorobutadiene	ND		ug/l	120	46.	200
Isopropylbenzene	ND		ug/l	100	37.	200
p-Isopropyltoluene	ND		ug/l	100	38.	200
Naphthalene	10000		ug/l	500	43.	200
n-Propylbenzene	ND		ug/l	100	35.	200
1,2,3-Trichlorobenzene	ND		ug/l	500	47.	200
1,2,4-Trichlorobenzene	ND		ug/l	500	44.	200
1,3,5-Trimethylbenzene	96	J	ug/l	500	42.	200
1,2,4-Trimethylbenzene	270	J	ug/l	500	54.	200
1,4-Diethylbenzene	ND		ug/l	400	22.	200
4-Ethyltoluene	210	J	ug/l	400	83.	200
1,2,4,5-Tetramethylbenzene	ND		ug/l	400	19.	200

Project Name: RIVER PLACE **Lab Number:** L1116955

Project Number: 170040901 **Report Date:** 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-02 D Date Collected: 10/17/11 15:55

Client ID: MW-N2-10-17-11 Date Received: 10/18/11

Sample Location: W. 42ND ST., NY, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/l	500	41.	200
trans-1,4-Dichloro-2-butene	ND		ug/l	500	35.	200

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	112		70-130

Project Name: RIVER PLACE **Lab Number:** L1116955

Project Number: 170040901 **Report Date:** 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-03
Client ID: TRIP BLANK-101711
Sample Location: W. 42ND ST., NY, NY
Matrix: Water
Analytical Method: 1,8260B
Analytical Date: 10/19/11 18:42
Analyst: PD

Date Collected: 10/17/11 00:00
Date Received: 10/18/11
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	0.54	1
1,1-Dichloroethane	ND		ug/l	0.75	0.22	1
Chloroform	ND		ug/l	0.75	0.20	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.8	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	0.75	0.26	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	0.50	0.19	1
Trichlorofluoromethane	ND		ug/l	2.5	0.27	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.26	1
Bromoform	ND		ug/l	2.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	0.75	0.23	1
Ethylbenzene	ND		ug/l	0.50	0.26	1
Chloromethane	ND		ug/l	2.5	0.28	1
Bromomethane	ND		ug/l	1.0	0.26	1
Vinyl chloride	ND		ug/l	1.0	0.22	1
Chloroethane	ND		ug/l	1.0	0.23	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.21	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.22	1

Project Name: RIVER PLACE **Lab Number:** L1116955

Project Number: 170040901 **Report Date:** 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-03 Date Collected: 10/17/11 00:00

Client ID: TRIP BLANK-101711 Date Received: 10/18/11

Sample Location: W. 42ND ST., NY, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.16	1
p/m-Xylene	ND		ug/l	1.0	0.35	1
o-Xylene	ND		ug/l	1.0	0.33	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19	1
Dibromomethane	ND		ug/l	5.0	0.36	1
1,2,3-Trichloropropane	ND		ug/l	5.0	0.43	1
Acrylonitrile	ND		ug/l	5.0	0.43	1
Styrene	ND		ug/l	1.0	0.36	1
Dichlorodifluoromethane	ND		ug/l	5.0	0.30	1
Acetone	ND		ug/l	5.0	1.6	1
Carbon disulfide	ND		ug/l	5.0	0.30	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	0.31	1
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42	1
2-Hexanone	ND		ug/l	5.0	0.58	1
Bromochloromethane	ND		ug/l	2.5	0.33	1
2,2-Dichloropropane	ND		ug/l	2.5	0.40	1
1,2-Dibromoethane	ND		ug/l	2.0	0.19	1
1,3-Dichloropropane	ND		ug/l	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.16	1
Bromobenzene	ND		ug/l	2.5	0.18	1
n-Butylbenzene	ND		ug/l	0.50	0.20	1
sec-Butylbenzene	ND		ug/l	0.50	0.18	1
tert-Butylbenzene	ND		ug/l	2.5	0.30	1
o-Chlorotoluene	ND		ug/l	2.5	0.18	1
p-Chlorotoluene	ND		ug/l	2.5	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.33	1
Hexachlorobutadiene	ND		ug/l	0.60	0.23	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
p-Isopropyltoluene	ND		ug/l	0.50	0.19	1
Naphthalene	ND		ug/l	2.5	0.22	1
n-Propylbenzene	ND		ug/l	0.50	0.17	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.21	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.27	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.11	1
4-Ethyltoluene	ND		ug/l	2.0	0.42	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.10	1

Project Name: RIVER PLACE **Lab Number:** L1116955

Project Number: 170040901 **Report Date:** 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-03 Date Collected: 10/17/11 00:00

Client ID: TRIP BLANK-101711 Date Received: 10/18/11

Sample Location: W. 42ND ST., NY, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/l	2.5	0.20	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.17	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	112		70-130

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 10/19/11 09:24
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG496996-3					
Methylene chloride	ND		ug/l	5.0	0.54
1,1-Dichloroethane	ND		ug/l	0.75	0.22
Chloroform	ND		ug/l	0.75	0.20
Carbon tetrachloride	ND		ug/l	0.50	0.16
1,2-Dichloropropane	ND		ug/l	1.8	0.30
Dibromochloromethane	ND		ug/l	0.50	0.19
1,1,2-Trichloroethane	ND		ug/l	0.75	0.26
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	0.50	0.19
Trichlorofluoromethane	ND		ug/l	2.5	0.27
1,2-Dichloroethane	ND		ug/l	0.50	0.16
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.26
Bromoform	ND		ug/l	2.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19
Benzene	ND		ug/l	0.50	0.19
Toluene	ND		ug/l	0.75	0.23
Ethylbenzene	ND		ug/l	0.50	0.26
Chloromethane	ND		ug/l	2.5	0.28
Bromomethane	ND		ug/l	1.0	0.26
Vinyl chloride	ND		ug/l	1.0	0.22
Chloroethane	ND		ug/l	1.0	0.23
1,1-Dichloroethene	ND		ug/l	0.50	0.18
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.21
Trichloroethene	ND		ug/l	0.50	0.17
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19
1,4-Dichlorobenzene	ND		ug/l	2.5	0.22

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 10/19/11 09:24
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG496996-3					
Methyl tert butyl ether	ND		ug/l	1.0	0.16
p/m-Xylene	ND		ug/l	1.0	0.35
o-Xylene	ND		ug/l	1.0	0.33
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19
Dibromomethane	ND		ug/l	5.0	0.36
1,2,3-Trichloropropane	ND		ug/l	5.0	0.43
Acrylonitrile	ND		ug/l	5.0	0.43
Styrene	ND		ug/l	1.0	0.36
Dichlorodifluoromethane	ND		ug/l	5.0	0.30
Acetone	ND		ug/l	5.0	1.6
Carbon disulfide	ND		ug/l	5.0	0.30
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	0.31
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42
2-Hexanone	ND		ug/l	5.0	0.58
Bromochloromethane	ND		ug/l	2.5	0.33
2,2-Dichloropropane	ND		ug/l	2.5	0.40
1,2-Dibromoethane	ND		ug/l	2.0	0.19
1,3-Dichloropropane	ND		ug/l	2.5	0.21
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.16
Bromobenzene	ND		ug/l	2.5	0.18
n-Butylbenzene	ND		ug/l	0.50	0.20
sec-Butylbenzene	ND		ug/l	0.50	0.18
tert-Butylbenzene	ND		ug/l	2.5	0.30
o-Chlorotoluene	ND		ug/l	2.5	0.18
p-Chlorotoluene	ND		ug/l	2.5	0.18
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.33
Hexachlorobutadiene	ND		ug/l	0.60	0.23
Isopropylbenzene	ND		ug/l	0.50	0.19
p-Isopropyltoluene	ND		ug/l	0.50	0.19
Naphthalene	ND		ug/l	2.5	0.22

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 10/19/11 09:24
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG496996-3					
n-Propylbenzene	ND		ug/l	0.50	0.17
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.21
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.27
1,4-Diethylbenzene	ND		ug/l	2.0	0.11
4-Ethyltoluene	ND		ug/l	2.0	0.42
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.10
Ethyl ether	ND		ug/l	2.5	0.20
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.17

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	127		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	117		70-130

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 10/20/11 09:41
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG497118-3					
Methylene chloride	ND		ug/l	5.0	0.54
1,1-Dichloroethane	ND		ug/l	0.75	0.22
Chloroform	ND		ug/l	0.75	0.20
Carbon tetrachloride	ND		ug/l	0.50	0.16
1,2-Dichloropropane	ND		ug/l	1.8	0.30
Dibromochloromethane	ND		ug/l	0.50	0.19
1,1,2-Trichloroethane	ND		ug/l	0.75	0.26
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	0.50	0.19
Trichlorofluoromethane	ND		ug/l	2.5	0.27
1,2-Dichloroethane	ND		ug/l	0.50	0.16
1,1,1-Trichloroethane	ND		ug/l	0.50	0.16
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.26
Bromoform	ND		ug/l	2.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19
Benzene	ND		ug/l	0.50	0.19
Toluene	ND		ug/l	0.75	0.23
Ethylbenzene	ND		ug/l	0.50	0.26
Chloromethane	ND		ug/l	2.5	0.28
Bromomethane	ND		ug/l	1.0	0.26
Vinyl chloride	ND		ug/l	1.0	0.22
Chloroethane	ND		ug/l	1.0	0.23
1,1-Dichloroethene	ND		ug/l	0.50	0.18
trans-1,2-Dichloroethene	ND		ug/l	0.75	0.21
Trichloroethene	ND		ug/l	0.50	0.17
1,2-Dichlorobenzene	ND		ug/l	2.5	0.18
1,3-Dichlorobenzene	ND		ug/l	2.5	0.19
1,4-Dichlorobenzene	ND		ug/l	2.5	0.22

