March 20, 2014

Simon Dushinsky The Rabsky Group 39 Heyward Street Brooklyn, NY 11205

Re: 644 East 14th Street, Manhattan, NY

**Block 396 Lot 29** 

Dear Mr. Dushinsky:

Environmental Business Consultants (EBC) performed a Limited Phase II subsurface investigation at the above referenced property on March 13, 2014, confirm the presence of a possible No. 2 fuel oil underground storage tank within the small yard on the south side of the property, and determine if the historic use of the Site as an automotive service facility has negatively impacted subsurface soil and/or groundwater.

### **Property Description**

The street address for the Site is 644 East 14th Street, Manhattan, New York 10009. The Site is identified as Block 396, Lot 29 on the Borough of Manhattan Tax Map (New York County). The Site is located on the southwest corner of the intersection of Avenue C and East 14th Street. Lot 29 is a rectangular shaped lot consisting of 114.75 feet of frontage on Avenue C and 88 feet of frontage on East 14th Street for a total of approximately 10,098 ft<sup>2</sup> (0.23 acres). The Site is currently developed with a vacant warehouse/commercial building formerly utilized by Strauss Discount Auto as an auto parts store. A small paved driveway on Avenue C provides access to a steel roll-up door of a former automotive service area.

### **Phase I Environmental Site Assessment**

A Phase I Environmental Site Assessment Report was completed by Hydro Tech Environmental, Corp. in December of 2013. The Phase I noted that prior to 1948, the Site was developed with one 6-story building and two 5-story buildings with multiple storefronts. The current one-story commercial building was constructed in 1948, and has been utilized for auto parts sales and auto repair since construction. The historic Sanborn maps included within the Phase I Report notes an automotive service area was located within the building along Avenue C.

During the site inspection performed as part of the Phase I Environmental Site Assessment, Hydro Tech Environmental, Corp. observed a No. 2 fuel oil fill port within the small yard located on the south side of the building. Hydro Tech Environmental, Corp. listed the No. 2 fuel oil fill port as a recognized environmental condition within the Phase I Environmental Site Assessment Report.

However, EBC was provided a copy of a figure (dated 6/30/2009) prepared by Pillori Associates, PA, which noted the locations in which several geotechnical soil borings and monitoring wells were installed. The location of the No. 2 fuel oil fill port corresponded with the same location as monitoring well W-1, so EBC removed the fill port to confirm it was a 1" diameter PVC monitoring well, and not a No. 2 fuel oil fill port. This monitoring well (W-1) was sampled as part of the subsurface investigation and was listed as Empty Lot MW.

A copy of the Phase I Environmental Site Assessment Report, and a copy of the Pillori Associates, PA figure are attached in **Appendix A**.





### **Phase II Environmental Investigation**

Soil Sampling

Six soil boring locations (B1 through B6) were selected as shown on **Figure 1.** Four of the soil borings (B1 through B4) were performed within the area identified on the Sanborn maps as being utilized for auto repair, on soil boring was performed within the small yard on the south side of the building (B6), and one soil boring was performed within the one-story addition accessed from the rear yard (B5) because spray painted words on the interior walls of the building indicated this area was also utilized for automotive repair or bulk petroleum storage.

All borings were advanced with Geoprobe<sup>TM</sup> direct push equipment and sampled with a 4 foot macro core sampler using disposable acetate liners. Soil was characterized by a Qualified Environmental Professional (QEP) and field screened for the presence of volatile organic compounds (VOCs) using a photo-ionization detector (PID).

At each of the soil boring locations, soil samples were collected continuously from grade to refusal which was encountered across the Site at depths ranging from 1 foot to 7 feet. Retrieved sample cores were field screened for the presence of VOCs with a photo-ionization detector (PID) and visually inspected for evidence of contamination. Soil recovered within each of the six soil borings consisted of historic fill material. Soil boring logs are attached in **Appendix B**.

Soil boring B1 was advanced to a depth of approximately 6 feet within the northern end of the former automotive service area. A 6" layer of a thick/hard tar was recovered within the 4 to 6 interval. EBC suspects the tar is associated with buried building materials, and not representative of a spill/release. No sample was retained from B1.

Soil boring B2 was performed approximately 15 feet south of B1, but refusal was encountered at a depth of approximately 2 feet. No soil was recovered within the macrocore liner, therefore no soil sample was retained for laboratory analysis.

Soil boring B3 was performed approximately 12 feet east of B1, but refusal was encountered at a depth of approximately 1 ft. Soil sample B3 @ 1' was retained for laboratory analysis. No PID values above background concentrations were detected.

Soil boring B4 was performed in the southern end of the former automotive service area and was completed to refusal which was encountered at a depth of approximately 6 feet. Soil sample B4 @ 6' was retained for laboratory analysis. No PID values above background concentrations were detected.

Soil boring B5 was performed in the one-story addition accessed from the rear yard. Spray paint was observed on the concrete block walls that indicated bulk storage of petroleum products. B5 was performed to a depth of approximately 7 feet. Soil sample B5 @ 7 ' was retained for laboratory analysis. No PID values above background concentrations were detected.

Soil boring B6 was performed in small yard on the south side of property to refusal at a depth of approximately 4 feet. Soil sample B6 @ 4' was retained for laboratory analysis. No PID values above background concentrations were detected.

### **Groundwater Sampling**

Two groundwater samples were collected at the Site in the locations shown on **Figure 1**. Groundwater sample "Corner MW" was collected from the existing geotechnical monitoring located within the sidewalk at the northeast corner of the building. Groundwater sample "Empty Lot MW" was collected





from the existing geotechnical monitoring well located within the small yard on the south side of th property. A peristaltic pump fitted with disposable polyethylene tubing and disposable peristaltic pump tubing was used to purge approximately 3 to 4 gallons of groundwater from both monitoring wells prior to sample collection. Groundwater was encountered within both monitoring wells at a depth of approximately 6 feet below grade.

### Sample Handling and Analysis

Collected samples were appropriately packaged, placed in coolers and shipped via laboratory dispatched courier for delivery to Phoenix Environmental Laboratories (Phoenix) of 587 East Middle Turnpike, Manchester, CT 06040, a New York State ELAP certified environmental laboratory (ELAP Certification No. 11301). Each of the retained soil samples were analyzed for volatile organic compounds (VOCs) by USEPA method 8260 and semi-volatile organic Compounds (SVOCs) by USEPA method 8270. Both groundwater samples were analyzed for VOCs by USEPA Method 8260.

#### **Results**

Soil sample results were compared to the Unrestricted Use and Restricted Residential Use Soil Cleanup Objectives (SCOs) as presented in NYSDEC CP51 Soil Cleanup Guidance (10/21/10). Groundwater results were compared to the New York State 6NYCRR Part 703.5 Class GA groundwater standards. Analytical data for the soil samples are summarized in **Tables 1** through **3**, and a copy of the laboratory analytical report is included in **Appendix C**.

As presented in **Table 1**, no VOCs were detected within the four retained soil samples at a concentration above NYSDEC Part 375.6 Unrestricted Use SCOs. Tetrachlorotheylene (PCE) was detected at a concentration below Unrestricted Use SCOs within soil sample B6 @ 4' (280 ppb). PCE was not reported in any of the other soil samples, and was not detected in any of the groundwater samples, and is therefore not considered a significant concern.

As presented in **Table 2**, multiple SVOCs were detected above NYSDEC Part 375.6 Restricted Residential Use SCOs with 2 of the 4 soil samples. SVOC exceedences included benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene. The distribution and concentrations reported within the soil samples are indicative of values typically observed within historic fill material present throughout NYC and are not indicative of a spill/release.

As presented in **Table 3**, no VOCs were detected within either monitoring well above the laboratory method detection limit.

No significant evidence of a spill/release associated with the former use of the Site as an automotive service facility was found during the subsurface investigation, and the No. 2 fuel oil fill port was determined to be a 1" diameter monitoring well with a metal cover typically used for an oil tank. Please call if you have any questions or would like to discuss the project further.

Very truly yours,

**Environmental Business Consultants** 

Kevin Brussee

Senior Project Manager



## **FIGURES**



### EAST 14th STREET

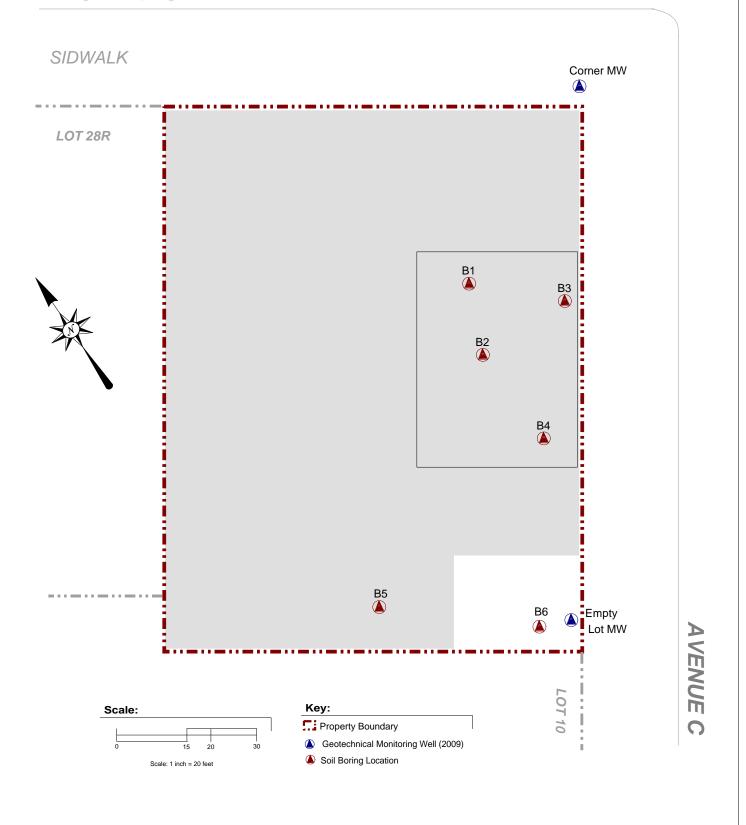




Figure	No.
1	

Site Address: 644 East 14th Street, New York, NY 10009

Drawing Title: Site Sampling Locations

## **TABLES**



#### TABLE 1 644 East 14th Street, Manhattan, New York Soil Analytical Results Volatile Organic Compounds

Cleanup Objectives	COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil	NYDEC Part 375.6 Restricted Residential Soil Cleanup	B3 <sup>-</sup>	1ft	B4 4	lft	B5 7	ft .	В6 4	4ft
11.1.3 Frenchenomena	COMPOUND								_		Ŭ
13.23 Frenchiscontenees	1,1,1,2-Tetrachlorothane										
1,1,2,7 Telesbergehenes		680	100,000								
1.50   1.50					_						
1.5. Deliconomename		270	26.000								
1,3,2,7 Telshoroprogene											
1,2,2-Titichiorpersenses											
1,3.4-Trindrivoloroleromen											
13.6-Trimonythemane	• •										
1.500		3,600	52,000		5.9				6.8		
1.20Cischonochemane											
1.2 Dictionedrame		·	· ·						_		
1.2 Dickhoropropense		· ·									
1.3 Dickholospenzeme			.,								
1.50   1.50		· ·									
1.4.00colorosemene		2,400	4,900						_		
2.2. Dischorprograms		1,800	13.000								
Californitoblesse		.,000	. 5,000								
2-begroupflothern	2-Chlorotoluene										
4.50   5.0   4.50   5.0   4.50   5.0   4.50   5.0   4.50   5.0   4.50   5.0   4.50   5.0     Actore	`										
4-Methyl-2-Pentannee			1								
Acetone											
Benzene   60		50	100,000						41		35
Semonablemane	<del></del>								_		
Bromochromethane		60	4,800								
Semonde/horomethane											
Brommerhane											
Carbon Insulfide	Bromoform										
Carbon tetrachloride											
Chlorostane		760	2.400								
Chlorotorm			,								
Chloromethane	Chloroethane			< 5.9	5.9	< 6.3	6.3	< 6.8	6.8	< 5.8	5.8
cis-1,2-Dichloroethene         250         100,000         < 5.8         5.8         < 6.3         3.8         < 6.8         < 5.8         5.8           cis-1,3-Dichloropropene          < 5.8         5.9         < 6.3         3.3         < 6.8         8.8         < 5.8         5.8           Dibromochtoromethane           < 5.9         < 6.3         3.3         < 6.8         < 8.8         < 5.8         5.8           Dibromothane          < 5.9         < 6.3         3.3         < 6.8         < 6.8         < 5.8         5.8           Eitybenzene         1,000         41,000         < 5.9         < 6.3         3.3         < 6.8         < 5.8         5.8           Eitybenzene         1,000         41,000         < 5.9         < 6.3         3.3         < 6.8         < 5.8         5.8           Eitybenzene         100          < 5.9         < 6.3         3.3         < 6.8         < 5.8         5.8           Eitybenzene         100           < 6.9         < 6.3         < 6.3         < 6.8         < 5.8         5.8           Eitybenzene         260         100,000         < 5.9         < 6.3		370	49,000								
Cis+1,3-Dichloropropene		250	100,000								
Dibrimomethane		250	100,000								
Dichlorodiffuoromethane	Dibromochloromethane			< 3.6	3.6	< 3.8	3.8	< 4.1	4.1	< 3.5	3.5
Ethylbenzene											
Hexachlorobutadiene		1 000	41,000								
Sepropylbenzene	-	1,000	41,000								
Methyl Ethyl Ketone (2-Butanone)						0.0		0.0	0.0		- 0
Methyl t-butyl ether (MTBE)         930         100,000         < 12         12         < 13         < 14         14         < 12         12           Methylene chloride         50         100,000         < 5,9         5,9         < 6,3         6,3         < 6,8         6,8         < 5,8         5,8           Naphthalene         12,000         100,000         430         300         200         6,3         < 6,8         6,8         < 5,8         5,8           n-Butylbenzene         12,000         100,000         < 5,9         5,9         < 6,3         6,3         < 6,8         6,8         < 5,8         5,8           n-Propylbenzene         3,900         100,000         < 5,9         5,9         < 6,3         6,3         < 6,8         6,8         < 5,8         5,8           o-Xylene         260         100,000         < 5,9         5,9         < 6,3         6,3         < 6,8         < 5,8         5,8           p-Isopropyltoluene         11,000         100,000         < 5,9         5,9         < 6,3         6,3         < 6,8         < 5,8         5,8           Styrene         11,000         100,000         < 5,9         5,9         < 6,3         6,3         <											
Methylene chloride											
Naphthalene	· · · · · · · · · · · · · · · · · · ·										
n-Propylbenzene 3,900 100,000 < 5.9 5.9 < 6.3 6.3 < 6.8 6.8 < 5.8 5.8 c-Xylene 260 100,000 < 5.9 5.9 < 6.3 6.3 < 6.8 6.8 < 5.8 5.8 c-Xylene 260 100,000 < 5.9 5.9 < 6.3 6.3 < 6.8 6.8 < 5.8 5.8 c-Xylene < 5.9 c-Xylene 6.8 c-Xylene 5.9 c-Xyle											
Description   Color		·									
p-Isopropyltoluene											
sec-Butylbenzene         11,000         100,000         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           Styrene          < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           tetr-Butylbenzene         5,900         100,000         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           Tetrachloroethene         1,300         19,000         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         280         150           Tetrahydrofuran (THF)         1,300         100,000         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         280         150           Total Mylenes         700         100,000         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         2.8         5.8           Total Xylenes         190         100,000         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           trans-1,2-Dichloroethene         190         100,000         < 5.9         5.9	-	200	100,000								
tert-Butylbenzene         5,900         100,000         < 5,9         5,9         < 6,3         6,3         < 6,8         6,8         < 5,8         5,8           Tetrachloroethene         1,300         19,000         < 5,9		11,000	100,000	< 5.9	5.9		6.3	< 6.8			5.8
Tetrachloroethene											
Tetrahydrofuran (THF)											
Toluene         700         100,000         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           Total Xylenes         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           trans-1,2-Dichloroethene         190         100,000         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           trans-1,3-Dichloropropene         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           trabs-1,4-dichloro-2-butene         < 12         12         < 13         < 14         14         < 12         12           Trichlorotethene         470         21,000         < 5.9         5.9         < 6.3         6.3         < 6.8         < 5.8         5.8           Trichlorotifluoromethane         < 5.9         5.9         < 6.3         6.3         < 6.8         < 5.8         5.8           Trichlorotifluoromethane         < 5.9         5.9         < 6.3         6.3         < 6.8         < 5.8         5.8           Trichlorotifluoromethane         < 5.9         5.9         < 6.3         6.3<		1,300	19,000								
trans-1,2-Dichloroethene         190         100,000         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           trans-1,3-Dichloropropene         < 5.9         5.9         < 6.3         6.3         < 6.8         < 6.8         < 5.8         5.8           trabs-1,4-dichloro-2-butene         < 12         < 12         < 13         < 14         < 14         < 12         < 12           Trichloroethene         470         21,000         < 5.9         5.9         < 6.3         6.8         < 5.8         5.8           Trichloroffluoromethane         < 5.9         5.9         < 6.3         6.3         < 6.8         < 5.8         5.8           Trichlorotfifluoroethane         < 5.9         5.9         < 6.3         6.3         < 6.8         < 5.8         5.8           Vinyl Chloride         20         900         < 5.9         5.9         < 6.3         6.3         < 6.8         < 5.8         5.8           Total BTEX Concentration         ND         ND         ND         ND         ND	· · · · · · · · · · · · · · · · · · ·	700	100,000								
trans-1,3-Dichloropropene         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           trabs-1,4-dichloro-2-butene         < 12         12         < 13         13         < 14         14         < 12         12           Trichloroethene         470         21,000         < 5.9         5.9         < 6.3         6.8         < 6.8         < 5.8         5.8           Trichloroffluoromethane         < 5.9         5.9         < 6.3         < 6.8         < 6.8         < 5.8         5.8           Tichlorotifluoroethane         < 5.9         5.9         < 6.3         6.3         < 6.8         < 6.8         < 5.8         5.8           Vinyl Chloride         20         900         < 5.9         5.9         < 6.3         6.3         < 6.8         < 5.8         5.8           Total BTEX Concentration         ND         ND         ND         ND         ND         ND											
trabs-1,4-dichloro-2-butene         <12         12         <13         13         <14         14         <12         12           Trichloroethene         470         21,000         <5.9         5.9         <6.3         6.3         <6.8         6.8         <5.8         5.8           Trichlorofluoromethane         <5.9         5.9         <6.3         6.3         <6.8         6.8         <5.8         5.8           Trichlorotrifluoroethane         <5.9         5.9         <6.3         6.3         <6.8         6.8         <5.8         5.8           Vinyl Chloride         20         900         <5.9         5.9         <6.3         6.3         <6.8         6.8         <5.8         5.8           Total BTEX Concentration         ND         ND         ND         ND         ND         ND		190	100,000								
Trichloroethene         470         21,000         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           Trichlorofluoromethane         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           Trichlorotrifluoroethane         < 5.9         5.9         < 6.3         6.3         < 6.8         < 5.8         5.8           Vinyl Chloride         20         900         < 5.9         5.9         < 6.3         6.3         < 6.8         < 5.8         5.8           Total BTEX Concentration         ND         ND         ND         ND         ND         ND											
Trichlorofluoromethane         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           Trichlorotrifluoroethane         < 5.9         5.9         < 6.3         6.3         < 6.8         < 5.8         5.8           Vinyl Chloride         20         900         < 5.9         5.9         < 6.3         6.3         < 6.8         < 5.8         5.8           Total BTEX Concentration         ND         ND         ND         ND         ND         ND		470	21,000								
Vinyl Chloride         20         900         < 5.9         5.9         < 6.3         6.3         < 6.8         6.8         < 5.8         5.8           Total BTEX Concentration         ND         ND         ND         ND         ND         ND         ND											
Total BTEX Concentration ND ND ND ND ND											
		20	900		5.9	_	6.3		6.8		5.8
1960 Y-9-3 - 9-00-000 0 1	Total BTEX Concentration Total VOCs Concentration			430		200	<b> </b>	ND		280	$\vdash \vdash$

#### Notes

\* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

ND - Not-detected

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

### TABLE 2 644

4 East 14th Street, Manhattan, New Yo	rk
Soil Analytical Results	
Semi-Volatile Organic Compounds	

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil	NYDEC Part 375.6 Restricted Residential	B3 1ft		B4 4		B5 7		B6 4	
	Cleanup Objectives*	Soil Cleanup Objectives*	μg/i Result	Kg RL	μg/k Result	(g RL	μg/K Result	g RL	μg/h Result	Kg RL
1,2,4,5-Tetrachlorobenzene			< 270	270	< 260	260	< 310	310	< 260	260
1,2,4-Trichlorobenzene			< 270	270	< 260	260	< 310	310	< 260	260
1,2-Dichlorobenzene 1,2-Diphenylhydrazine			< 270 < 390	270 390	< 260 < 370	260 370	< 310 < 440	310 440	< 260 < 380	260 380
1,3-Dichlorobenzene			< 270	270	< 260	260	< 310	310	< 260	260
1,4-Dichlorobenzene			< 270	270	< 260	260	< 310	310	< 260	260
2,4,5-Trichlorophenol			< 270	270	< 260	260	< 310	310	< 260	260
2,4,6-Trichlorophenol			< 270	270	< 260	260	< 310	310	< 260	260
2,4-Dichlorophenol 2.4-Dimethylphenol			< 270	270	< 260	260	< 310	310	< 260	260
2,4-Dimetryiphenol			< 270 < 620	270 620	< 260 < 600	260 600	< 310 < 710	310 710	< 260 < 600	260 600
2,4-Dinitrotoluene			< 270	270	< 260	260	< 310	310	< 260	260
2,6-Dinitrotoluene			< 270	270	< 260	260	< 310	310	< 260	260
2-Chloronaphthalene			< 270	270	< 260	260	< 310	310	< 260	260
2-Chlorophenol			< 270	270	< 260	260	< 310	310	< 260	260
2-Methylnaphthalene 2-Methylphenol (o-cresol)	330	100,000	<b>390</b> < 270	270 270	< 260 < 260	260 260	< 310 < 310	310 310	< 260 < 260	260 260
2-Nitroaniline	330	100,000	< 620	620	< 600	600	< 710	710	< 600	600
2-Nitrophenol			< 270	270	< 260	260	< 310	310	< 260	260
3&4-Methylphenol (m&p-cresol)			< 390	390	< 370	370	< 440	440	< 380	380
3,3'-Dichlorobenzidine			< 270	270	< 260	260	< 310	310	< 260	260
3-Nitroaniline			< 620	620	< 600	600	< 710	710	< 600	600
4,6-Dinitro-2-methylphenol 4-Bromophenyl phenyl ether			< 1100 < 390	1,100 390	< 1100 < 370	1,100 370	< 1300 < 440	1,300 440	< 1100 < 380	1,100 380
4-Chloro-3-methylphenol			< 270	270	< 260	260	< 310	310	< 260	260
4-Chloroaniline			< 270	270	< 260	260	< 310	310	< 260	260
4-Chlorophenyl phenyl ether			< 270	270	< 260	260	< 310	310	< 260	260
4-Nitroaniline			< 620	620	< 600	600	< 710	710	< 600	600
4-Nitrophenol		400.000	< 1100	1,100	< 1100	1,100	< 1300	1,300	< 1100	1,100
Acenaphthene Acenaphthylene	20,000 100,000	100,000 100,000	<b>1,000</b> < 270	270 270	< 260 < 260	260 260	< 310 < 310	310	<b>930</b> < 260	260 260
Acetophenone	100,000	100,000	< 270	270	< 260	260	< 310	310	< 260	260
Aniline			< 1100	1,100	< 1100	1,100	< 1300	1,300	< 1100	1,100
Anthracene	100,000	100,000	1,800	270	280	260	< 310	310	1,400	260
Benz(a)anthracene	1,000	1,000	2,300	270	370	260	< 310	310	1,600	260
Benzidine	1,000	1,000	< 460 <b>2,100</b>	460	< 450 <b>340</b>	450	< 530	530	< 450 <b>1,400</b>	450
Benzo(a)pyrene Benzo(b)fluoranthene	1,000	1,000	2,600	270 270	440	260 260	< 310 < 310	310	1,600	260 260
Benzo(ghi)perylene	100,000	100,000	750	270	< 260	260	< 310	310	560	260
Benzo(k)fluoranthene	800	1,000	1,000	270	< 260	260	< 310	310	700	260
Benzoic acid			< 1100	1,100	< 1100	1,100	< 1300	1,300	< 1100	1,100
Benzyl butyl phthalate			13,000	270	< 260	260	< 310	310	< 260	260
Bis(2-chloroethoxy)methane			< 270	270	< 260	260	< 310	310	< 260	260
Bis(2-chloroethyl)ether Bis(2-chloroisopropyl)ether			< 390 < 270	390 270	< 370 < 260	370 260	< 440 < 310	440 310	< 380 < 260	380 260
Bis(2-ethylhexyl)phthalate			2,300	270	< 260	260	< 310	310	< 260	260
Carbazole			1,300	580	< 560	560	< 670	670	650	570
Chrysene	1,000	1,000	2,000	270	360	260	< 310	310	1,600	260
Dibenz(a,h)anthracene	330	330	< 270	270	< 260	260	< 310	310	< 260	260
Dibenzofuran	7,000	59,000	820	270	< 260	260	< 310	310	460	260
Diethyl phthalate Dimethylphthalate			< 270 < 270	270 270	< 260 < 260	260 260	< 310 < 310	310 310	< 260 < 260	260 260
Di-n-butylphthalate			< 270	270	< 260	260	< 310	310	< 260	260
Di-n-octylphthalate			< 270	270	< 260	260	< 310	310	< 260	260
Fluoranthene	100,000	100,000	6,500	270	1,200	260	< 310	310	3,700	260
Fluorene	30,000	100,000	1,100	270	< 260	260	< 310	310	770	260
Hexachlorobenzene			< 270	270	< 260	260	< 310	310	< 260	260
Hexachlorobutadiene Hexachlorocyclopentadiene			< 270 < 270	270 270	< 260 < 260	260 260	< 310 < 310	310	< 260 < 260	260 260
Hexachloroethane			< 270	270	< 260	260	< 310	310	< 260	260
Indeno(1,2,3-cd)pyrene	500	500	750	270	< 260	260	< 310	310	570	260
Isophorone			< 270	270	< 260	260	< 310	310	< 260	260
Naphthalene	12,000	100,000	900	270	< 260	260	< 310	310	550	260
Nitrobenzene			< 270	270	< 260	260	< 310	310	< 260	260
N-Nitrosodimethylamine N-Nitrosodi-n-propylamine			< 390 < 270	390 270	< 370 < 260	370 260	< 440 < 310	440 310	< 380 < 260	380 260
N-Nitrosodi-n-propylamine N-Nitrosodiphenylamine			< 390	390	< 370	370	< 440	440	< 380	380
Pentachloronitrobenzene			< 390	390	< 370	370	< 440	440	< 380	380
Pentachlorophenol	800	2,400	< 390	390	< 370	370	< 440	440	< 380	380
Phenanthrene	100,000	100,000	9,900	270	1,300	260	< 310	310	3,600	260
Phenol	330	100,000	< 270	270	< 260 <b>1,000</b>	260	< 310	310	< 260 2 100	260
Pyrene	100,000	100,000	5,800	270	1,000	260 370	< 310 < 440	310 440	<b>3,100</b> < 380	260 380