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 10/20/11 09:41
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG497118-3					
Methyl tert butyl ether	ND		ug/l	1.0	0.16
p/m-Xylene	ND		ug/l	1.0	0.35
o-Xylene	ND		ug/l	1.0	0.33
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.19
Dibromomethane	ND		ug/l	5.0	0.36
1,2,3-Trichloropropane	ND		ug/l	5.0	0.43
Acrylonitrile	ND		ug/l	5.0	0.43
Styrene	ND		ug/l	1.0	0.36
Dichlorodifluoromethane	ND		ug/l	5.0	0.30
Acetone	ND		ug/l	5.0	1.6
Carbon disulfide	ND		ug/l	5.0	0.30
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	0.31
4-Methyl-2-pentanone	ND		ug/l	5.0	0.42
2-Hexanone	ND		ug/l	5.0	0.58
Bromochloromethane	ND		ug/l	2.5	0.33
2,2-Dichloropropane	ND		ug/l	2.5	0.40
1,2-Dibromoethane	ND		ug/l	2.0	0.19
1,3-Dichloropropane	ND		ug/l	2.5	0.21
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.16
Bromobenzene	ND		ug/l	2.5	0.18
n-Butylbenzene	ND		ug/l	0.50	0.20
sec-Butylbenzene	ND		ug/l	0.50	0.18
tert-Butylbenzene	ND		ug/l	2.5	0.30
o-Chlorotoluene	ND		ug/l	2.5	0.18
p-Chlorotoluene	ND		ug/l	2.5	0.18
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.33
Hexachlorobutadiene	ND		ug/l	0.60	0.23
Isopropylbenzene	ND		ug/l	0.50	0.19
p-Isopropyltoluene	ND		ug/l	0.50	0.19
Naphthalene	ND		ug/l	2.5	0.22

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260B
Analytical Date: 10/20/11 09:41
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG497118-3					
n-Propylbenzene	ND		ug/l	0.50	0.17
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.23
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.22
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.21
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.27
1,4-Diethylbenzene	ND		ug/l	2.0	0.11
4-Ethyltoluene	ND		ug/l	2.0	0.42
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.10
Ethyl ether	ND		ug/l	2.5	0.20
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.17

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	113		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVER PLACE

Project Number: 170040901

Lab Number: L1116955

Report Date: 10/25/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG496996-1 WG496996-2								
Chlorobenzene	97		105		75-130	8		20
Benzene	93		99		76-127	6		20
Toluene	90		96		76-125	6		20
1,1-Dichloroethene	94		99		61-145	5		20
Trichloroethene	106		112		71-120	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	125		124		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	101		103		70-130
Dibromofluoromethane	118		115		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG497118-1 WG497118-2								
Chlorobenzene	106		88		75-130	19		20
Benzene	99		80		76-127	**21**	Q	20
Toluene	100		82		76-125	20		20
1,1-Dichloroethene	104		76		61-145	**31**	Q	20
Trichloroethene	110		89		71-120	**21**	Q	20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	120		122		70-130
Toluene-d8	105		104		70-130
4-Bromofluorobenzene	104		104		70-130
Dibromofluoromethane	114		117		70-130

SEMIVOLATILES

Project Name: RIVER PLACE **Lab Number:** L1116955

Project Number: 170040901 **Report Date:** 10/25/11

SAMPLE RESULTS

Lab ID:	L1116955-01	Date Collected:	10/17/11 13:00
Client ID:	MW-S2-10-17-11	Date Received:	10/18/11
Sample Location:	W. 42ND ST., NY, NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C	Extraction Date:	10/19/11 17:37
Analytical Date:	10/20/11 13:10		
Analyst:	JB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	6.9		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	ND		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1

Project Name: RIVER PLACE **Lab Number:** L1116955

Project Number: 170040901 **Report Date:** 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-01 Date Collected: 10/17/11 13:00

Client ID: MW-S2-10-17-11 Date Received: 10/18/11

Sample Location: W. 42ND ST., NY, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.34	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.43	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.2	1
2-Nitrophenol	ND		ug/l	10	0.48	1
4-Nitrophenol	ND		ug/l	10	1.2	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59	1
Phenol	ND		ug/l	5.0	0.26	1
2-Methylphenol	ND		ug/l	5.0	0.53	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.47	1
Carbazole	18		ug/l	2.0	0.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	24		21-120
Phenol-d6	19		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	54		10-120
4-Terphenyl-d14	83		41-149

Project Name: RIVER PLACE
Project Number: 170040901
Lab Number: L1116955
Report Date: 10/25/11

SAMPLE RESULTS

Lab ID:	L1116955-01	Date Collected:	10/17/11 13:00
Client ID:	MW-S2-10-17-11	Date Received:	10/18/11
Sample Location:	W. 42ND ST., NY, NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C	Extraction Date:	10/19/11 17:37
Analytical Date:	10/20/11 14:10		
Analyst:	HL		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	15		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	9.0		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	9.3		ug/l	0.20	0.06	1
Benzo(a)anthracene	4.2		ug/l	0.20	0.06	1
Benzo(a)pyrene	4.0		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	2.9		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	1.5		ug/l	0.20	0.07	1
Chrysene	3.2		ug/l	0.20	0.05	1
Acenaphthylene	4.4		ug/l	0.20	0.05	1
Anthracene	5.3		ug/l	0.20	0.06	1
Benzo(ghi)perylene	2.4		ug/l	0.20	0.07	1
Fluorene	13		ug/l	0.20	0.06	1
Phenanthrene	16		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	0.66		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	1.8		ug/l	0.20	0.08	1
Pyrene	12		ug/l	0.20	0.06	1
2-Methylnaphthalene	1.7		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	25		21-120
Phenol-d6	23		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	98		41-149

Project Name: RIVER PLACE **Lab Number:** L1116955

Project Number: 170040901 **Report Date:** 10/25/11

SAMPLE RESULTS

Lab ID:	L1116955-02	Date Collected:	10/17/11 15:55
Client ID:	MW-N2-10-17-11	Date Received:	10/18/11
Sample Location:	W. 42ND ST., NY, NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C	Extraction Date:	10/19/11 17:37
Analytical Date:	10/20/11 13:35		
Analyst:	JB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	46		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	80		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1

Project Name: RIVER PLACE **Lab Number:** L1116955

Project Number: 170040901 **Report Date:** 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-02 Date Collected: 10/17/11 15:55

Client ID: MW-N2-10-17-11 Date Received: 10/18/11

Sample Location: W. 42ND ST., NY, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.34	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.43	1
2,4-Dimethylphenol	230	E	ug/l	5.0	1.2	1
2-Nitrophenol	ND		ug/l	10	0.48	1
4-Nitrophenol	ND		ug/l	10	1.2	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59	1
Phenol	ND		ug/l	5.0	0.26	1
2-Methylphenol	68		ug/l	5.0	0.53	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45	1
Benzoic Acid	14	J	ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.47	1
Carbazole	200	E	ug/l	2.0	0.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		21-120
Phenol-d6	19		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	54		10-120
4-Terphenyl-d14	94		41-149

Project Name: RIVER PLACE
Project Number: 170040901
Lab Number: L1116955
Report Date: 10/25/11

SAMPLE RESULTS

Lab ID:	L1116955-02 D	Date Collected:	10/17/11 15:55
Client ID:	MW-N2-10-17-11	Date Received:	10/18/11
Sample Location:	W. 42ND ST., NY, NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C	Extraction Date:	10/19/11 17:37
Analytical Date:	10/20/11 22:39		
Analyst:	JB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4-Dimethylphenol	230		ug/l	10	2.5	2
Carbazole	220		ug/l	4.0	1.0	2

Project Name: RIVER PLACE
Project Number: 170040901
Lab Number: L1116955
Report Date: 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-02 D
Client ID: MW-N2-10-17-11
Sample Location: W. 42ND ST., NY, NY
Matrix: Water
Analytical Method: 1,8270C
Analytical Date: 10/21/11 12:37
Analyst: HL

Date Collected: 10/17/11 15:55
Date Received: 10/18/11
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/19/11 17:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	140		ug/l	80	26.	400
2-Chloronaphthalene	ND		ug/l	80	26.	400
Fluoranthene	ND		ug/l	80	17.	400
Hexachlorobutadiene	ND		ug/l	200	28.	400
Naphthalene	6800		ug/l	80	26.	400
Benzo(a)anthracene	ND		ug/l	80	23.	400
Benzo(a)pyrene	ND		ug/l	80	28.	400
Benzo(b)fluoranthene	ND		ug/l	80	28.	400
Benzo(k)fluoranthene	ND		ug/l	80	27.	400
Chrysene	ND		ug/l	80	20.	400
Acenaphthylene	ND		ug/l	80	20.	400
Anthracene	ND		ug/l	80	25.	400
Benzo(ghi)perylene	ND		ug/l	80	28.	400
Fluorene	58	J	ug/l	80	23.	400
Phenanthrene	97		ug/l	80	26.	400
Dibenzo(a,h)anthracene	ND		ug/l	80	29.	400
Indeno(1,2,3-cd)Pyrene	ND		ug/l	80	32.	400
Pyrene	ND		ug/l	80	23.	400
2-Methylnaphthalene	220		ug/l	80	24.	400
Pentachlorophenol	ND		ug/l	320	75.	400
Hexachlorobenzene	ND		ug/l	320	5.6	400
Hexachloroethane	ND		ug/l	320	26.	400

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**0**	Q	21-120
Phenol-d6	**0**	Q	10-120
Nitrobenzene-d5	**0**	Q	23-120
2-Fluorobiphenyl	**0**	Q	15-120
2,4,6-Tribromophenol	**0**	Q	10-120
4-Terphenyl-d14	**0**	Q	41-149