### Notes:

\* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

# TABLE 3 644 East 14th Street, Manhattan, New York Groundwater Analytical Results Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards	Corner	MW	Empty μg/L	Lot
1,1,1,2-Tetrachlorothane	5	< 1.0	1	< 1.0	1
1,1,1-Trichloroethane	5	< 1.0	1	< 1.0	1
1,1,2,2-Tetrachloroethane	5 1	< 0.50	0.5	< 0.50	0.5
1,1,2-Trichloroethane 1,1-Dichloroethane	5	< 1.0 < 1.0	1	< 1.0 < 1.0	1
1,1-Dichloroethene	5	< 1.0	1	< 1.0	1
1,1-Dichloropropene		< 1.0	1	< 1.0	1
1,2,3-Trichlorobenzene		< 1.0	1	< 1.0	1
1,2,3-Trichloropropane	0.04	< 1.0	1	< 1.0	1
1,2,4-Trichlorobenzene	5	< 1.0 < 1.0	1	< 1.0 < 1.0	1
1,2,4-Trimethylbenzene 1,2-Dibromo-3-chloropropane	0.04	< 1.0	1	< 1.0	1
1,2-Dichlorobenzene	5	< 1.0	1	< 1.0	1
1,2-Dichloroethane	0.6	< 1.0	1	< 1.0	1
1,2-Dichloropropane	0.94	< 0.60	0.6	< 0.60	0.6
1,2-Dibromoethane	-	< 1.0	1	< 1.0	1
1,3,5-Trimethylbenzene 1,3-Dichlorobenzene	5 5	< 1.0 < 1.0	1	< 1.0 < 1.0	1
1,3-Dichloropropane	5	< 1.0	1	< 1.0	1
1,4-Dichlorobenzene	5	< 1.0	1	< 1.0	1
2,2-Dichloropropane	5	< 1.0	1	< 1.0	1
2-Chlorotoluene	5	< 1.0	1	< 1.0	1
2-Hexanone (Methyl Butyl Ketone)		< 5.0	5	< 5.0	5
2-Isopropyltoluene	5 5	< 1.0 < 1.0	1	< 1.0 < 1.0	1
4-Chlorotoluene 4-Methyl-2-Pentanone	3	< 5.0	5	< 5.0	5
Acetone		< 25	25	< 25	25
Acrylonitrile	5	< 5.0	5	< 5.0	5
Benzene	1	< 0.70	0.7	< 0.70	0.7
Bromobenzene	5	< 1.0	1	< 1.0	1
Bromochloromethane Bromodichloromethane	5	< 1.0 < 0.50	0.5	< 1.0 < 0.50	0.5
Bromoform		< 1.0	1	< 1.0	1
Bromomethane	5	< 1.0	1	< 1.0	1
Carbon Disulfide	60	< 5.0	5	< 5.0	5
Carbon tetrachloride	5	< 1.0	1	< 1.0	1
Chlorobenzene	5	< 1.0	1	< 1.0	1
Chloroethane Chloroform	5 7	< 1.0 < 1.0	1	< 1.0 < 1.0	1
Chloromethane	60	< 1.0	1	< 1.0	1
cis-1,2-Dichloroethene	5	< 1.0	1	< 1.0	1
cis-1,3-Dichloropropene		< 0.40	0.4	< 0.40	0.4
Dibromochloromethane	_	< 0.50	0.5	< 0.50	0.5
Dibromomethane	5	< 1.0	1	< 1.0	1
Dichlorodifluoromethane  Ethylbenzene	5 5	< 1.0 < 1.0	1	< 1.0	1
Hexachlorobutadiene	0.5	< 0.40	0.4	< 0.40	0.4
Isopropylbenzene	5	< 1.0	1	< 1.0	1
m&p-Xylenes	5	< 1.0	1	< 1.0	1
Methyl Ethyl Ketone (2-Butanone)	40	< 5.0	5	< 5.0	5
Methyl t-butyl ether (MTBE)	10 5	< 1.0	1	< 1.0	1
Methylene chloride Naphthalene	10	< 1.0	1	< 1.0	1
n-Butylbenzene	5	< 1.0	1	< 1.0	1
n-Propylbenzene	5	< 1.0	1	< 1.0	1
o-Xylene	5	< 1.0	1	< 1.0	1
p-Isopropyltoluene	_	< 1.0	1	< 1.0	1
sec-Butylbenzene	5	< 1.0	1	< 1.0	1
Styrene tert-Butylbenzene	5 5	< 1.0 < 1.0	1	< 1.0 < 1.0	1
Tetrachloroethene	5	< 1.0	1	< 1.0	1
Tetrahydrofuran (THF)		< 2.5	2.5	< 2.5	2.5
Toluene	5	< 1.0	1	< 1.0	1
Total Xylenes	5	< 2.0	2	< 2.0	2
trans-1,2-Dichloroethene	5	< 1.0	1	< 1.0	1
trans-1,3-Dichloropropene trans-1,4-dichloro-2-butene	0.4 5	< 0.40 < 5.0	0.4	< 0.40	0.4
Trichloroethene	5	< 1.0	1	< 1.0	1
Trichlorofluoromethane	5	< 1.0	1	< 1.0	1
Trichlorotrifluoroethane		< 1.0	1	< 1.0	1
Vinyl Chloride	2	< 1.0	1	< 1.0	1

# <u>APPENDIX A</u> <u>PREVIOUS REPORTS</u>





# Hydro Tech Environmental, Corp.

Main Office 77 Arkay Drive, Suite G Hauppauge, New York 11788 T (631) 462-5866 • F (631) 462-5877 NYC Office 15 Ocean Avenue, 2<sup>nd</sup> Floor Brooklyn, New York 11225 T (718) 636-0800• F (718) 636-0900

WWW.HYDROTECHENVIRONMENTAL.COM

### PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

644 East 14th Street New York, NY



Prepared For: Mr. Paul Ratnofsky 14 Avenue C LLC 500 West 43<sup>rd</sup> Street Suite 39A New York, NY 10036

December 5, 2013

### PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

644 East 14th Street New York, NY

### December 5, 2013

Hydro Tech Environmental, Corp. appreciates the opportunity to work for 14 Avenue C LLC at the property located at 644 East 14th Street, New York, New York.

Should you require any additional information or have any comments regarding the contents of this report, please feel free to contact our office at your convenience.

We declare that, to the best of my professional knowledge and belief, HTE personnel meet the definition of an environmental professional as defined in §312.10 of 40 C.F.R. 312, and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 C.F.R. Part 312.

Very Truly Yours,

Hydro Tech Environmental, Corp.

Ezgi Karayel

Project Engineer

Mark E. Robbins, C.P.G., C.E.I.

Principal

### TABLE OF CONTENTS

Page	Num	ber

	-
1.0 Executive Summary	1
2.0 Introduction & Scope of Work	.2
2.1 Introduction	2
2.2 Scope of Work	2
2.3 Limitations, Exceptions & Data Gaps	2
3.0 Subject Property Description	4
3.1 Subject Property Vicinity	.4
3.2 Subject Property Description	.4
3.3 Adjacent Land Use	.4
3.4 Proximity to Environmentally Sensitive Areas	.4
3.5 Environmental Setting	.5
4.0 Historical Use	.6
4.1 Sanborn Maps	.6
4.2 City Directory Search	.6
4.3 Previous Studies	.6
4.4 Previous Owners	.6
4.5 Historical Use Summary	.7
5.0 Records Review	.8
5.1 Environmental Databases	.8
5.2 Municipal Records	.9
6.0 Site Reconnaissance	11
7.0 Client/User-Provided Information & Interviews	14
7.1 Client/User-Provided Information	14
7.2 Interviews	14
8.0 Conclusions	15
9.0 Credentials & Declaration	16
9.1 Credentials	16
9.2 Environmental Professional Declaration	16
10.0 References	.17
11.0 Exclusions &Disclaimer	18

Figures
1. Site Plan

- Appendices
  A. Photographs
  B. Sanborn Maps
  C. City Directory Search
  D. Database Search Results
  E. Municipal Records
- F. Credentials

#### 1.0 EXECUTIVE SUMMARY

Hydro Tech Environmental, Corp. (Hydro Tech) has performed a Phase I Environmental Site Assessment (Phase I ESA) at the Subject Property located at 644 East 14th Street, New York, NY. The Phase I ESA was performed to meet or surpass the American Standard of Testing Materials Standard for Phase I Environmental Site Assessments E 1527-05. The purpose of the assessment was to characterize the environmental quality of the Subject Property through the identification of Recognized Environmental Conditions. All work was performed under the supervision of a Hydro Tech Project Manager and under the guidance of a Hydro Tech geologist.

The results of the Phase I Environmental Site Assessment are contained in this report. The Phase I Environmental Site Assessment has revealed the following Recognized Environmental Condition(s) at the Subject Property:

- The presence of a suspect fill port in the southeastern portion of the Subject Property (§6.0)
- The presence of suspect lead-based paint inside the building (§6.0)
- The presence of suspect asbestos containing material (ACM) inside the building (§6.0)
- The presence of mold inside the building (§6.0)

No effort has been made to perform any investigation beyond what is included in this Report. The observations and conclusions included herein summarize the results of the Phase I Environmental Site Assessment up to the date of the fieldwork and the date of this Report.

The following sections provide the details and specific information pertaining to the various components of the Phase I Environmental Site Assessment.

### 2.0 INTRODUCTION & SCOPE OF WORK

#### 2.1 Introduction

Hydro Tech Environmental, Corp. (Hydro Tech, the "Preparer") has been retained by 14 Avenue C LLC (the "User") to perform a Phase I Environmental Site Assessment at the property located at 644 East 14th Street in Manhattan, New York. The User is the "Owner" of the property. The Phase I was prepared for due diligence purposes towards a purchase transaction of the property. The property will hereafter be referred to as the "Subject Property".

The purpose of a Phase I Assessment is to characterize the environmental quality of the Subject Property through the determination of the presence of Recognized Environmental Conditions (RECs). As defined by the American Society of Testing and Materials (ASTM), a REC is, "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property" (ASTM E 1527-05, §1.1.1).

To this end, Hydro Tech has collected information through a number of sources including, but not limited to: a property and neighborhood inspection by trained environmental personnel, a review of historical and current information collected from various federal, state, county and municipal agencies and personnel interviews with Site representatives. Recommendations are offered where prudent. Firms subcontracted by Hydro Tech and the User may have collected some information used in this report. Some or all of the Assessment has been performed or supervised by environmental professionals as required by 40 CFR Part 310. The procurement of Title and Judicial Records for Environmental Liens and/or Activity and Use Limitations ("AULs") by HTE is beyond the scope of this practice (ASTM E1527-05) and investigation.

### 2.2 Scope of Work

The general activities of the Phase I Assessment included the performance of the following tasks:

- 1. A detailed inspection of the Site and its general vicinity.
- A review of all reasonably ascertainable regulatory agency documents.
- 3. A neighborhood hazardous waste survey utilizing Federal and State databases.
- 4. A review and evaluation of reasonably ascertainable geologic and hydrogeologic reference materials.
- Interviews with representatives of the Site.
- The preparation of a Phase I Environmental Site Assessment Report.

The Phase I ESA was performed in accordance with ASTM E 1527 except where noted in Section 2.3 and Hydro Tech's Proposal. As required by ASTM, the User has supplied information that has been relied upon by Hydro Tech in the rendering of findings, conclusions and opinions, except where indicated in Section 2.3 or elsewhere in the report.

### 2.3 Limitations and Exceptions & Data Gaps

In addition to those items outlined by ASTM E 1527, asbestos, radon, lead-based paint and lead in water were also considered in the scope of work. While this Phase I Assessment provides information with respect to both asbestos and lead-based paint, the presence of these materials can only be confirmed through the collection and analysis of bulk samples.

This report is not intended to serve as a full asbestos survey or lead-based paint survey. These surveys are commonly performed for the purpose of building demolition/renovation or the recognition/identification of any building materials that may contain asbestos or lead-based paint and it is recommended that they be performed prior to any such work.

Business Environmental Risks have not been considered and are not included in the scope of work. This Phase I Assessment is not intended to address the soil/groundwater quality at the Subject Property for

general Site characterization or waste disposal purposes. This Phase I Assessment in not intended to evaluate the fair market price of the property if it is not affected by hazardous or petroleum products.

Portions of this report have been prepared utilizing information provided by third party sources or the user. As such, Hydro Tech relies upon these sources and has recorded findings, conclusions and opinions based upon this information. Hydro Tech cannot attest to the accuracy of this information but where possible had attempted to verify the information.

This Phase I ESA Report is not intended to serve or be construed as a regulatory compliance report for the property. No legal opinions are provided with this report.

It should be noted that the USEPA has determined in their final ruling (40 C.F.R. Part 312, Standards and Practices for All Appropriate Inquires) of November 1, 2005 that "persons conducting all appropriate inquiries may use the procedures included in the ASTM E1527-05 standard to comply with today's final rule." Therefore, while all appropriate inquiry could be considered satisfied as this ESA was prepared in exceedance(s) of the ASTM E1527-05 standard, persons attempting to utilize this ESA while seeking one of CERCLA's LLPs must note that; a) they will not maintain CERCLA liability protections unless they also comply with all of the continuing obligations established under the statute that are beyond the scope of this practice (ASTM E1527-05) and investigation; and b) in order to qualify for one of the CERCLA LLPs, the person commissioning the Phase I Environmental Site Assessment must have provided site-specific information (if available) to Hydro Tech before the date of this ESA, otherwise a determination could be made that all appropriate inquiry is not complete.

As defined by ASTM, a Data Gap is defined as an inability to obtain information during the Phase I process, as required under the Standard, despite a good faith effort by the Environmental Professional to obtain this information. The Phase I ESA report must contain information pertaining to Data Gap(s) and evaluate their relative significance.

The following table provides a breakdown of the Data Gap(s) encountered and their relative significance.

Data Gap	Significance
Site History – not conducted to time of first development and/or 5 year intervals.	Low – unlikely to alter conclusions due to findings of other resource(s).
No environmental lien provided.	Low – unlikely to alter conclusions due to findings of other resource(s).
Municipal Records – FOIAs not returned as of date of report.	Unknown – Any FOIA responses that alter the conclusions of the report will be provided upon receipt.

Due to other historical information obtained over the course of this investigation, Hydro Tech does not consider these data failures/data gaps significant, as they appear unlikely to have affected potential Recognized Environmental Conditions at the Subject Property.

### 3.0 SUBJECT PROPERTY DESCRIPTION

### 3.1 Subject Property Vicinity

The Subject Property is located on the southwest corner of East 14th Street and Avenue C, in the Borough of Manhattan, New York. The Borough of Manhattan is situated in the western portion of the City of New York. The East River is located approximately ¼ mile to the east of the Site.

The vicinity of the Subject Property consists of commercial and residential properties. The ground surfaces in the vicinity of the Site consist of asphalt and concrete.

### 3.2 Subject Property Description

The address of the Subject Property is identified as 644 East 14<sup>th</sup> Street, New York, NY. The Subject Property is approximately 10,098 square feet in area and is currently developed with a 1-story closed Strauss Discount Auto Parts Store. A small fenced rear yard is located in the southeast portion of the property. The Subject Property is not in use. A Con Edison plant is located to the east of the Subject Property. *Appendix A* provides photographs of the Subject Property.

The interior of the building consists of a wide-open empty space and an out of use bathroom. The building has no basement. Gas-fired space heaters were observed in the building. The building is heated via natural gas. There was no electric in the building during the inspection.

Access to the Subject Property is via East  $14^{th}$  Street to the north. The Subject Property is connected to the municipal water and gas. These services enter the Subject Property from East  $14^{th}$  Street to the north.

The topography of the Subject Property and its vicinity is generally level. Figure 1 provides a Site Plan.

#### 3.3 Adjacent Land Use

The Subject Property is located in a residential and commercial area. The following properties were identified immediately adjacent to the Subject Property:

Direction	Adjacent Parcel	Surrounding Parcels
North	Multi-story residential and commercial mixed use building	
South	Multi-story residential and commercial mixed use building	Residential and Commercial
East	Avenue C and Con Edison Plant	
West	Multi-story residential and commercial mixed use building	

Hydro Tech does not believe that the present uses of the adjacent properties identified above should impact upon the environmental quality of the Subject Property.

### 3.4 Proximity to Environmentally Sensitive Areas

The results of the Site inspection and an evaluation of the United States Geological Survey (USGS) 7-½ Minute Topographic Map containing the properties indicate there are four (4) sensitive receptors present within a 0.125-mile radius of the Subject Property. These sensitive receptors are Vaccination Services of America, Inc., NYCHA Campos Plaza Community Center, UCPA of New York City and Gina Brown Daycare. Hydro Tech believes that the Subject Property should not impact upon the environmental quality of these sensitive receptors.

### 3.5 Environmental Setting

The Subject Property is located in southeastern portion of New York County, New York. The elevation of the Subject Property is approximately 7 feet above mean sea level (USGS Brooklyn, New York Quadrangle, 1995, Photo revised 2011).

The vicinity of the site is characterized by metamorphosed sequences of bedrock known as the Manhattan Prong of the Hartland Formation. The Hartland Formation was formed during the late Cambrian to early Ordovician period and consists of undivided pelitic schist with gneiss and amphibolite. The formation is frequently cross cut by transverse and parallel faults. The area is overlain by Pleistocene aged glacial till deposits.

Outcrops of bedrock are commonplace in the borough of Manhattan, as can be seen in Central Park. However, no areas of exposed bedrock were identified during the site inspection portion of the Phase I.

The depth to groundwater in the vicinity of the Site is estimated below 10 feet below grade. The water table is typically encountered within the fractures of the bedrock. The regional groundwater flow direction in the vicinity of the Subject Property is presumed to be toward the east, in the direction of the East River.

#### 4.0 HISTORICAL USE

### 4.1 Sanborn Maps

Sanborn Fire Rate Insurance Maps for the Subject Property and its vicinity dated 1903, 1920, 1922, 1928, 1944, 1950, 1971, 1976, 1979, 1980, 1983, 1985, 1987, 1988, 1991, 1992, 1993, 1994, 1995, 1996, 2001, 2002, 2003, 2004, and 2005 were obtained from EDR and evaluated in order to establish the history of the Site. *Appendix B* provides a copy of the Sanborn Fire Rate Insurance Maps.

Date	Subject Property Shown As	Surrounding area
1903- 1920	One 6-story and two 5-story buildings, multiple storefronts (use of the buildings not listed)	
1922- 1928	No listing for the Subject Property	Residential and commercial
1944- 1950	One 6-story and two 5-story buildings, multiple storefronts (use of the buildings not listed)	buildings and Con Edison Facility
1971- 2005	Auto Service Shop and one 1-story building	

### 4.2 City Directory Search

In order to further assess the property's history, available City Directory files were obtained from EDR for review. The City Directories document known occupants of specific properties and sorted by individual addresses. *Appendix C* provides a copy of the City Directory Search.

The following provides a listing of all documented usages of the addresses  $6444\ East\ 14^{th}\ Street$ :

Date	Use of Subject Property	Surrounding Property Use
1927-1938 Lipschitz Jon Grocer		
1942-1950	Dependable Window Shades, Leonard Goldstone, Jack Gross Window Shades, Lipschitz Jon Grocer, Marvald Saml Electrician, Ralph Miller Glass, Triboro Glass Co	Residential and Commercial
1956-2013	Strauss Stores Corp / Strauss Discount Auto	

### 4.3 Previous Studies

Hydro Tech Environmental performed a Phase I ESA on the Subject Property during January 2011. The January 2011 report identified three (3) RECs at the Subject Property. These include; the presence of mold inside the building, the documented presence of Asbestos-Containing Materials, and the presence of peeling paint inside the building that could be lead-based. During January 2011 inspection, there was upwards of six inches of snow covered a large portion of the sidewalk along the building and street (as well as the paved area in the southeast portion of the property). Therefore the fill port located in the southeastern portion of the Subject Property could not be identified.

#### 4.4 Previous Owners

According to the property listing on Property Shark, the following provides a list of historical owners of the Subject Property:

Year	Name Of Previous Owner(s)	
2013	14 Avenue C LCC	
2008	Kimstrauss Unitary Business Trust	
2005	Sbcg Strauss LLC	



2000	R&S/Strauss Inc, A Del Corporation	
1988	Schottenstein Storescrp	
1985	644 E 14th St Corp Granett & Gold PC	

### 4.5 Historical Use Summary

Based on a review of available information provided and/or obtained for the Subject Property as of the date of this ESA, it appears that the Subject Property was originally developed prior to 190 with storefronts. The existing building on site was constructed prior to 1950s, and has been occupied by Strauss Auto Store since then. Specific historical uses of the Subject Property include a grocery, window shade shop, glass shop, and restaurant. Since the auto service shop was utilized as a retail space for auto accessories, it should not have impacted upon the environmental quality of the Subject Property. The historical use of adjacent properties does not appear to have impacted the environmental quality of the Subject Property.

### 5.0 RECORDS REVIEW

### 5.1 Environmental Databases

Federal, State, Local and Tribal hazardous waste databases were reviewed with respect to the Subject Property and surrounding properties. ASTM E 1527 specifies the search area for each database. In addition, all orphan sites (those without adequate information for mapping purposes) listed in the database search were also reviewed, evaluated and incorporated (as needed). *Appendix D* provides a copy of the Database Search Results. The following databases, with the appropriate search radius, were reviewed:

ASTM Standard Environmental	Approx. ASTM Minimum Search Distance (MSD)	Number of Mapped Sites within MSD	Number of Orphan Sites	
Record Source				
1. NPL (Superfund) National Priorities List	1.0 Mile	0	0	
2. Delisted NPL Site Delisted National Priorities List Site	0.5 Mile	0	0	
3. CERCLIS Comprehensive Environmental Response Compensation & Liability Information System	0.5 Mile	0	0	
4. CERCLIS NFRAP CERCLIS No Further Remedial Action Planned Site	0.5 Mile	0	0	
5. RCRA-TSD CORRACTS Resource Conservation & Recovery Treatment/Storage/Disposal Facility Subject to Corrective Action	1.0 Mile	0	0.	
6. RCRA-TSD Resource Conservation & Recovery Treatment/Storage/Disposal Facility (Non-Corrective Action)	0.5 Mile	0	0	
7. RCRA-LG Resource Conservation & Recovery Large Quantity Generator	Site & Adjoining	0	0	
8. RCRA-SG Resource Conservation & Recovery Small Quantity Generator	Site & Adjoining	0	0	
9. ERNS Emergency Response Notification System	Property Only	0	0	
10. Local / State / Tribal UST, PBS Registered Storage Tanks	Site & Adjoining	1	0	
11. Local / State / Tribal LTANKS Leaking Underground Storage Tanks	0.5 Mile	45	0	
12. State Spill Incidents NYSDEC Spill Sites	0.125 Mile	233	0	
13. Local / State / Tribal SWF Solid Waste Facility / Landfill	0.5 Mile	0	0	
14. Local / State / Tribal CERCLIS Inactive Hazardous Waste Disposal Site	0.5 Mile	3	0	
16. Inst. / Engineering Controls Registry of Institutional and/or Engineering Controls	Property Only	0	0	
17. Voluntary Cleanup Program Sites Local / State / Tribal VCP Sites	0.5 Mile	0	0	
18. Brownfield Sites Local / State / Tribal Brownfield Sites	0.5 Mile	1	0	
19. Non-ASTM Record Source(s)	Not Applicable		No MSD has been established by ASTM for these sources	

1

The review and evaluation of the above Federal and State/Tribal/Local Databases indicates that the Subject Property is identified in the RCRA Non Generator and FINDS databases. No violations are associated with the Site, and no hazardous waste is handled at the Subject Property. The listing of the Subject Property in these databases should not impact upon the environmental quality of the Subject Property.

Forty five (45) incidents are listed in the Leaking Underground Storage Tanks (LUSTs) database within a 0.5-mile radius of the Subject Property. None of the LUSTs are adjacent to the Subject Property. Thirty seven of the 45 LUSTs have been cleaned up to the satisfaction of the NYSDEC and are considered closed; the remaining 8 LUST sites are active. One of the active LUST sites is located down gradient of the Subject Property. None of the remaining 7 sites is adjacent to the Subject Property and therefore should not impact upon the environmental quality of the Subject Property.

Two hundred and thirty three (233) incidents are listed in the NY Spills database within a 0.125-mile radius of the Subject Property. One hundred ninety four of the 233 sites have been cleaned up to the satisfaction of the NYSDEC and are listed as closed while the remaining 39 sites are active. Fourteen of the active 39 spill sites are located upgradient to the Subject Property. Corrective actions were taken at all of the spill sites. The first site is 378 feet to the northwest of the Site. The second is 576 feet to the northwest of the site. Due to their proximity, none of the open spills should impact upon the Subject Property.

One (1) aboveground storage tank (AST) is located at a property located adjacent to the Subject Property. The tank is listed as "active", and is not associated with any spills or leaks. The presence of the adjacent AST should not impact upon the environmental quality of the Subject Property.