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 10/20/11 20:19
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 10/19/11 17:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG496891-1					
Acenaphthene	ND		ug/l	2.0	0.55
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67
Hexachlorobenzene	ND		ug/l	2.0	0.65
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
2-Chloronaphthalene	ND		ug/l	2.0	0.47
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46
Fluoranthene	ND		ug/l	2.0	0.51
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40
Hexachlorobutadiene	ND		ug/l	2.0	0.81
Hexachlorocyclopentadiene	ND		ug/l	20	2.1
Hexachloroethane	ND		ug/l	2.0	0.66
Isophorone	ND		ug/l	5.0	0.35
Naphthalene	ND		ug/l	2.0	0.72
Nitrobenzene	ND		ug/l	2.0	0.50
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Butyl benzyl phthalate	ND		ug/l	5.0	0.46
Di-n-butylphthalate	ND		ug/l	5.0	0.54
Di-n-octylphthalate	ND		ug/l	5.0	0.53
Diethyl phthalate	ND		ug/l	5.0	0.45
Dimethyl phthalate	ND		ug/l	5.0	0.45
Benzo(a)anthracene	ND		ug/l	2.0	0.82

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 10/20/11 20:19
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 10/19/11 17:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG496891-1					
Benzo(a)pyrene	ND		ug/l	2.0	0.48
Benzo(b)fluoranthene	ND		ug/l	2.0	0.48
Benzo(k)fluoranthene	ND		ug/l	2.0	0.48
Chrysene	ND		ug/l	2.0	0.56
Acenaphthylene	ND		ug/l	2.0	0.50
Anthracene	ND		ug/l	2.0	0.47
Benzo(ghi)perylene	ND		ug/l	2.0	0.53
Fluorene	ND		ug/l	2.0	0.49
Phenanthrene	ND		ug/l	2.0	0.49
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.48
Indeno(1,2,3-cd)Pyrene	ND		ug/l	2.0	0.48
Pyrene	ND		ug/l	2.0	0.44
Biphenyl	ND		ug/l	2.0	0.50
4-Chloroaniline	ND		ug/l	5.0	0.83
2-Nitroaniline	ND		ug/l	5.0	0.40
3-Nitroaniline	ND		ug/l	5.0	0.59
4-Nitroaniline	ND		ug/l	5.0	0.55
Dibenzofuran	ND		ug/l	2.0	0.47
2-Methylnaphthalene	ND		ug/l	2.0	0.55
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65
Acetophenone	ND		ug/l	5.0	0.55
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.34
2,4-Dichlorophenol	ND		ug/l	5.0	0.43
2,4-Dimethylphenol	ND		ug/l	5.0	1.2
2-Nitrophenol	ND		ug/l	10	0.48
4-Nitrophenol	ND		ug/l	10	1.2
2,4-Dinitrophenol	ND		ug/l	20	1.4
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59
Pentachlorophenol	ND		ug/l	10	1.2

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 10/20/11 20:19
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 10/19/11 17:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG496891-1					
Phenol	ND		ug/l	5.0	0.26
2-Methylphenol	ND		ug/l	5.0	0.53
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45
Benzoic Acid	ND		ug/l	50	1.0
Benzyl Alcohol	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.53

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	92		41-149

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 10/20/11 13:04
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 10/19/11 17:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG496894-1					
Acenaphthene	ND		ug/l	0.20	0.06
2-Chloronaphthalene	ND		ug/l	0.20	0.07
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.20	0.06
Benzo(a)anthracene	ND		ug/l	0.20	0.06
Benzo(a)pyrene	ND		ug/l	0.20	0.07
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07
Chrysene	ND		ug/l	0.20	0.05
Acenaphthylene	ND		ug/l	0.20	0.05
Anthracene	ND		ug/l	0.20	0.06
Benzo(ghi)perylene	ND		ug/l	0.20	0.07
Fluorene	ND		ug/l	0.20	0.06
Phenanthrene	ND		ug/l	0.20	0.06
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08
Pyrene	ND		ug/l	0.20	0.06
2-Methylnaphthalene	ND		ug/l	0.20	0.06
Pentachlorophenol	ND		ug/l	0.80	0.19
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.07

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 10/20/11 13:04
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 10/19/11 17:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG496894-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	91		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	114		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVER PLACE

Project Number: 170040901

Lab Number: L1116955

Report Date: 10/25/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG496891-2 WG496891-3								
Acenaphthene	70		64		46-118	9		30
1,2,4-Trichlorobenzene	59		51		39-98	15		30
2-Chloronaphthalene	83		74		40-140	11		30
1,2-Dichlorobenzene	55		47		40-140	16		30
1,4-Dichlorobenzene	53		45		36-97	16		30
2,4-Dinitrotoluene	94		89		24-96	5		30
2,6-Dinitrotoluene	92		85		40-140	8		30
Fluoranthene	90		87		40-140	3		30
4-Chlorophenyl phenyl ether	80		74		40-140	8		30
n-Nitrosodi-n-propylamine	59		55		41-116	7		30
Butyl benzyl phthalate	86		83		40-140	4		30
Anthracene	87		85		40-140	2		30
Pyrene	89		87		26-127	2		30
P-Chloro-M-Cresol	83		76		23-97	9		30
2-Chlorophenol	62		58		27-123	7		30
2-Nitrophenol	72		62		30-130	15		30
4-Nitrophenol	42		42		10-80	0		30
2,4-Dinitrophenol	60		55		20-130	9		30
Pentachlorophenol	73		74		9-103	1		30
Phenol	31		27		12-110	14		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVER PLACE

Project Number: 170040901

Lab Number: L1116955

Report Date: 10/25/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG496891-2 WG496891-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	46		40		21-120
Phenol-d6	30		27		10-120
Nitrobenzene-d5	62		57		23-120
2-Fluorobiphenyl	76		71		15-120
2,4,6-Tribromophenol	94		94		10-120
4-Terphenyl-d14	91		90		41-149

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG496894-2 WG496894-3

Acenaphthene	75		69		37-111	8		40
2-Chloronaphthalene	119		112		40-140	6		40
Fluoranthene	107		105		40-140	2		40
Anthracene	92		92		40-140	0		40
Pyrene	103		101		26-127	2		40
Pentachlorophenol	83		78		9-103	6		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVER PLACE

Project Number: 170040901

Lab Number: L1116955

Report Date: 10/25/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG496894-2 WG496894-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	57		55		21-120
Phenol-d6	42		40		10-120
Nitrobenzene-d5	96		92		23-120
2-Fluorobiphenyl	96		89		15-120
2,4,6-Tribromophenol	116		111		10-120
4-Terphenyl-d14	106		104		41-149

METALS

Project Name: RIVER PLACE
Project Number: 170040901
Lab Number: L1116955
Report Date: 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-01
Client ID: MW-S2-10-17-11
Sample Location: W. 42ND ST., NY, NY
Matrix: Water
Date Collected: 10/17/11 13:00
Date Received: 10/18/11
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	1.2		mg/l	0.10	0.02	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Antimony, Total	0.0002	J	mg/l	0.0020	0.0002	2	10/19/11 09:30	10/20/11 01:58	EPA 3005A	1,6020	BM
Arsenic, Total	0.013		mg/l	0.005	0.002	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Barium, Total	0.246		mg/l	0.010	0.001	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Beryllium, Total	0.0001	J	mg/l	0.0010	0.0001	2	10/19/11 09:30	10/20/11 01:58	EPA 3005A	1,6020	BM
Cadmium, Total	ND		mg/l	0.005	0.001	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Calcium, Total	190		mg/l	0.10	0.02	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Chromium, Total	0.004	J	mg/l	0.010	0.002	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Cobalt, Total	0.003	J	mg/l	0.020	0.002	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Copper, Total	0.008	J	mg/l	0.010	0.005	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Iron, Total	9.9		mg/l	0.05	0.02	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Lead, Total	0.042		mg/l	0.010	0.003	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Magnesium, Total	68		mg/l	0.10	0.05	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Manganese, Total	0.537		mg/l	0.010	0.001	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Mercury, Total	ND		mg/l	0.0002	0.0001	1	10/24/11 18:30	10/25/11 13:47	EPA 7470A	1,7470A	JP
Nickel, Total	0.004	J	mg/l	0.025	0.003	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Potassium, Total	22		mg/l	2.5	0.80	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Selenium, Total	ND		mg/l	0.010	0.003	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Silver, Total	ND		mg/l	0.007	0.002	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Sodium, Total	42		mg/l	2.0	0.80	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Thallium, Total	ND		mg/l	0.0010	0.0001	2	10/19/11 09:30	10/20/11 01:58	EPA 3005A	1,6020	BM
Vanadium, Total	0.004	J	mg/l	0.010	0.002	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI
Zinc, Total	0.046	J	mg/l	0.050	0.005	1	10/19/11 09:30	10/19/11 17:41	EPA 3005A	1,6010B	AI

Project Name: RIVER PLACE
Project Number: 170040901
Lab Number: L1116955
Report Date: 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-02
Client ID: MW-N2-10-17-11
Sample Location: W. 42ND ST., NY, NY
Matrix: Water
Date Collected: 10/17/11 15:55
Date Received: 10/18/11
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	0.31		mg/l	0.10	0.02	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Antimony, Total	0.0002	J	mg/l	0.0020	0.0002	2	10/19/11 09:30	10/20/11 02:04	EPA 3005A	1,6020	BM
Arsenic, Total	0.128		mg/l	0.005	0.002	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Barium, Total	0.131		mg/l	0.010	0.001	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Beryllium, Total	ND		mg/l	0.0010	0.0001	2	10/19/11 09:30	10/20/11 02:04	EPA 3005A	1,6020	BM
Cadmium, Total	ND		mg/l	0.005	0.001	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Calcium, Total	170		mg/l	0.10	0.02	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Chromium, Total	0.002	J	mg/l	0.010	0.002	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Cobalt, Total	0.014	J	mg/l	0.020	0.002	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Copper, Total	ND		mg/l	0.010	0.005	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Iron, Total	3.3		mg/l	0.05	0.02	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Lead, Total	ND		mg/l	0.010	0.003	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Magnesium, Total	64		mg/l	0.10	0.05	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Manganese, Total	0.582		mg/l	0.010	0.001	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Mercury, Total	ND		mg/l	0.0002	0.0001	1	10/24/11 18:30	10/25/11 13:53	EPA 7470A	1,7470A	JP
Nickel, Total	0.015	J	mg/l	0.025	0.003	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Potassium, Total	31		mg/l	2.5	0.80	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Selenium, Total	ND		mg/l	0.010	0.003	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Silver, Total	ND		mg/l	0.007	0.002	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Sodium, Total	210		mg/l	2.0	0.80	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Thallium, Total	ND		mg/l	0.0010	0.0001	2	10/19/11 09:30	10/20/11 02:04	EPA 3005A	1,6020	BM
Vanadium, Total	0.003	J	mg/l	0.010	0.002	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI
Zinc, Total	0.038	J	mg/l	0.050	0.005	1	10/19/11 09:30	10/19/11 17:44	EPA 3005A	1,6010B	AI

Project Name: RIVER PLACE
Project Number: 170040901
Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG496761-1										
Aluminum, Total	ND		mg/l	0.10	0.02	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Arsenic, Total	ND		mg/l	0.005	0.002	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Barium, Total	ND		mg/l	0.010	0.001	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Cadmium, Total	ND		mg/l	0.005	0.001	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Calcium, Total	ND		mg/l	0.10	0.02	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Chromium, Total	ND		mg/l	0.01	0.002	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Cobalt, Total	ND		mg/l	0.020	0.002	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Copper, Total	ND		mg/l	0.010	0.005	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Iron, Total	ND		mg/l	0.05	0.02	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Lead, Total	ND		mg/l	0.010	0.003	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Magnesium, Total	ND		mg/l	0.10	0.05	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Manganese, Total	ND		mg/l	0.010	0.001	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Nickel, Total	ND		mg/l	0.025	0.003	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Potassium, Total	ND		mg/l	2.5	0.80	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Selenium, Total	ND		mg/l	0.010	0.003	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Silver, Total	ND		mg/l	0.007	0.002	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Sodium, Total	ND		mg/l	2.0	0.80	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Vanadium, Total	ND		mg/l	0.010	0.002	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI
Zinc, Total	ND		mg/l	0.050	0.005	1	10/19/11 09:30	10/19/11 17:24	1,6010B	AI

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG496762-1										
Antimony, Total	ND		mg/l	0.0010	0.0001	1	10/19/11 09:30	10/20/11 00:49	1,6020	BM
Beryllium, Total	0.0001	J	mg/l	0.0005	0.00003	1	10/19/11 09:30	10/20/11 00:49	1,6020	BM
Thallium, Total	0.0001	J	mg/l	0.0005	0.00003	1	10/19/11 09:30	10/20/11 00:49	1,6020	BM

Project Name: RIVER PLACE
Project Number: 170040901
Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG497818-1										
Mercury, Total	ND		mg/l	0.0002	0.0001	1	10/24/11 18:30	10/25/11 13:44	1,7470A	JP

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVER PLACE

Project Number: 170040901

Lab Number: L1116955

Report Date: 10/25/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG496761-2								
Aluminum, Total	95		-		80-120	-		
Arsenic, Total	112		-		80-120	-		
Barium, Total	102		-		80-120	-		
Cadmium, Total	102		-		80-120	-		
Calcium, Total	95		-		80-120	-		
Chromium, Total	105		-		80-120	-		
Cobalt, Total	101		-		80-120	-		
Copper, Total	104		-		80-120	-		
Iron, Total	89		-		80-120	-		
Lead, Total	106		-		80-120	-		
Magnesium, Total	99		-		80-120	-		
Manganese, Total	99		-		80-120	-		
Nickel, Total	103		-		80-120	-		
Potassium, Total	97		-		80-120	-		
Selenium, Total	113		-		80-120	-		
Silver, Total	107		-		80-120	-		
Sodium, Total	90		-		80-120	-		
Vanadium, Total	105		-		80-120	-		
Zinc, Total	108		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVER PLACE

Project Number: 170040901

Lab Number: L1116955

Report Date: 10/25/11

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG496762-2					
Antimony, Total	95	-	80-120	-	
Beryllium, Total	100	-	80-120	-	
Thallium, Total	96	-	80-120	-	
Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG497818-2					
Mercury, Total	104	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG496761-4 QC Sample: L1116912-01 Client ID: MS Sample												
Aluminum, Total	0.12	2	2.0	94		-	-		75-125	-		20
Arsenic, Total	0.003J	0.12	0.138	115		-	-		75-125	-		20
Barium, Total	0.064	2	2.11	102		-	-		75-125	-		20
Cadmium, Total	ND	0.051	0.052	101		-	-		75-125	-		20
Calcium, Total	19.	10	28	90		-	-		75-125	-		20
Chromium, Total	0.01	0.2	0.22	110		-	-		75-125	-		20
Cobalt, Total	ND	0.5	0.504	101		-	-		75-125	-		20
Copper, Total	0.005J	0.25	0.267	107		-	-		75-125	-		20
Iron, Total	2.0	1	2.9	90		-	-		75-125	-		20
Lead, Total	0.007J	0.51	0.539	106		-	-		75-125	-		20
Magnesium, Total	2.2	10	12	98		-	-		75-125	-		20
Manganese, Total	0.051	0.5	0.546	99		-	-		75-125	-		20
Nickel, Total	ND	0.5	0.520	104		-	-		75-125	-		20
Potassium, Total	5.4	10	15	96		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.138	115		-	-		75-125	-		20
Silver, Total	ND	0.05	0.053	106		-	-		75-125	-		20
Sodium, Total	27.	10	35	80		-	-		75-125	-		20
Vanadium, Total	0.003J	0.5	0.536	107		-	-		75-125	-		20
Zinc, Total	0.021J	0.5	0.561	112		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG496762-4 QC Sample: L1115781-68 Client ID: MS Sample									
Antimony, Total	0.0003J	0.5	0.4803	96	-	-	80-120	-	20
Beryllium, Total	ND	0.05	0.0512	102	-	-	80-120	-	20
Thallium, Total	ND	0.12	0.1186	99	-	-	80-120	-	20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG497818-4 QC Sample: L1116955-01 Client ID: MW-S2-10-17-11									
Mercury, Total	ND	0.001	0.0012	124	-	-	70-130	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG496761-3 QC Sample: L1116912-01 Client ID: DUP Sample						
Arsenic, Total	0.003J	0.002J	mg/l	NC		20
Barium, Total	0.064	0.063	mg/l	1		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.01	0.01J	mg/l	NC		20
Lead, Total	0.007J	0.007J	mg/l	NC		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG496762-3 QC Sample: L1115781-68 Client ID: DUP Sample						
Antimony, Total	0.0003J	0.0002J	mg/l	NC		20
Beryllium, Total	ND	ND	mg/l	NC		20
Thallium, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG497818-3 QC Sample: L1116955-01 Client ID: MW-S2-10-17-11						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-01
Client ID: MW-S2-10-17-11
Sample Location: W. 42ND ST., NY, NY
Matrix: Water

Date Collected: 10/17/11 13:00
Date Received: 10/18/11
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.798		mg/l	0.025	0.008	1	10/25/11 10:00	10/25/11 15:45	1,9010B/9012A	JO
Cyanide, Physiologically Available	0.164		mg/l	0.010	0.0001	1	10/25/11 09:45	10/25/11 16:41	64,9014(M)	JO

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

SAMPLE RESULTS

Lab ID: L1116955-02
Client ID: MW-N2-10-17-11
Sample Location: W. 42ND ST., NY, NY
Matrix: Water

Date Collected: 10/17/11 15:55
Date Received: 10/18/11
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.612		mg/l	0.025	0.008	1	10/25/11 10:00	10/25/11 15:49	1,9010B/9012A	JO
Cyanide, Physiologically Available	0.174		mg/l	0.010	0.0001	1	10/25/11 09:45	10/25/11 16:43	64,9014(M)	JO

Project Name: RIVER PLACE
Project Number: 170040901
Lab Number: L1116955
Report Date: 10/25/11

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG496772-3										
Cyanide, Physiologically Available	ND		mg/l	0.005	0.00005	1	10/25/11 09:45	10/25/11 16:27	64,9014(M)	JO
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG496773-3										
Cyanide, Total	ND		mg/l	0.005	0.002	1	10/25/11 10:00	10/25/11 15:30	1,9010B/9012A	JO

Lab Control Sample Analysis

Batch Quality Control

Project Name: RIVER PLACE

Project Number: 170040901

Lab Number: L1116955

Report Date: 10/25/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG496772-1								
Cyanide, Physiologically Available	96		-		80-120	-		
General Chemistry - Westborough Lab NEGATIVE LCS Associated sample(s): 01-02 Batch: WG496772-2								
Cyanide, Physiologically Available	**0**		-		0-10	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG496773-1 WG496773-2								
Cyanide, Total	85		118		80-120	33		

Matrix Spike Analysis
Batch Quality Control

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG496772-4 QC Sample: L1116955-01 Client ID: MW-S2-10-17-11												
Cyanide, Physiologically Available	0.164	0.2	0.727	**141**	Q	-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG496773-4 WG496773-5 QC Sample: L1116955-01 Client ID: MW-S2-10-17-11												
Cyanide, Total	0.798	0.2	2.00	100		1.97	118		80-120	2		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG496772-5 QC Sample: L1116955-02 Client ID: MW-N2-10-17-11						
Cyanide, Physiologically Available	0.174	0.170	mg/l	2		20

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1116955-01A	Clear Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1116955-01B	Clear Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1116955-01C	Clear Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1116955-01D	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1116955-01E	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1116955-01F	Plastic 500ml HNO3 preserved	A	<2	2	Y	Absent	TL-6020T(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),BE-6020T(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),SB-6020T(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1116955-01G	Plastic 250ml NaOH preserved	A	>12	2	Y	Absent	PACN(14)
L1116955-01H	Plastic 250ml NaOH preserved	A	>12	2	Y	Absent	TCN-9010(14)
L1116955-02A	Clear Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1116955-02B	Clear Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1116955-02C	Clear Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1116955-02D	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1116955-02E	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1116955-02F	Plastic 500ml HNO3 preserved	A	<2	2	Y	Absent	TL-6020T(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),BE-6020T(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),SB-6020T(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

*Values in parentheses indicate holding time in days

Project Name: RIVER PLACE
Project Number: 170040901

Lab Number: L1116955
Report Date: 10/25/11

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1116955-02G	Plastic 250ml NaOH preserved	A	>12	2	Y	Absent	PACN(14)
L1116955-02H	Plastic 250ml NaOH preserved	A	>12	2	Y	Absent	TCN-9010(14)
L1116955-03A	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1116955-03B	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	RIVER PLACE	**Lab Number:**	L1116955
Project Number:	170040901	**Report Date:**	10/25/11

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
M	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
NJ	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: DU Report with "J" Qualifiers

Project Name:	RIVER PLACE	**Lab Number:**	L1116955
Project Number:	170040901	**Report Date:**	10/25/11

Data Qualifiers

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers

Project Name:	RIVER PLACE	**Lab Number:**	L1116955
Project Number:	170040901	**Report Date:**	10/25/11

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

64 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). August 2004.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised September 19, 2011 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
*Drinking Water (*Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl, V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 6010B, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3545, 3546, 3550B**,** 3580A, 3630C, 5035, 8015B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NY-DOH.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:
EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix.