Three (3) State Hazardous Waste Sites (SHWS) are located within a mile radius of the Subject Property. None of the sites are adjacent to the Subject Property. All three sites are located cross gradient to the Subject Property, and should not impact upon its environmental quality.

One (1) Brownfield site is located within a mile radius of the Subject Property. The site is 1185 feet to the northwest of the Subject Property. The site has impacted groundwater, and remedial actions have been taken. Due to its proximity, the brownfield site should not impact upon the environmental quality of the Subject Property.

None of the remaining properties identified in the databases, including Orphan Sites, should impact upon the environmental quality of the Subject Property.

### 5.2 Municipal Records

Freedom of Information Act (FOIA) requests were issued to the following regulatory agencies with respect to the Subject Property. All reasonably ascertainable municipal records are provided with this report. *Appendix E* provides copies of the municipal documents.

- New York City Department of City Planning
- New York City Department of Building
- New York City Department of Housing Preservation and Development
- New York City Department of Health
- New York City Bureau of Fire Department
- New York State Department of Environmental Conservation
- New York City Department of Environmental Protection

### New York City Department of City Planning

A FOIA request was submitted to the New York City Zoning Department. The address of the Subject Property is identified as 221-229 Avenue C and 644-652 East 14th Street. The tax map number is listed as Block 396, Lot 29. The New York City Zoning Department indicated that the Subject Property is "R7-2." The Little "E" Restriction is listed as "Not Applicable". The Department of Finance Occupancy Code is listed as "K9-Store Building" for the Subject Property.

New York City Department of Building

A FOIA request was submitted to the New York City Department of Building (NYCDOB). The NYCDOB indicates there are 3 complaints (one open), no DOB violations and one ECB violation (none open) listed for the Subject Property. The open complaint is pertaining to excessive debris. The NYCDOB further indicates there are total of 7 jobs, and 18 actions listed for the Subject Property. The actions are pertaining to alteration, building notice, curb cut, Certificate of Occupancy (CO), demolition permit, electric sign application and new building. There are 3 CO documents dated August 12, 1953, October 7, 1953, and November 2, 1964 are provided in the NYCDOB records. All three of the CO documents describe 644 East 14th Street as 1-story retail store.

New York City Department of Housing Preservation and Development

A FOIA request was submitted to the New York City Department of Housing Preservation and Development (NYCHPD). The NYCHPD indicated that there are no violations associated with the Subject Property.

New York City Department of Health

A FOIA request was submitted to the New York City Department of Health (NYCDOH). The NYCDOH was contacted via telephone to obtain the status of the FOIA request. As of the date of this report, the NYCDOH has not responded to our initial search request or subsequent follow-up calls. Any information provided by the NYCDOH will be provided as soon as it has been received and evaluated.

New York City Bureau of Fire Prevention

A FOIA request was submitted to the New York City Bureau of Fire Prevention (NYCBFP). As of the date of this report, the NYCBFP has not responded to our initial search request. Any information provided by the NYCBFP will be provided as soon as it has been received and evaluated.

New York State Department of Environmental Conservation

A FOIA request was submitted to the New York State Department of Environmental Conservation (NYSDEC). As of the date of this report, the NYSDEC has not responded to our initial search request. Any information provided by the NYSDEC will be provided as soon as it has been received and evaluated. The NYSDEC website was also searched for any records associated with the Subject Property. The Subject Property was not identified on the NYSDEC spills database website.

New York City Department of Environmental Protection

A FOIA request was submitted to the New York City Department of Environmental Protection (NYCDEP). As of the date of this report, the NYSDEP has not responded to our initial search request. Any information provided by the NYSDEP will be provided as soon as it has been received and evaluated.

### 6.0 SITE RECONNAISSANCE

Mrs. Ezgi Karayel of Hydro Tech performed the site reconnaissance portion of the Phase I Assessment on November 26, 2013. The weather during the inspection was sunny and approximately 50 degrees Fahrenheit.

Hydro Tech inspected all accessible portions of the Subject Property. It should be noted that the interior of the building did not have electricity and it was dark inside the building. The following pertinent information was obtained during the Subject Property Reconnaissance:

#### 1. Industrial Processes:

No industrial processes were observed at the Subject Property. No evidence of historical industrial processes was observed at the Subject Property.

### 2. Suspect Asbestos-Containing Materials:

Visual evidence of suspect asbestos containing material (ACM) in the form of floor tiles were identified at the Subject Property. The presence of suspect ACM represents a REC.

### 3. Suspect Lead-Based Paint:

Visual of peeling paint was identified at the Subject Property. The peeling paint is indicative of lead-based paint and represents a REC.

### Drum Storage Areas:

No current or former drum storage areas were observed at the Subject Property.

### Storage Tanks:

A suspect fill port was identified in the rear yard of the Subject Property. Fill port is indicative of an underground storage tank and represents a REC. No visual evidence of any other underground storage tanks (USTs) or aboveground storage tanks (ASTs) was identified at the Subject Property. As mentioned earlier, there was upwards of six inches of snow covered a large portion of the sidewalk along the building and street (as well as the paved area in the southeast portion of the property) during the January 2011 inspection. Therefore the fill port located in the southeastern portion of the Subject Property could not be identified.

### Subsurface Drainage Structures/Drains/Sumps:

No subsurface drainage structures, such as leaching pools, cesspools, or drywells were observed at the Subject Property. No evidence of former subsurface drainage structures was observed at the Subject Property.

No evidence of current or former septic/waste water/storm water discharge systems is identified at the Subject Property. The Subject Property is located in a well-served area in the New York City with a publicly managed combined sewer system.

No floor drains were observed at the Subject Property. No evidence of former floor drains was identified at the Subject Property.

No sumps were observed inside the building at the Subject Property. No evidence of former sumps was identified inside the building at the Subject Property.

### 7. PCB-Containing Equipment:

No PCB-containing equipment was identified at the Subject Property.

### Monitoring / Potable Water Wells:

One monitoring well was identified on the sidewalk at the corner of East 14th Street and Avenue. According to Mr. Ratnofsky, the monitoring well is associated with a historical geotechnical investigation. Based upon our January 2011 Phase I ESA, a total of six (6) geotechnical borings were advanced across the property, two (2) of which were converted to observation wells. Since the existing off-site monitoring well is a part of a geotechnical investigation, it does not represent a REC.

No potable water wells were observed at the Subject Property.

The Subject Property does not utilize wells for the generation of potable water.

No monitoring wells were identified at the Subject Property.

#### 9. Mold

Visual evidence of mold was identified on the walls of the building. The presence of mold represents a REC.

#### 10. Pits, Ponds, or Lagoons:

No waste disposal pits, ponds, or lagoons were observed at the Subject Property. No evidence of former pits, ponds, pools of liquid or lagoons were observed at the Subject Property.

#### 11. Wetlands

No evidence of wetlands or wetlands growth is identified at the Subject Property. The location of the Subject Property and its vicinity do not appear in the USA National Wetlands Inventory.

#### 12. Staining/Stressed Vegetation:

No significant staining was identified at the Subject Property. No stressed vegetation was observed at the Subject Property.

#### 13. Fill / Land Disposal / Solid Waste:

No visual areas of fill or evidence of land disposal of solid waste material(s) were observed at the Subject Property.

### 14. Engineering Controls:

No engineering controls were noted at the Subject Property.

### 15. Odors/Air Emissions:

No odors indicative of a petroleum, chemical or hazardous substance spill or release were identified at the Subject Property. No evidence of air emissions or air emission equipment was identified at the Subject Property.

### 16. Hazardous Substance / Petroleum Containers:

No evidence of suspect hazardous substance or other petroleum containers were identified at the Subject Property.

### 17. Radon:

USEPA's recommended action level is 4 picoCuries/liter and the average radon gas concentrations predicted in the Manhattan area is 2 picoCuries/liter. Since Manhattan is located in a Low Radon Potential area, radon gas should not represent a potential environmental concern that would warrant the sampling for radon gas at the Subject Property.

#### 7.0 CLIENT/USER-PROVIDED INFORMATION & INTERVIEWS

### 7.1 Client/User-Provided Information

During the course of the Phase I Assessment, interviews were conducted with respect to the operation and history of the Site and a Client/User Questionnaire was provided.

- The client/user provided no records to Hydro Tech's request for information associated with Environmental Liens or Activity and Use Limitations against the property that may have been filed or listed under federal, tribal, state, or local law.
- The client/user reported no specialized or actual knowledge or experience related to any potential Recognized Environmental Conditions at the Subject Property or nearby properties.
- 3. The client/user did not respond to Hydro Tech's request for information regarding the relationship of the purchase price of the property to fair market value, specifically if it has been adjusted due to the known or potential presence of on-site contamination.
- 4. The client/user reported no commonly known information or information within the local community regarding past use(s) of the property (including the storage and/or release of chemicals, hazardous substances, petroleum products, etc.) that could have affected the environmental integrity of the subject site.
- The client/user could not confirm whether no environmental contamination or cleanups have occurred at the property in the past.
- Hydro Tech Environmental provided the Questionnaire for the client/user to complete. The Client/User did not return the Questionnaire as of the date of this report.

#### 7.2 Interviews

During the course of the Phase I Assessment, interviews were conducted with key site personnel with respect to the operation and history of the Subject Property. The following key site personnel were interviewed:

Mr. Paul Ratnofsky, Owner Representative

The interview did not reveal the presence of any other potential Recognized Environmental Conditions in connection with the subject site, and did not provide any additional information with respect to the environmental integrity of the subject property that was not obtained from other sources over the course of this investigation.

In addition, although an interview with the former owner(s) was not possible as none were provided to HTE as of the date of this ESA, we do not believe that any such owner(s) would have additional material information regarding the potential for contamination at the property that was not obtained from other sources over the course of this investigation.

### 8.0 CONCLUSIONS

Hydro Tech has performed a Phase I Environmental Site Assessment at the Subject Property, and has identified the following Recognized Environmental Conditions (RECs):

- The presence of a suspect fill port in the southeastern portion of the Subject Property (§6.0)
- The presence of suspect lead-based paint inside the building (§6.0)
- The presence of suspect asbestos containing material (ACM) inside the building (§6.0)
- The presence of mold inside the building (§6.0)

### 9.0 CREDENTIALS & DECLARATION

#### 9.1 Credentials

In accordance with ASTM E 1527, the credentials of those personnel directly involved with the production of this Phase I are provided with this report. *Appendix F* provides a copy of the personnel credentials.

### 9.2 Environmental Professional Declaration

We declare that to the best of our professional knowledge and belief, we meet the definition of environmental professional as defined in 40 CFR Part 312. We have the specific qualifications based on education, training and experience to access a property of the nature, history and setting of the Subject Property. Only where indicated we have developed and performed the AAIs in conformance with the standards and practices set forth in 40 C.F.R. Part 312.

1

#### 10.0 REFERENCES

- Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM E 1527-05, American Society for Testing and Materials, West Conshohocken, PA.
- 2. Principals of Groundwater Engineering, William C. Walton, Lewis Publishers, Inc., 1991.
- The Long Island Ground Water Pollution Study, New York State Department of Environmental Conservation, 1972.
- 4. Geochemical traverse across Cameron's Line, Boro Hall Park, Bronx, New York, Cadmus, D., Hodgson, R., Gatto, L.M., and Puffer, J.H., Geology Department, Rutgers University, Newark, NJ.
- 5. EDR Environmental Data Resources, 644 East 14th Street, New York, NY, November 26, 2013. The EDR Sanborn Maps, Milford, Connecticut.
- EDR Environmental Data Resources, 644 East 14th Street, New York, NY, November 26, 2013. The EDR City Directory Abstract, Milford, Connecticut.
- 7. EDR Environmental Data Resources, 644 East 14th Street, New York, NY, November 26, 2013. The EDR Radius Map, Milford, Connecticut.
- 8. Property Shark Property Profile for 644 East 14th Street, New York, NY from <a href="http://www.propertyshark.com/mason/">http://www.propertyshark.com/mason/</a>.
- Long Island Home Inspection, (n.d.), Radon on Long Island, from <a href="http://www.longislandhomeinspection.com/content/radon-long-island">http://www.longislandhomeinspection.com/content/radon-long-island</a>
- U.S Fish Wildlife Services National Wetlands Inventory http://www.fws.gov/wetlands/Wetlands-Mapper.html

#### 11.0 EXCLUSIONS & DISCLAIMER

The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client. No warranty, expressed or implied, is made whatsoever in connection with this report.

In preparing this report, Hydro Tech Environmental, Corp. may have relied on certain information provided by state and local officials and other parties referenced therein, and on information contained in the files of state and/or local agencies available to Hydro Tech Environmental, Corp. at the time of the subject property assessment. Although there may have been some degree of overlap in the information provided by these various sources, Hydro Tech Environmental, Corp. did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this subject property assessment.

No environmental site assessment can wholly eliminate uncertainty regarding the potential for RECs in connection with a Subject Property (ASTM E 1527-05 Section 4.5.1). The intent of an environmental site assessment is to reduce but not eliminate uncertainty regarding the presence of potential RECs within reasonable limits of both time and cost.

Observations were made of the subject property and of structures on the subject property as indicated within the report. Where access to portions of the subject property or to structures on the subject property was unavailable or limited, Hydro Tech Environmental, Corp. renders no opinion as to the presence of non-hazardous or hazardous materials, or to the presence of indirect evidence relating to a non-hazardous or hazardous materials, in that portion of the subject property or structure. In addition, Hydro Tech Environmental, Corp. renders no opinion as to the presence of hazardous materials, or the presence of indirect evidence relating to hazardous materials, where direct observation of the interior walls, floors, or ceiling of a structure on a subject property was obstructed by objects or coverings on or over these surfaces.

Hydro Tech Environmental, Corp. did not perform testing or analyses to determine the presence or concentration of asbestos or lead-based paint at the Subject Property or in the environment of the subject property under the scope of the services performed.

Any water level reading made in test pits, borings, and/or observation wells were made at the times and under the conditions stated in the report. However, it must be noted that fluctuations in the level of groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.

Except as noted within the text of the report, no qualitative laboratory testing was performed as part of the subject property assessment. Where an outside laboratory, Hydro Tech Environmental, has conducted such analyses Corp. has relied upon the data provided, and has not conducted an independent evaluation of the reliability of the data.

The conclusions contained in this report are based in part, where noted, upon various types of chemical data and are contingent upon their validity. The data have been reviewed and interpretations were made in the report. As indicated within the report, some of the data may be preliminary "screening" level data, and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, the data should be reviewed, and the conclusions and recommendations presented herein modified accordingly. If in the opinion of the Client/ User or any third party claiming reliance on this report, that Hydro Tech was negligent or in breach of contract, such aforementioned parties shall have 6 months from the date of Hydro Tech's visit to make a claim.

This report was prepared solely for the use of the Client/User and is not intended for use by third parties. Unauthorized third parties shall indemnify and hold Hydro Tech harmless against any liability for any loss arising out of, or related to, reliance by any third party on any work performed hereunder, or the contents of this report.