CHAIN OF CUSTODY

PAGE _____ OF _____

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 10/18/11

ALPHA Job #: 2111695S

Client Information

Client: Langan Engineering
Address: 360 W 31st St, 8th Fl
New York, NY 10001
Phone: 212-479-5400
Fax:
Email: NRochna@langan.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: River Place
Project Location: W 42nd St, NY, NY
Project #: 170040901
Project Manager: Jason Hayes
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 10/25/11 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All *CAM* methods for inorganic analyses require MS every 20 soil samples)

ANALYSIS: VOC (EPA 8260) | SVOC (EPA 8270) | TAL Metals (EPA 6010) | Cyanide Total (EPA 9010) | Cyanide Available (EPA 9012)

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC	SVOC	TAL Metals	Cyanide Total	Cyanide Available	Sample Specific Comments	TOTAL # BOTTLES
16955-1	MW-5a-10-17-11	10/17/11	13:06	GW	NCR	X	X	X	X	X		
2	MW-4a-10-17-11	10/17/11	15:55	GW	NCR	X	X	X	X	X		
3	Trip Blank-101711	10/17/11	15:00	Water	NCR	X						

Container Type
Preservative

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
R. Dena	10/18/11 13:00		10/18/11 13:00
	10/18/11 18:00		10/18/11 800
	10/18/11 2130		10/18/11 2150

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 18-Jan-2010)

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2012
Issued April 01, 2011

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. CHRISTOPHER WAKEFIELD
ALPHA ANALYTICAL
8 WALKUP DR
WESTBOROUGH, MA 01581-1019

NY Lab Id No: 11148
EPA Lab Code: MA00086

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES POTABLE WATER
All approved analytes are listed below:

Drinking Water Bacteriology	
Coliform, Total / E. coli (Qualitative)	SM 18-21 9222B(97)/40CFR141.21(F)6i
	SM 18-21 9223B (97) (Colilert)
Standard Plate Count	SM 18-21 9215B
Drinking Water Metals I	
Arsenic, Total	EPA 200.8 Rev. 5.4
Barium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Cadmium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Chromium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Copper, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Iron, Total	EPA 200.7 Rev. 4.4
Lead, Total	EPA 200.8 Rev. 5.4
Manganese, Total	EPA 200.7 Rev. 4.4
Mercury, Total	EPA 245.2 Rev. 1974
Selenium, Total	EPA 200.8 Rev. 5.4
Silver, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Zinc, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Drinking Water Metals II	
Aluminum, Total	EPA 200.7 Rev. 4.4
Antimony, Total	EPA 200.8 Rev. 5.4
Drinking Water Metals II	
Beryllium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Nickel, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Thallium, Total	EPA 200.8 Rev. 5.4
Drinking Water Metals III	
Calcium, Total	EPA 200.7 Rev. 4.4
Magnesium, Total	EPA 200.7 Rev. 4.4
Sodium, Total	EPA 200.7 Rev. 4.4
Drinking Water Miscellaneous	
Organic Carbon, Total	SM 18-21 5310C (00)
Perchlorate	EPA 332.0 Rev. 1
Drinking Water Non-Metals	
Alkalinity	SM 18-21 2320B (97)
Calcium Hardness	EPA 200.7 Rev. 4.4
Chloride	EPA 300.0 Rev. 2.1
Color	SM 18-21 2120B (01)
Cyanide	SM 18-21 4500-CN E (99)
Fluoride, Total	EPA 300.0 Rev. 2.1
	SM 18-21 4500-F C (97)
Hydrogen Ion (pH)	SM 18-21 4500-H B (00)
Nitrate (as N)	SM 18-21 4500-NO3 F (00)
Nitrite (as N)	SM 18-21 4500-NO3 F (00)
Solids, Total Dissolved	SM 18-21 2540C (97)

Serial No.: 44170

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

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MR. CHRISTOPHER WAKEFIELD
ALPHA ANALYTICAL
8 WALKUP DR
WESTBOROUGH, MA 01581-1019

NY Lab Id No: 11148
EPA Lab Code: MA00086

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES POTABLE WATER
All approved analytes are listed below:

Drinking Water Non-Metals	
Specific Conductance	SM 18-21 2510B (97)
Sulfate (as SO4)	EPA 300.0 Rev. 2.1
Drinking Water Trihalomethanes	
Bromodichloromethane	EPA 524.2
Bromoform	EPA 524.2
Chloroform	EPA 524.2
Dibromochloromethane	EPA 524.2
Total Trihalomethanes	EPA 524.2
Fuel Additives	
Methyl tert-butyl ether	EPA 524.2
Naphthalene	EPA 524.2
Microextractibles	
1,2-Dibromo-3-chloropropane	EPA 504.1
1,2-Dibromoethane	EPA 504.1
Volatile Aromatics	
1,2,3-Trichlorobenzene	EPA 524.2
1,2,4-Trichlorobenzene	EPA 524.2
1,2,4-Trimethylbenzene	EPA 524.2
1,2-Dichlorobenzene	EPA 524.2
1,3,5-Trimethylbenzene	EPA 524.2
1,3-Dichlorobenzene	EPA 524.2
1,4-Dichlorobenzene	EPA 524.2
2-Chlorotoluene	EPA 524.2
4-Chlorotoluene	EPA 524.2

Volatile Aromatics	
Benzene	EPA 524.2
Bromobenzene	EPA 524.2
Chlorobenzene	EPA 524.2
Ethyl benzene	EPA 524.2
Hexachlorobutadiene	EPA 524.2
Isopropylbenzene	EPA 524.2
n-Butylbenzene	EPA 524.2
n-Propylbenzene	EPA 524.2
p-Isopropyltoluene (P-Cymene)	EPA 524.2
sec-Butylbenzene	EPA 524.2
Styrene	EPA 524.2
tert-Butylbenzene	EPA 524.2
Toluene	EPA 524.2
Total Xylenes	EPA 524.2
Volatile Halocarbons	
1,1,1,2-Tetrachloroethane	EPA 524.2
1,1,1-Trichloroethane	EPA 524.2
1,1,2,2-Tetrachloroethane	EPA 524.2
1,1,2-Trichloroethane	EPA 524.2
1,1-Dichloroethane	EPA 524.2
1,1-Dichloroethene	EPA 524.2
1,1-Dichloropropene	EPA 524.2
1,2,3-Trichloropropane	EPA 524.2
1,2-Dichloroethane	EPA 524.2
1,2-Dichloropropane	EPA 524.2

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WESTBOROUGH, MA 01581-1019

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EPA Lab Code: MA00086

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES POTABLE WATER
All approved analytes are listed below:

Volatile Halocarbons	
1,3-Dichloropropane	EPA 524.2
2,2-Dichloropropane	EPA 524.2
Bromochloromethane	EPA 524.2
Bromomethane	EPA 524.2
Carbon tetrachloride	EPA 524.2
Chloroethane	EPA 524.2
Chloromethane	EPA 524.2
cis-1,2-Dichloroethene	EPA 524.2
cis-1,3-Dichloropropene	EPA 524.2
Dibromomethane	EPA 524.2
Dichlorodifluoromethane	EPA 524.2
Methylene chloride	EPA 524.2
Tetrachloroethene	EPA 524.2
trans-1,2-Dichloroethene	EPA 524.2
trans-1,3-Dichloropropene	EPA 524.2
Trichloroethene	EPA 524.2
Trichlorofluoromethane	EPA 524.2
Vinyl chloride	EPA 524.2

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MR. CHRISTOPHER WAKEFIELD
ALPHA ANALYTICAL
8 WALKUP DR
WESTBOROUGH, MA 01581-1019

NY Lab Id No: 11148
EPA Lab Code: MA00086

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Acrylates	
Acrolein (Propenal)	EPA 624
	EPA 8260B
Acrylonitrile	EPA 624
	EPA 8260B
Ethyl methacrylate	EPA 8260B
Amines	
2-Nitroaniline	EPA 8270C
3-Nitroaniline	EPA 8270C
4-Chloroaniline	EPA 8270C
4-Nitroaniline	EPA 8270C
Carbazole	EPA 8270C
Pyridine	EPA 625
	EPA 8270C
Bacteriology	
Coliform, Fecal	SM 18-21 9221E (99)
	SM 18-21 9222D (97)
Coliform, Total	SM 18-21 9221B (99)
	SM 18-21 9222B (97)
Standard Plate Count	SM 18-21 9215B
Benzidines	
3,3'-Dichlorobenzidine	EPA 625
	EPA 8270C
Benzidine	EPA 625
	EPA 8270C

Chlorinated Hydrocarbon Pesticides	
4,4'-DDD	EPA 608
	EPA 8081A
4,4'-DDE	EPA 608
	EPA 8081A
4,4'-DDT	EPA 608
	EPA 8081A
Aldrin	EPA 608
	EPA 8081A
alpha-BHC	EPA 608
	EPA 8081A
alpha-Chlordane	EPA 8081A
beta-BHC	EPA 608
	EPA 8081A
Chlordane Total	EPA 608
	EPA 8081A
delta-BHC	EPA 608
	EPA 8081A
Dieldrin	EPA 608
	EPA 8081A
Endosulfan I	EPA 608
	EPA 8081A
Endosulfan II	EPA 608
	EPA 8081A
Endosulfan sulfate	EPA 608
	EPA 8081A

Serial No.: 44171

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WADSWORTH CENTER

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MR. CHRISTOPHER WAKEFIELD
ALPHA ANALYTICAL
8 WALKUP DR
WESTBOROUGH, MA 01581-1019

NY Lab Id No: 11148
EPA Lab Code: MA00086

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Chlorinated Hydrocarbon Pesticides	
Endrin	EPA 608
	EPA 8081A
Endrin aldehyde	EPA 608
	EPA 8081A
Endrin Ketone	ERA 8081A
gamma-Chlordane	EPA 8081A
Heptachlor	EPA 608
	EPA 8081A
Heptachlor epoxide	EPA 608
	EPA 8081A
Lindane	EPA 608
	EPA 8081A
Methoxychlor	EPA 608
	EPA 8081A
Toxaphene	EPA 608
	EPA 8081A
Chlorinated Hydrocarbons	
1,2,3-Trichlorobenzene	EPA 8260B
1,2,4,5-Tetrachlorobenzene	EPA 8270C
1,2,4-Trichlorobenzene	EPA 625
	EPA 8270C
2-Chloronaphthalene	EPA 625
	EPA 8270C
Hexachlorobenzene	EPA 625
	EPA 8270C
Chlorinated Hydrocarbons	
Hexachlorobutadiene	EPA 625
	EPA 8270C
Hexachlorocyclopentadiene	EPA 625
	EPA 8270C
Hexachloroethane	EPA 625
	EPA 8270C
Chlorophenoxy Acid Pesticides	
2,4,5-T	EPA 8151A
2,4,5-TP (Silvex)	EPA 8151A
2,4-D	EPA 8151A
Demand	
Biochemical Oxygen Demand	SM 18-21 5210B (01)
Carbonaceous BOD	SM 18-21 5210B (01)
Chemical Oxygen Demand	EPA 410.4 Rev. 2.0
	SM 18-21 5220D (97)
Fuel Oxygenates	
Di-isopropyl ether	EPA 8260B
Methyl tert-butyl ether	EPA 8260B
tert-butyl alcohol	EPA 8260B
tert-butyl ethyl ether(ETBE)	EPA 8260B
Haloethers	
4-Bromophenylphenyl ether	EPA 625
	EPA 8270C
4-Chlorophenylphenyl ether	EPA 625

Serial No.: 44171

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2012
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CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. CHRISTOPHER WAKEFIELD
ALPHA ANALYTICAL
8 WALKUP DR
WESTBOROUGH, MA 01581-1019

NY Lab Id No: 11148
EPA Lab Code: MA00086

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Haloethers	
4-Chlorophenylphenyl ether	EPA 8270C
Bis (2-chloroisopropyl) ether	EPA 625
	EPA 8270C
Bis(2-chloroethoxy)methane	EPA 625
	EPA 8270C
Bis(2-chloroethyl)ether	EPA 625
	EPA 8270C
Mineral	
Acidity	SM 18-21 2310B 4a (97)
Alkalinity	SM 18-21 2320B (97)
Chloride	EPA 300.0 Rev. 2.1
	SM 18-21 4500-Cl- E (97)
Fluoride, Total	EPA 300.0 Rev. 2.1
	SM 18-21 4500-F C (97)
Hardness, Total	EPA 200.7 Rev. 4.4
Sulfate (as SO4)	EPA 300.0 Rev. 2.1
	SM 15 426 C
Nitroaromatics and Isophorone	
1,3,5-Trinitrobenzene	EPA 8330
1,3-Dinitrobenzene	EPA 8330
2,4,6-Trinitrotoluene	EPA 8330
2,4-Dinitrotoluene	EPA 625
	EPA 8270C
	EPA 8330
2,6-Dinitrotoluene	EPA 625

Nitroaromatics and Isophorone	
2,6-Dinitrotoluene	EPA 8270C
	EPA 8330
2-Amino-4,6-dinitrotoluene	EPA 8330
2-Nitrotoluene	EPA 8330
3-Nitrotoluene	EPA 8330
4-Amino-2,6-dinitrotoluene	EPA 8330
4-Nitrotoluene	EPA 8330
Hexahydro-1,3,5-trinitro-1,3,5-triazine	EPA 8330
Isophorone	EPA 625
	EPA 8270C
Methyl-2,4,6-trinitrophenylnitramine	EPA 8330
Nitrobenzene	EPA 625
	EPA 8270C
	EPA 8330
Octahydro-tetranitro-tetrazocine	EPA 8330
Nitrosoamines	
N-Nitrosodimethylamine	EPA 625
	EPA 8270C
N-Nitrosodi-n-propylamine	EPA 625
	EPA 8270C
N-Nitrosodiphenylamine	EPA 625
	EPA 8270C
Nutrient	
Ammonia (as N)	EPA 350.1 Rev. 2.0
	SM 18 4500-NH3 H

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Nutrient	
Kjeldahl Nitrogen, Total	EPA 351.1 Rev. 1978
	LACHAT 10-107-06-2
Nitrate (as N)	EPA 300.0 Rev. 2.1
	EPA 353.2 Rev. 2.0
	SM 18-21 4500-NO3 F (00)
Nitrite (as N)	SM 18-21 4500-NO2 B (00)
Orthophosphate (as P)	SM 18-21 4500-P E
Phosphorus, Total	SM 18-21 4500-P E
Organophosphate Pesticides	
Atrazine	EPA 8270C
Phthalate Esters	
Benzyl butyl phthalate	EPA 625
	EPA 8270C
Bis(2-ethylhexyl) phthalate	EPA 625
	EPA 8270C
Diethyl phthalate	EPA 625
	EPA 8270C
Dimethyl phthalate	EPA 625
	EPA 8270C
Di-n-butyl phthalate	EPA 625
	EPA 8270C
Di-n-octyl phthalate	EPA 625
	EPA 8270C
Polychlorinated Biphenyls	
PCB-1016	EPA 608
	EPA 8082
PCB-1221	EPA 608
	EPA 8082
PCB-1232	EPA 608
	EPA 8082
PCB-1242	EPA 608
	EPA 8082
PCB-1248	EPA 608
	EPA 8082
PCB-1254	EPA 608
	EPA 8082
PCB-1260	EPA 608
	EPA 8082
PCB-1262	EPA 8082
PCB-1268	EPA 8082
Polynuclear Aromatics	
Acenaphthene	EPA 625
	EPA 8270C
Acenaphthylene	EPA 625
	EPA 8270C
Anthracene	EPA 625
	EPA 8270C
Benzo(a)anthracene	EPA 625
	EPA 8270C

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Polynuclear Aromatics	
Benzo(a)pyrene	EPA 625
	EPA 8270C
Benzo(b)fluoranthene	EPA 625
	EPA 8270C
Benzo(ghi)perylene	EPA 625
	EPA 8270C
Benzo(k)fluoranthene	EPA 625
	EPA 8270C
Chrysene	EPA 625
	EPA 8270C
Dibenzo(a,h)anthracene	EPA 625
	EPA 8270C
Fluoranthene	EPA 625
	EPA 8270C
Fluorene	EPA 625
	EPA 8270C
Indeno(1,2,3-cd)pyrene	EPA 625
	EPA 8270C
Naphthalene	EPA 625
	EPA 8270C
Phenanthrene	EPA 625
	EPA 8270C
Pyrene	EPA 625
	EPA 8270C

Priority Pollutant Phenols	
2,4,5-Trichlorophenol	EPA 625
	EPA 8270C
2,4,6-Trichlorophenol	EPA 625
	EPA 8270C
2,4-Dichlorophenol	EPA 625
	EPA 8270C
2,4-Dimethylphenol	EPA 625
	EPA 8270C
2,4-Dinitrophenol	EPA 625
	EPA 8270C
2-Chlorophenol	EPA 625
	EPA 8270C
2-Methyl-4,6-dinitrophenol	EPA 625
	EPA 8270C
2-Methylphenol	EPA 8270C
2-Nitrophenol	EPA 625
	EPA 8270C
4-Chloro-3-methylphenol	EPA 625
	EPA 8270C
4-Methylphenol	EPA 8270C
4-Nitrophenol	EPA 625
	EPA 8270C
Pentachlorophenol	EPA 625
	EPA 8270C
Phenol	EPA 625

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Priority Pollutant Phenols	
Phenol	EPA 8270C
Residue	
Solids, Total	SM 18-21 2540B (97)
Solids, Total Dissolved	SM 18-21 2540C (97)
Solids, Total Suspended	SM 18-21 2540D (97)
Semi-Volatile Organics	
1,1'-Biphenyl	EPA 8270C
1,2-Dichlorobenzene, Semi-volatile	EPA 8270C
1,3-Dichlorobenzene, Semi-volatile	EPA 8270C
1,4-Dichlorobenzene, Semi-volatile	EPA 8270C
2-Methylnaphthalene	EPA 8270C
Acetophenone	EPA 8270C
Benzaldehyde	EPA 8270C
Benzoic Acid	EPA 8270C
Benzyl alcohol	EPA 8270C
Caprolactam	EPA 8270C
Dibenzofuran	EPA 8270C
Volatile Aromatics	
1,2,4-Trichlorobenzene, Volatile	EPA 8260B
1,2,4-Trimethylbenzene	EPA 8260B
1,2-Dichlorobenzene	EPA 624
	EPA 8260B
1,3,5-Trimethylbenzene	EPA 8260B
1,3-Dichlorobenzene	EPA 624