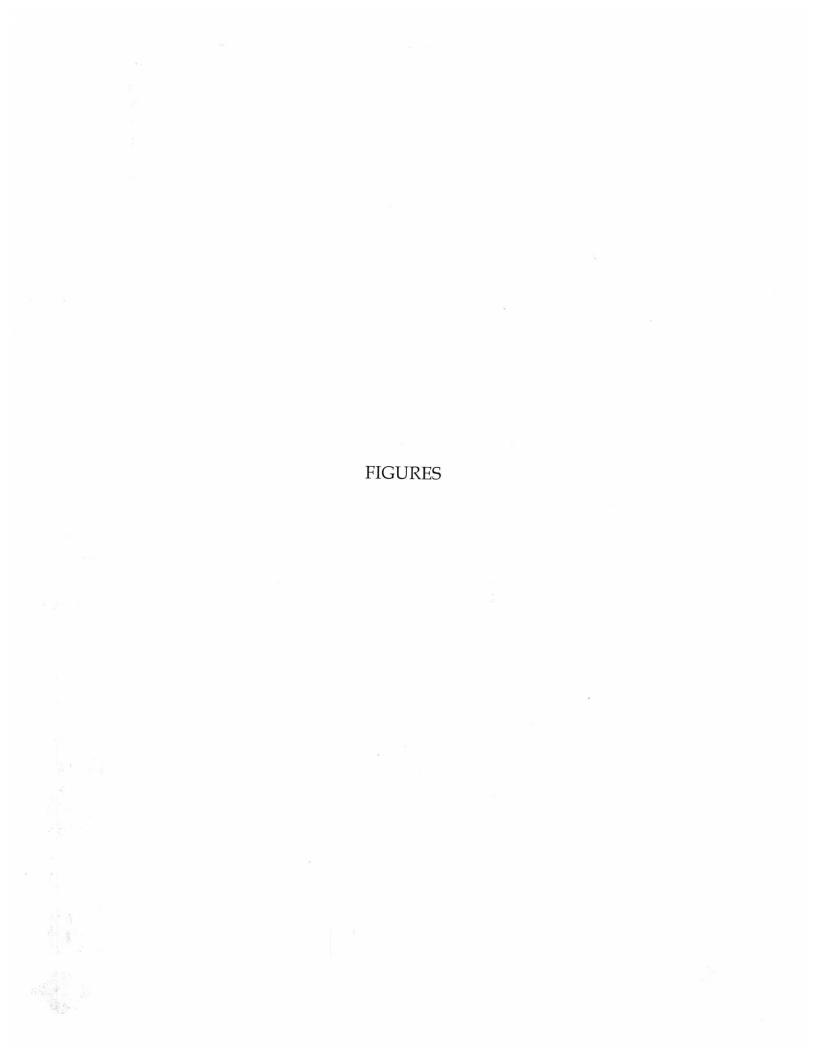
•

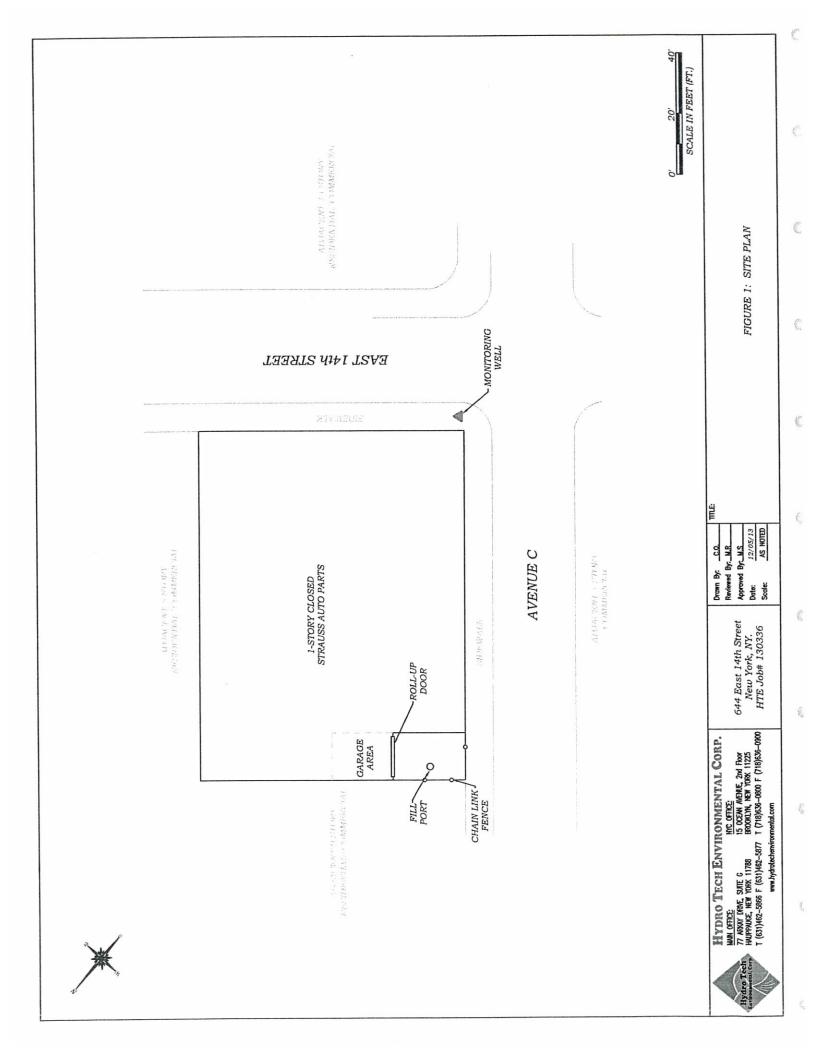
É

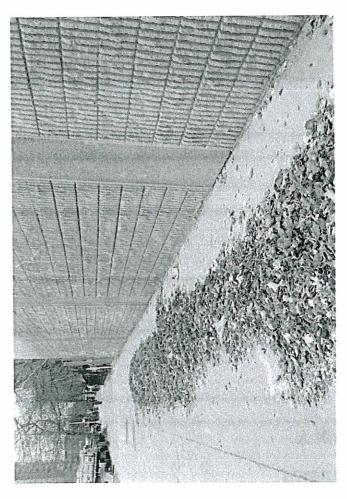
(

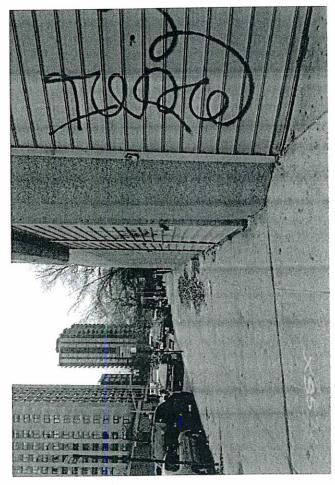
1

4





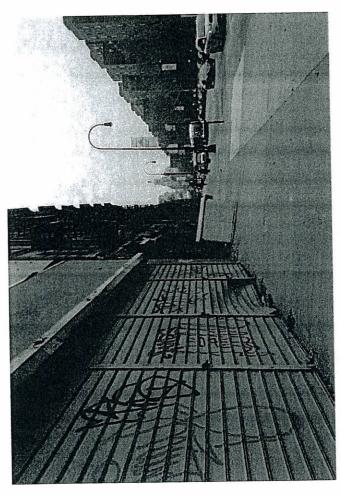


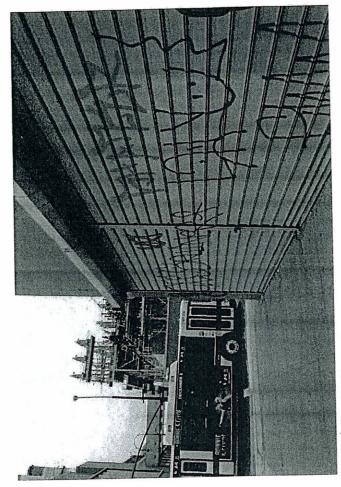


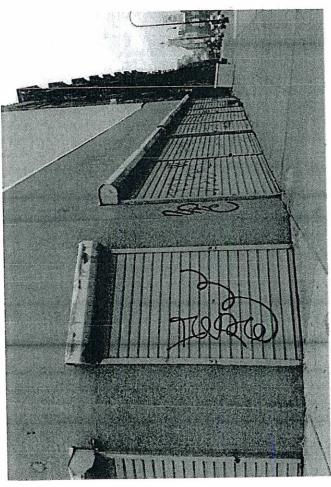


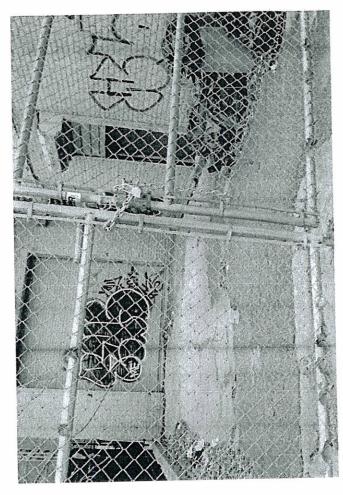


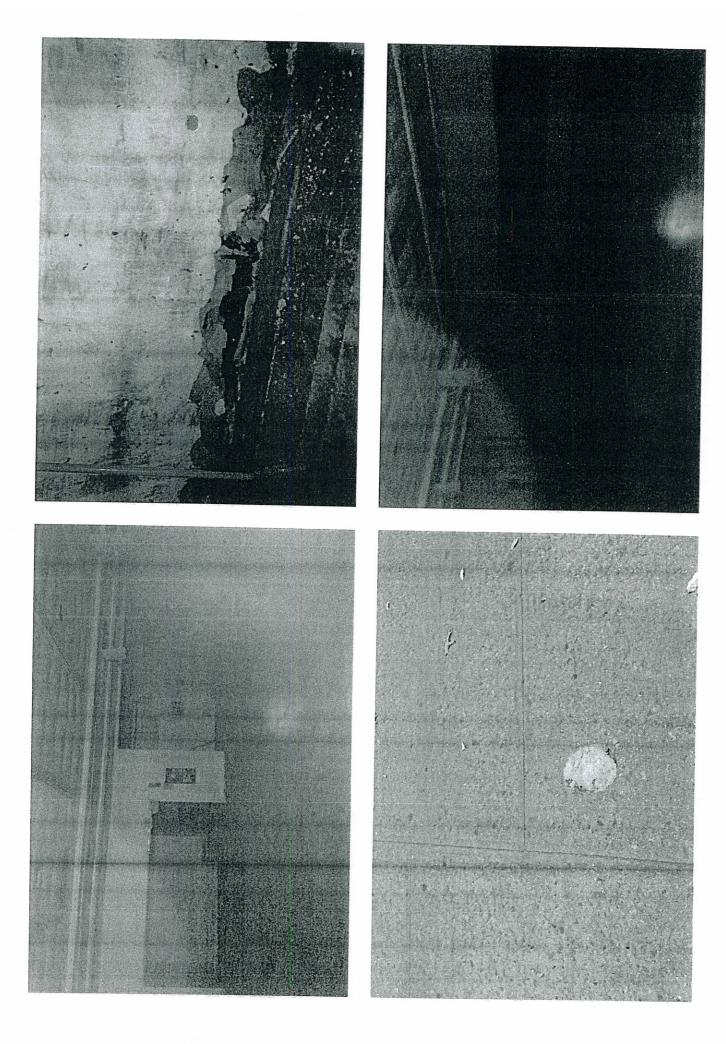
# APPENDIX A PHOTOGRAPHS



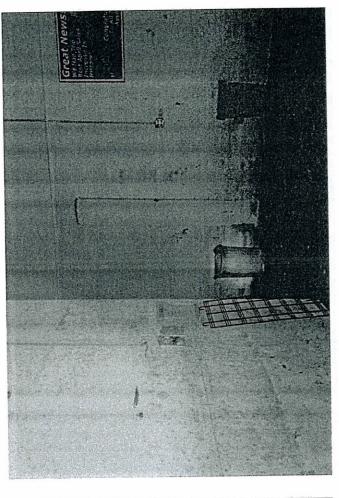


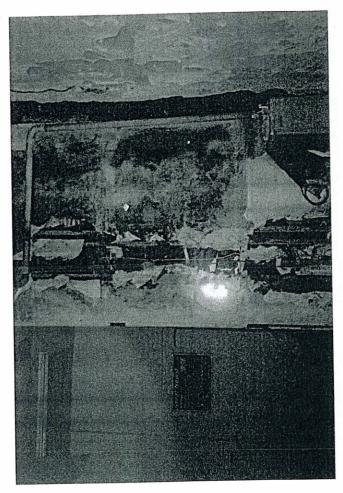




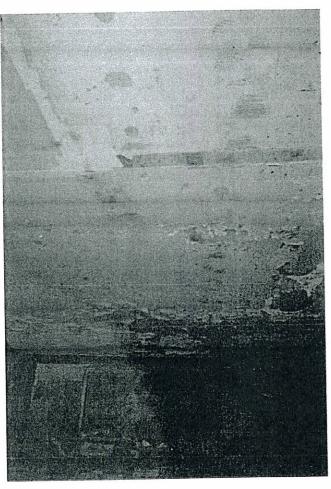


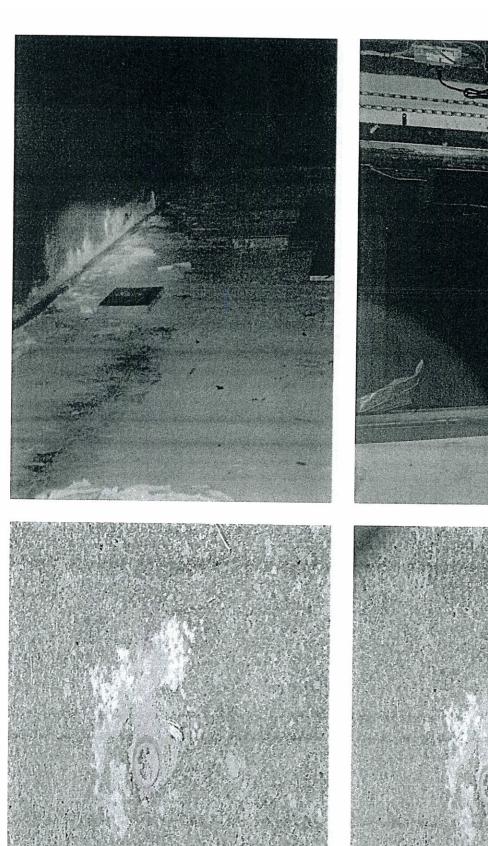
CHS

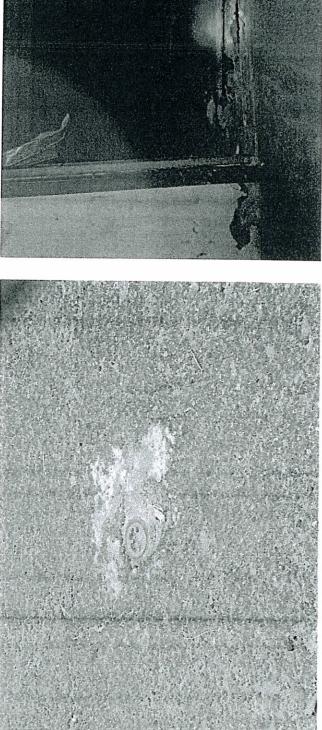












C

The second





APPENDIX B
SANBORN MAPS

644 E. 14th Street, New York, New York 10009

644 E. 14th Street New York, NY 10009

Inquiry Number: 3796457.3

November 26, 2013

# Certified Sanborn® Map Report



# Certified Sanborn® Map Report

11/26/13

Site Name:

644 E. 14th Street, New York,

644 E. 14th Street

New York, NY 10009

Client Name:

Hydro Tech Env. Corp. 77 Arkay Drive

Hauppauge, NY 11788-0000

EDR Inquiry # 3796457.3 Contact: Yvonne Martinez



The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Hydro Tech Env. Corp. were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

### Certified Sanborn Results:

Site Name:

644 E. 14th Street, New York, New York 10009

Address: City, State, Zip:

644 E. 14th Street New York, NY 10009

**Cross Street:** 

P.O. # Project: 5745 130336

Certification #

00B9-4653-93F5



Sanborn® Library search results Certification # 00B9-4653-93F5

#### Maps Provided:

1995	1987	1971	190
1994	1985	1950	
1993	1983	1944	
1992	1980	1928	
1991	1979	1922	
1988	1976	1920	
	1994 1993 1992 1991	1994 1985 1993 1983 1992 1980 1991 1979	1994       1985       1950         1993       1983       1944         1992       1980       1928         1991       1979       1922

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

✓ Library of Congress

✓ University Publications of America

**▼** EDR Private Collection

The Sanborn Library LLC Since 1866™

#### Limited Permission To Make Copies

Hydro Tech Env. Corp. (the client) is permitted to make up to THREE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

### Disclaimer - Copyright and Trademark notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2013 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

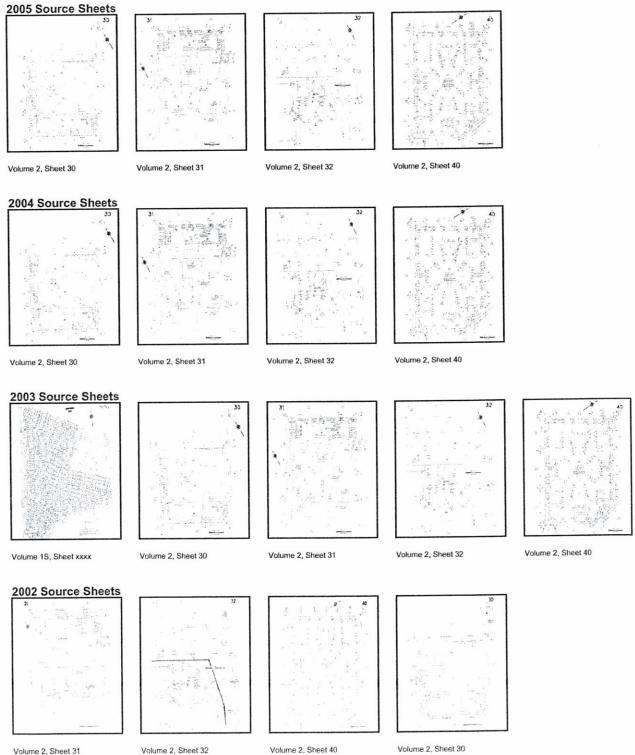
EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

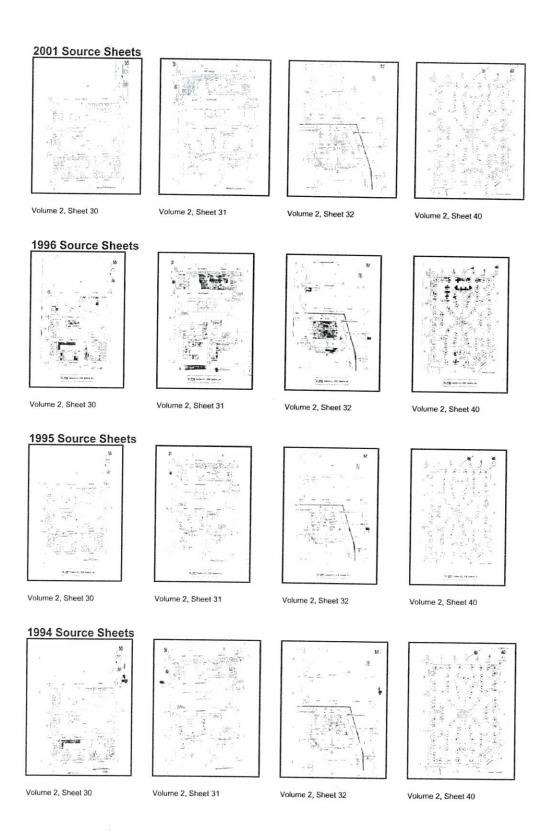
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