Volatile Aromatics	
1,3-Dichlorobenzene	EPA 8260B
1,4-Dichlorobenzene	EPA 624
	EPA 8260B
Benzene	EPA 624
	EPA 8260B
Chlorobenzene	EPA 624
	EPA 8260B
Ethyl benzene	EPA 624
	EPA 8260B
Isopropylbenzene	EPA 8260B
Naphthalene, Volatile	EPA 8260B
n-Butylbenzene	EPA 8260B
n-Propylbenzene	EPA 8260B
p-Isopropyltoluene (P-Cymene)	EPA 8260B
sec-Butylbenzene	EPA 8260B
Styrene	EPA 624
	EPA 8260B
tert-Butylbenzene	EPA 8260B
Toluene	EPA 624
	EPA 8260B
Total Xylenes	EPA 624
	EPA 8260B
Volatile Halocarbons	
1,1,1-Trichloroethane	EPA 624
	EPA 8260B

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Volatile Halocarbons	
1,1,2,2-Tetrachloroethane	EPA 624
	EPA 8260B
1,1,2-Trichloro-1,2,2-Trifluoroethane	EPA 8260B
1,1,2-Trichloroethane	EPA 624
	EPA 8260B
1,1-Dichloroethane	EPA 624
	EPA 8260B
1,1-Dichloroethene	EPA 624
	EPA 8260B
1,1-Dichloropropene	EPA 8260B
1,2,3-Trichloropropane	EPA 8260B
1,2-Dibromo-3-chloropropane	EPA 8260B
1,2-Dibromoethane	EPA 8260B
1,2-Dichloroethane	EPA 624
	EPA 8260B
1,2-Dichloropropane	EPA 624
	EPA 8260B
1,3-Dichloropropane	EPA 8260B
2,2-Dichloropropane	EPA 8260B
2-Chloroethylvinyl ether	EPA 624
	EPA 8260B
Bromochloromethane	EPA 8260B
Bromodichloromethane	EPA 624
	EPA 8260B
Bromoform	EPA 624

Volatile Halocarbons	
Bromoform	EPA 8260B
Bromomethane	EPA 624
	EPA 8260B
Carbon tetrachloride	EPA 624
	EPA 8260B
Chloroethane	EPA 624
	EPA 8260B
Chloroform	EPA 624
	EPA 8260B
Chloromethane	EPA 624
	EPA 8260B
cis-1,2-Dichloroethene	EPA 624
	EPA 8260B
cis-1,3-Dichloropropene	EPA 624
	EPA 8260B
Dibromochloromethane	EPA 624
	EPA 8260B
Dibromomethane	EPA 8260B
Dichlorodifluoromethane	EPA 624
	EPA 8260B
Hexachlorobutadiene, Volatile	EPA 8260B
Methylene chloride	EPA 624
	EPA 8260B
Tetrachloroethene	EPA 624
	EPA 8260B

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All approved analytes are listed below:

Volatile Halocarbons	
trans-1,2-Dichloroethene	EPA 624
	EPA 8260B
trans-1,3-Dichloropropene	EPA 624
	EPA 8260B
trans-1,4-Dichloro-2-butene	EPA 8260B
Trichloroethene	EPA 624
	EPA 8260B
Trichlorofluoromethane	EPA 624
	EPA 8260B
Vinyl chloride	EPA 624
	EPA 8260B
Volatiles Organics	
1,4-Dioxane	EPA 8260B
2-Butanone (Methylethyl ketone)	EPA 8260B
2-Hexanone	EPA 8260B
4-Methyl-2-Pentanone	EPA 8260B
Acetone	EPA 8260B
Carbon Disulfide	EPA 8260B
Cyclohexane	EPA 8260B
Methyl acetate	EPA 8260B
Methyl cyclohexane	EPA 8260B
Vinyl acetate	EPA 8260B
Wastewater Metals I	
Barium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4

Wastewater Metals I	
Barium, Total	EPA 6010B
	EPA 6020
Cadmium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
	EPA 6010B
	EPA 6020
Calcium, Total	EPA 200.7 Rev. 4.4
	EPA 6010B
Chromium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
	EPA 6010B
	EPA 6020
Copper, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
	EPA 6010B
	EPA 6020
Iron, Total	EPA 200.7 Rev. 4.4
	EPA 6010B
Lead, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
	EPA 6010B
	EPA 6020
Magnesium, Total	EPA 200.7 Rev. 4.4
	EPA 6010B
Manganese, Total	EPA 200.7 Rev. 4.4

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Wastewater Metals I		**Wastewater Metals II**	
Manganese, Total	EPA 200.8 Rev. 5.4 EPA 6010B EPA 6020	Arsenic, Total	EPA 200.8 Rev. 5.4 EPA 6010B EPA 6020
Nickel, Total	EPA 200.7 Rev. 4.4 EPA 200.8 Rev. 5.4 EPA 6010B EPA 6020	Beryllium, Total	EPA 200.7 Rev. 4.4 EPA 200.8 Rev. 5.4 EPA 6010B EPA 6020
Potassium, Total	EPA 200.7 Rev. 4.4 EPA 6010B	Chromium VI	EPA 7196A SM 18-19 3500-Cr D
Silver, Total	EPA 200.7 Rev. 4.4 EPA 200.8 Rev. 5.4 EPA 6010B EPA 6020	Mercury, Total	EPA 245.1 Rev. 3.0 EPA 245.2 Rev. 1974 EPA 7470A
Sodium, Total	EPA 200.7 Rev. 4.4 EPA 6010B	Selenium, Total	EPA 200.7 Rev. 4.4 EPA 200.8 Rev. 5.4 EPA 6010B EPA 6020
Wastewater Metals II			
Aluminum, Total	EPA 200.7 Rev. 4.4 EPA 200.8 Rev. 5.4 EPA 6010B EPA 6020	Vanadium, Total	EPA 200.7 Rev. 4.4 EPA 200.8 Rev. 5.4 EPA 6010B EPA 6020
Antimony, Total	EPA 200.7 Rev. 4.4 EPA 200.8 Rev. 5.4 EPA 6010B EPA 6020	Zinc, Total	EPA 200.7 Rev. 4.4 EPA 200.8 Rev. 5.4 EPA 6010B EPA 6020
Arsenic, Total	EPA 200.7 Rev. 4.4		

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Wastewater Metals III	
Cobalt, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
	EPA 6010B
	EPA 6020
Molybdenum, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
	EPA 6010B
	EPA 6020
Thallium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
	EPA 6010B
	EPA 6020
Tin, Total	EPA 200.7 Rev. 4.4
	EPA 6010B
Titanium, Total	EPA 200.7 Rev. 4.4
Wastewater Miscellaneous	
Boron, Total	EPA 200.7 Rev. 4.4
	EPA 6010B
Bromide	EPA 300.0 Rev. 2.1
Color	SM 18-21 2120B (01)
Cyanide, Total	LACHAT 10-204-00-1-A
	SM 18-21 4500-CN E (99)
Hydrogen Ion (pH)	EPA 9040B
	SM 18-21 4500-H B (00)
Oil & Grease Total Recoverable (HEM)	EPA 1664A

Wastewater Miscellaneous	
Organic Carbon, Total	SM 18-21 5310C (00)
Phenols	EPA 420.1 Rev. 1978
	SM 14 510C
Silica, Dissolved	EPA 200.7 Rev. 4.4
Specific Conductance	EPA 120.1 Rev. 1982
	SM 18-21 2510B (97)
Sulfide (as S)	SM 18-21 4500-S D (00)
Surfactant (MBAS)	SM 18-21 5540C (00)
Total Petroleum Hydrocarbons	EPA 1664A
Sample Preparation Methods	
	EPA 3005A
	EPA 3510C
	EPA 5030B
	EPA 9010B
	EPA 9030B
	SM 18-20 4500-CN C
	SM 18-21 4500-NH3 B (97)

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Acrylates	
Acrolein (Propenal)	EPA 8260B
Acrylonitrile	EPA 8260B
Ethyl methacrylate	EPA 8260B
Amines	
1,2-Diphenylhydrazine	EPA 8270C
2-Nitroaniline	EPA 8270C
3-Nitroaniline	EPA 8270C
4-Chloroaniline	EPA 8270C
4-Nitroaniline	EPA 8270C
Carbazole	EPA 8270C
Benzidines	
3,3'-Dichlorobenzidine	EPA 8270C
Characteristic Testing	
Corrosivity	EPA 9040B
	EPA 9045C
Ignitability	EPA 1010
	EPA 1030
Chlorinated Hydrocarbon Pesticides	
4,4'-DDD	EPA 8081A
4,4'-DDE	EPA 8081A
4,4'-DDT	EPA 8081A
Aldrin	EPA 8081A
alpha-BHC	EPA 8081A
alpha-Chlordane	EPA 8081A

Chlorinated Hydrocarbon Pesticides	
Atrazine	EPA 8270C
beta-BHC	EPA 8081A
Chlordane-Total	EPA 8081A
delta-BHC	EPA 8081A
Dieldrin	EPA 8081A
Endosulfan I	EPA 8081A
Endosulfan II	EPA 8081A
Endosulfan sulfate	EPA 8081A
Endrin	EPA 8081A
Endrin aldehyde	EPA 8081A
Endrin Ketone	EPA 8081A
gamma-Chlordane	EPA 8081A
Heptachlor	EPA 8081A
Heptachlor epoxide	EPA 8081A
Lindane	EPA 8081A
Methoxychlor	EPA 8081A
Toxaphene	EPA 8081A
Chlorinated Hydrocarbons	
1,2,4,5-Tetrachlorobenzene	EPA 8270C
1,2,4-Trichlorobenzene	EPA 8270C
2-Chloronaphthalene	EPA 8270C
Hexachlorobenzene	EPA 8270C
Hexachlorobutadiene	EPA 8270C
Hexachlorocyclopentadiene	EPA 8270C
Hexachloroethane	EPA 8270C

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Chlorophenoxy Acid Pesticides	
2,4,5-T	EPA 8151A
2,4,5-TP (Silvex)	EPA 8151A
2,4-D	EPA 8151A
Dicamba	EPA 8151A
Haloethers	
4-Bromophenylphenyl ether	EPA 8270C
4-Chlorophenylphenyl ether	EPA 8270C
Bis (2-chloroisopropyl) ether	EPA 8270C
Bis(2-chloroethoxy)methane	EPA 8270C
Bis(2-chloroethyl)ether	EPA 8270C
Metals I	
Barium, Total	EPA 6010B
Cadmium, Total	EPA 6010B
Calcium, Total	EPA 6010B
Chromium, Total	EPA 6010B
Copper, Total	EPA 6010B
Iron, Total	EPA 6010B
Lead, Total	EPA 6010B
Magnesium, Total	EPA 6010B
Manganese, Total	EPA 6010B
Nickel, Total	EPA 6010B
Potassium, Total	EPA 6010B
Silver, Total	EPA 6010B
Sodium, Total	EPA 6010B
Metals II	
Aluminum, Total	EPA 6010B
Antimony, Total	EPA 6010B
Arsenic, Total	EPA 6010B
Beryllium, Total	EPA 6010B
Chromium VI	EPA 7196A
Mercury, Total	EPA 7471A
Selenium, Total	EPA 6010B
Vanadium, Total	EPA 6010B
Zinc, Total	EPA 6010B
Metals III	
Cobalt, Total	EPA 6010B
Molybdenum, Total	EPA 6010B
Thallium, Total	EPA 6010B
Tin, Total	EPA 6010B
Miscellaneous	
Boron, Total	EPA 6010B
Cyanide, Total	EPA 9012A
	EPA 9014
Hydrogen Ion (pH)	EPA 9040B
	EPA 9045C
Phenols	EPA 9065
Specific Conductance	EPA 9050
Nitroaromatics and Isophorone	
1,3,5-Trinitrobenzene	EPA 8330

Serial No.: 44172

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2012
Issued April 01, 2011

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. CHRISTOPHER WAKEFIELD
ALPHA ANALYTICAL
8 WALKUP DR
WESTBOROUGH, MA 01581-1019

NY Lab Id No: 11148
EPA Lab Code: MA00086

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Nitroaromatics and Isophorone	
1,3-Dinitrobenzene	EPA 8330
2,4,6-Trinitrotoluene	EPA 8330
2,4-Dinitrotoluene	EPA 8270C
	EPA 8330
2,6-Dinitrotoluene	EPA 8270C
	EPA 8330
2-Amino-4,6-dinitrotoluene	EPA 8330
2-Nitrotoluene	EPA 8330
3-Nitrotoluene	EPA 8330
4-Amino-2,6-dinitrotoluene	EPA 8330
4-Nitrotoluene	EPA 8330
Hexahydro-1,3,5-trinitro-1,3,5-triazine	EPA 8330
Isophorone	EPA 8270C
Methyl-2,4,6-trinitrophenylnitramine	EPA 8330
Nitrobenzene	EPA 8270C
	EPA 8330
Octahydro-tetranitro-tetrazocine	EPA 8330
Pyridine	EPA 8270C
Nitrosoamines	
N-Nitrosodimethylamine	EPA 8270C
N-Nitrosodi-n-propylamine	EPA 8270C
N-Nitrosodiphenylamine	EPA 8270C
Petroleum Hydrocarbons	
Diesel Range Organics	EPA 8015 B
Gasoline Range Organics	EPA 8015 B

Phthalate Esters	
Benzyl butyl phthalate	EPA 8270C
Bis(2-ethylhexyl) phthalate	EPA 8270C
Diethyl phthalate	EPA 8270C
Dimethyl phthalate	EPA 8270C
Di-n-butyl phthalate	EPA 8270C
Di-n-octyl phthalate	EPA 8270C
Polychlorinated Biphenyls	
PCB-1016	EPA 8082
PCB-1221	EPA 8082
PCB-1232	EPA 8082
PCB-1242	EPA 8082
PCB-1248	EPA 8082
PCB-1254	EPA 8082
PCB-1260	EPA 8082
PCB-1262	EPA 8082
PCB-1268	EPA 8082
Polynuclear Aromatic Hydrocarbons	
Acenaphthene	EPA 8270C
Acenaphthylene	EPA 8270C
Anthracene	EPA 8270C
Benzo(a)anthracene	EPA 8270C
Benzo(a)pyrene	EPA 8270C
Benzo(b)fluoranthene	EPA 8270C
Benzo(ghi)perylene	EPA 8270C
Benzo(k)fluoranthene	EPA 8270C

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Polynuclear Aromatic Hydrocarbons	
Chrysene	EPA 8270C
Dibenzo(a,h)anthracene	EPA 8270C
Fluoranthene	EPA 8270C
Fluorene	EPA 8270C
Indeno(1,2,3-cd)pyrene	EPA 8270C
Naphthalene	EPA 8270C
Phenanthrene	EPA 8270C
Pyrene	EPA 8270C
Priority Pollutant Phenols	
2,4,5-Trichlorophenol	EPA 8270C
2,4,6-Trichlorophenol	EPA 8270C
2,4-Dichlorophenol	EPA 8270C
2,4-Dimethylphenol	EPA 8270C
2,4-Dinitrophenol	EPA 8270C
2-Chlorophenol	EPA 8270C
2-Methyl-4,6-dinitrophenol	EPA 8270C
2-Methylphenol	EPA 8270C
2-Nitrophenol	EPA 8270C
4-Chloro-3-methylphenol	EPA 8270C
4-Methylphenol	EPA 8270C
4-Nitrophenol	EPA 8270C
Pentachlorophenol	EPA 8270C
Phenol	EPA 8270C
Semi-Volatile Organics	
1,1'-Biphenyl	EPA 8270C

Semi-Volatile Organics	
1,2-Dichlorobenzene, Semi-volatile	EPA 8270C
1,3-Dichlorobenzene, Semi-volatile	EPA 8270C
1,4-Dichlorobenzene, Semi-volatile	EPA 8270C
2-Methylnaphthalene	EPA 8270C
Acetophenone	EPA 8270C
Benzaldehyde	EPA 8270C
Benzoic Acid	EPA 8270C
Benzyl alcohol	EPA 8270C
Caprolactam	EPA 8270C
Dibenzofuran	EPA 8270C
Volatile Aromatics	
1,2,4-Trichlorobenzene, Volatile	EPA 8260B
1,2,4-Trimethylbenzene	EPA 8260B
1,2-Dichlorobenzene	EPA 8260B
1,3,5-Trimethylbenzene	EPA 8260B
1,3-Dichlorobenzene	EPA 8260B
1,4-Dichlorobenzene	EPA 8260B
2-Chlorotoluene	EPA 8260B
4-Chlorotoluene	EPA 8260B
Benzene	EPA 8260B
Bromobenzene	EPA 8260B
Chlorobenzene	EPA 8260B
Ethyl benzene	EPA 8260B
Isopropylbenzene	EPA 8260B
Naphthalene, Volatile	EPA 8260B

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Volatile Aromatics	
n-Butylbenzene	EPA 8260B
n-Propylbenzene	EPA 8260B
p-Isopropyltoluene (P-Cymene)	EPA 8260B
sec-Butylbenzene	EPA 8260B
Styrene	EPA 8260B
tert-Butylbenzene	EPA 8260B
Toluene	EPA 8260B
Total Xylenes	EPA 8260B
Volatile Halocarbons	
1,1,1-Trichloroethane	EPA 8260B
1,1,2,2-Tetrachloroethane	EPA 8260B
1,1,2-Trichloro-1,2,2-Trifluoroethane	EPA 8260B
1,1,2-Trichloroethane	EPA 8260B
1,1-Dichloroethane	EPA 8260B
1,1-Dichloroethene	EPA 8260B
1,1-Dichloropropene	EPA 8260B
1,2,3-Trichloropropane	EPA 8260B
1,2-Dibromo-3-chloropropane	EPA 8260B
1,2-Dibromoethane	EPA 8260B
1,2-Dichloroethane	EPA 8260B
1,2-Dichloropropane	EPA 8260B
1,3-Dichloropropane	EPA 8260B
2,2-Dichloropropane	EPA 8260B
Bromochloromethane	EPA 8260B
Bromodichloromethane	EPA 8260B

Volatile Halocarbons	
Bromoform	EPA 8260B
Bromomethane	EPA 8260B
Carbon tetrachloride	EPA 8260B
Chloroethane	EPA 8260B
Chloroform	EPA 8260B
Chloromethane	EPA 8260B
cis-1,2-Dichloroethene	EPA 8260B
cis-1,3-Dichloropropene	EPA 8260B
Dibromochloromethane	EPA 8260B
Dibromomethane	EPA 8260B
Dichlorodifluoromethane	EPA 8260B
Hexachlorobutadiene, Volatile	EPA 8260B
Methylene chloride	EPA 8260B
Tetrachloroethene	EPA 8260B
trans-1,2-Dichloroethene	EPA 8260B
trans-1,3-Dichloropropene	EPA 8260B
trans-1,4-Dichloro-2-butene	EPA 8260B
Trichloroethene	EPA 8260B
Trichlorofluoromethane	EPA 8260B
Vinyl chloride	EPA 8260B
Volatile Organics	
1,4-Dioxane	EPA 8260B
2-Butanone (Methylethyl ketone)	EPA 8260B
2-Hexanone	EPA 8260B
4-Methyl-2-Pentanone	EPA 8260B

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Volatile Organics	
Acetone	EPA 8260B
Carbon Disulfide	EPA 8260B
Cyclohexane	EPA 8260B
Methyl acetate	EPA 8260B
Methyl cyclohexane	EPA 8260B
Methyl tert-butyl ether	EPA 8260B
tert-butyl alcohol	EPA 8260B
Vinyl acetate	EPA 8260B
Sample Preparation Methods	
	EPA 1311
	EPA 1312
	EPA 3005A
	EPA 3050B
	EPA 3540C
	EPA 3545
	EPA 3546
	EPA 3580
	EPA 5030B
	EPA 5035
	EPA 9010B
	EPA 9030B

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