Volume 2, Sheet 32

Volume 2, Sheet 31

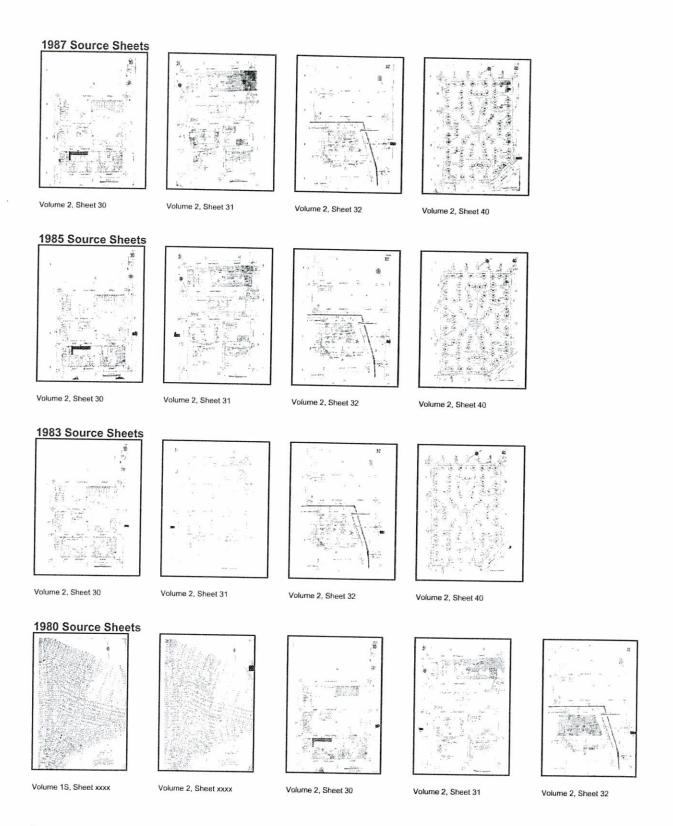


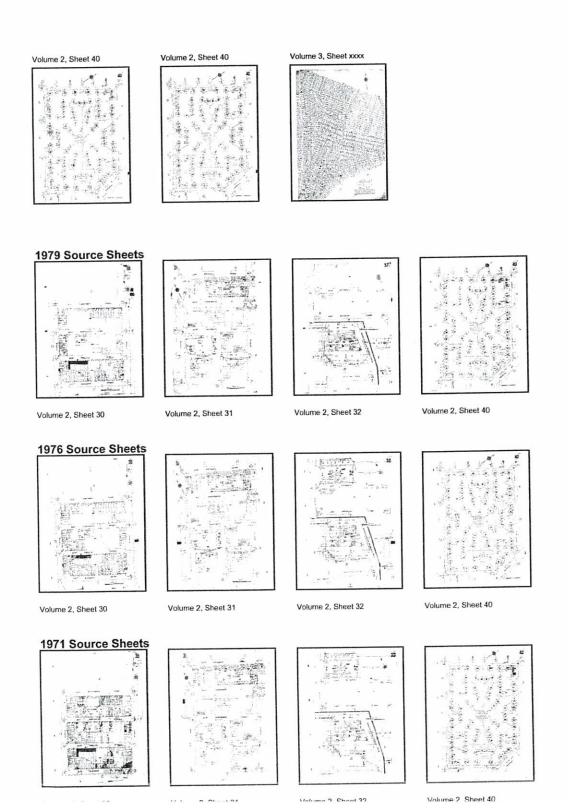


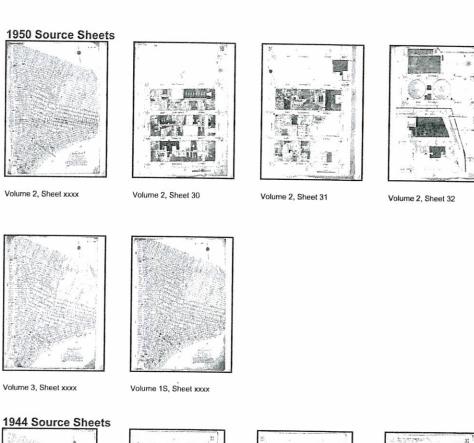


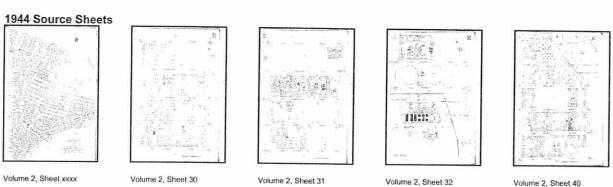
\$ 150 \$ 150













Volume Pier Maps, Sheet 16

 $\ell_{\cdot,\cdot}^{\circ}$ 

6

6

Volume 2, Sheet 40







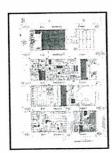
Volume 1N, Sheet xxxx



Volume Pier Maps, Sheet 16







Volume 2, Sheet 31



Volume 2, Sheet 32



Volume 2, Sheet 40

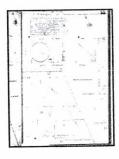
1903 Source Sheets



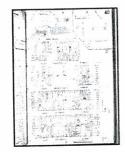
Volume 2, Sheet 30



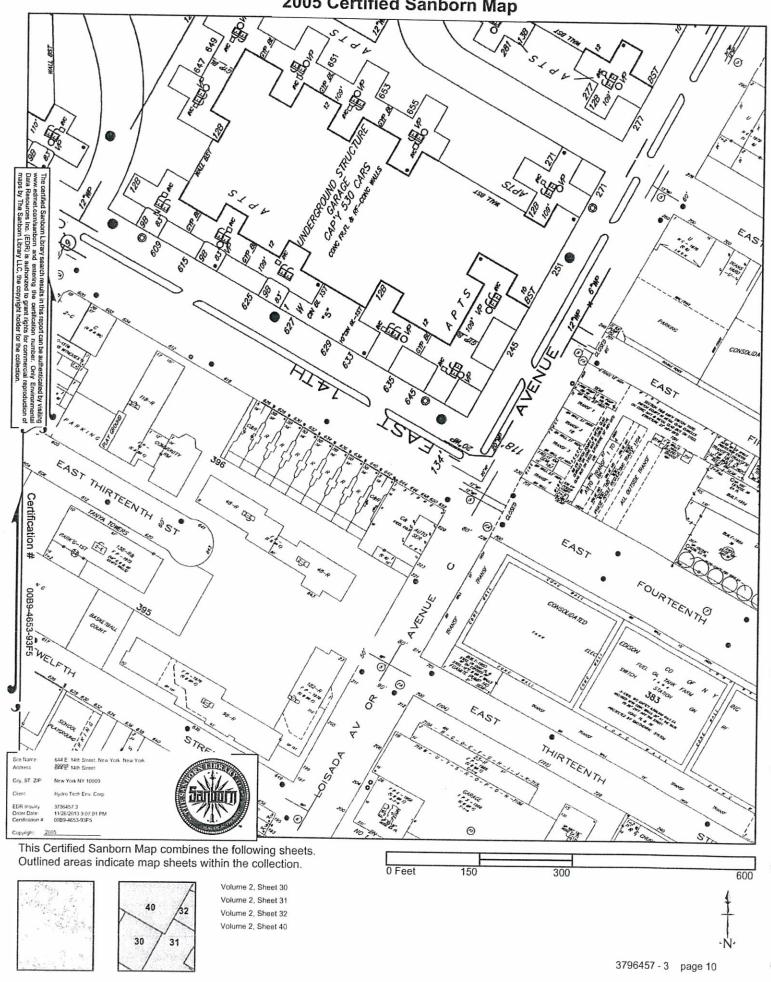
Volume 2, Sheet 31



Volume 2, Sheet 32



Volume 2, Sheet 40

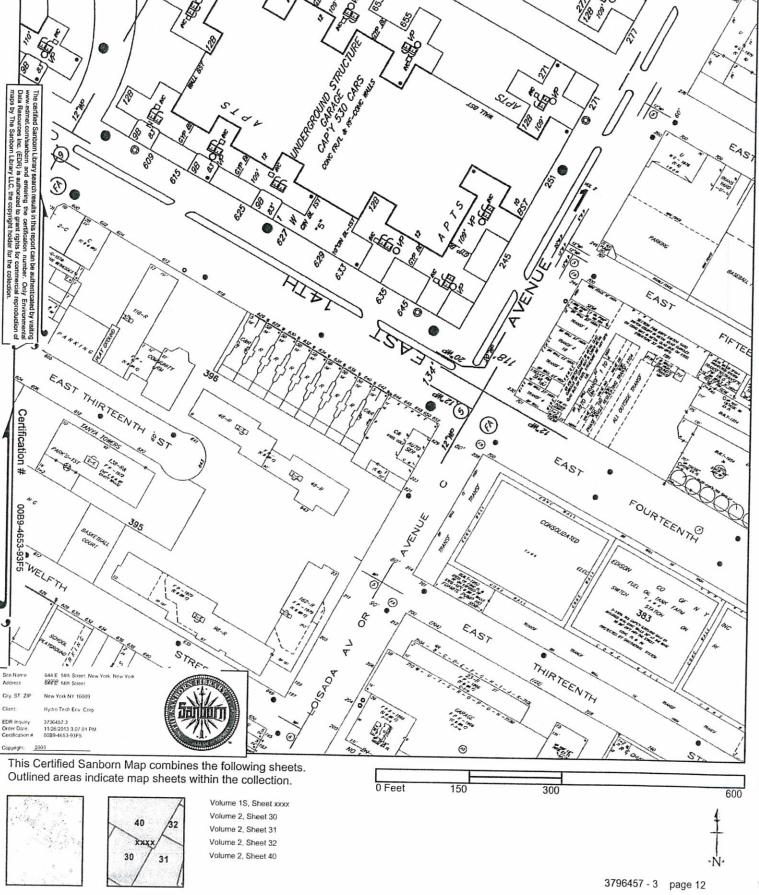


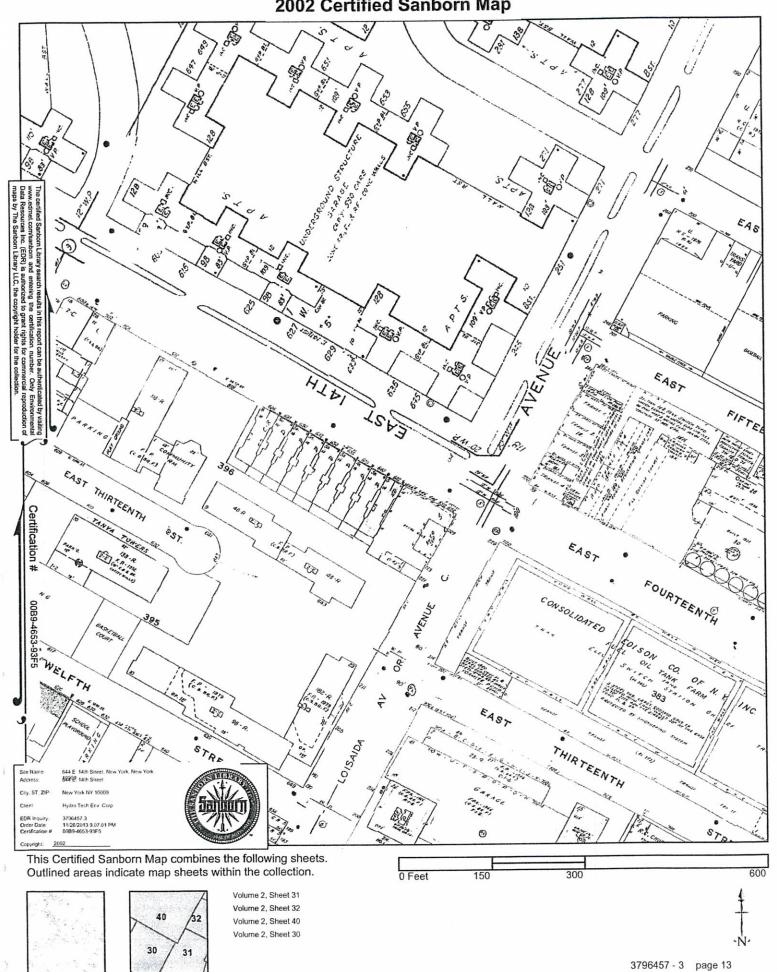
2004 Certified Sanborn Map EAST EAST THIRTEEN THE ST re-sp QD Certification ④ • EAST (2) 100 mg FOURTEENTH 00B9-4653-93F5 CONSCIONTO EAST THIRTEENTH City. ST. ZIF EDR Inquir Order Date Certification 3796457.3 11/26/2013 9.07:01 PM 00B9-4653-93F5 0 0 This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection. 300 0 Feet 150 Volume 2, Sheet 30 Volume 2, Sheet 31 Volume 2, Sheet 32

Volume 2, Sheet 40

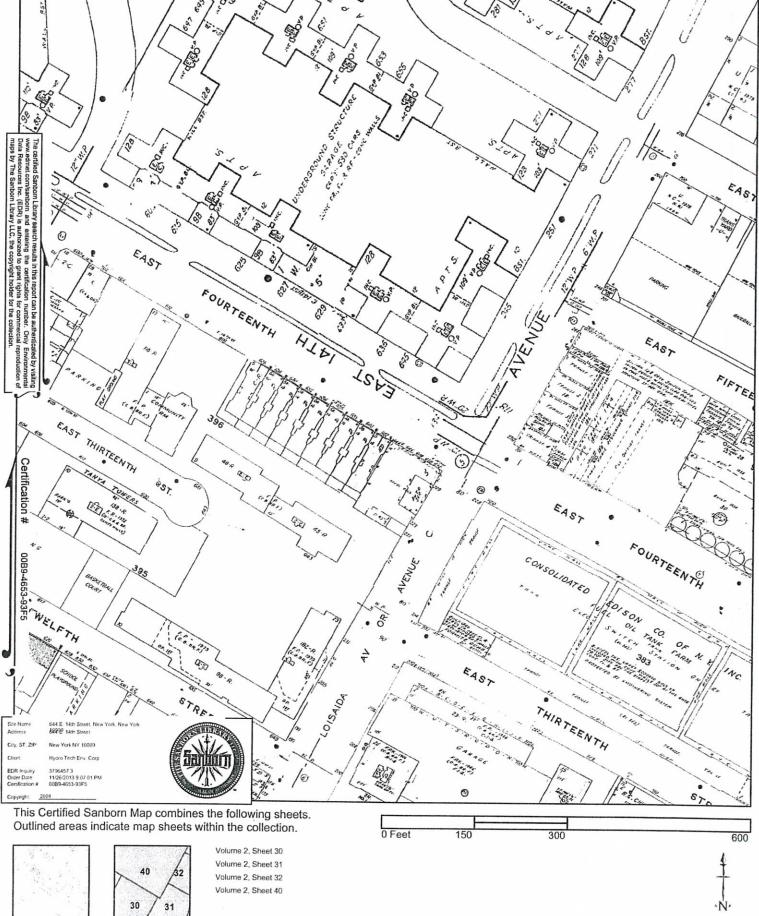
31

2003 Certified Sanborn Map EAST THIRTEENTH SST Certification EAST FOURTEENTH CONSCIDATED • EAST THIRTEENTH New York NY 10009 Hydro Tech Env. Corp. 1 This Certified Sanborn Map combines the following sheets. 0 Feet 150 600 Volume 1S, Sheet xxxx Volume 2, Sheet 30 40

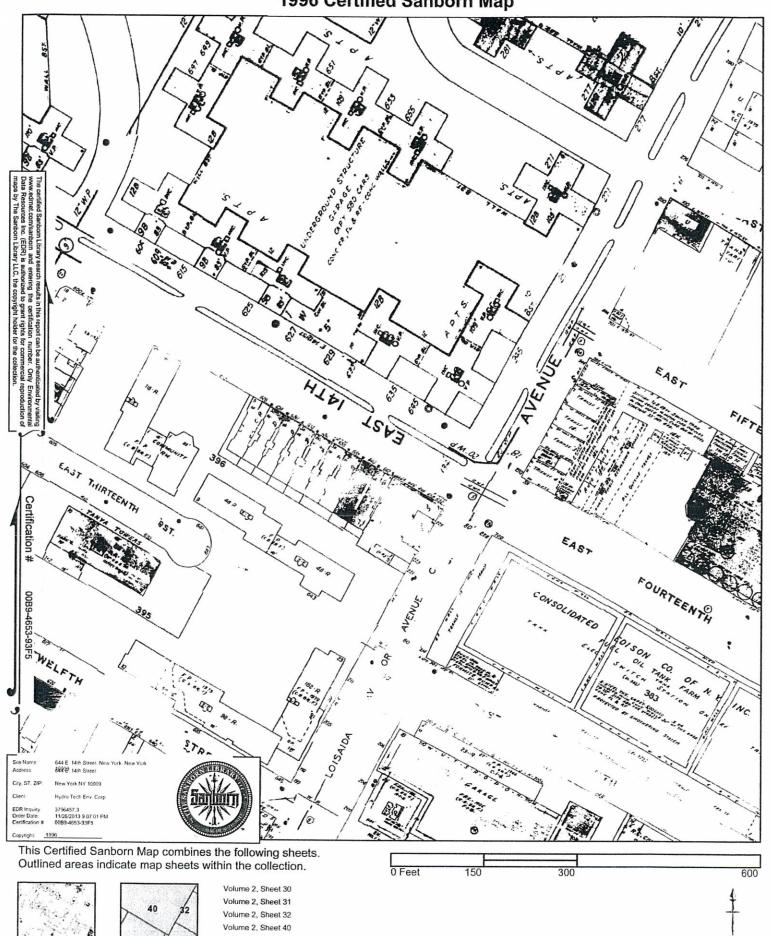


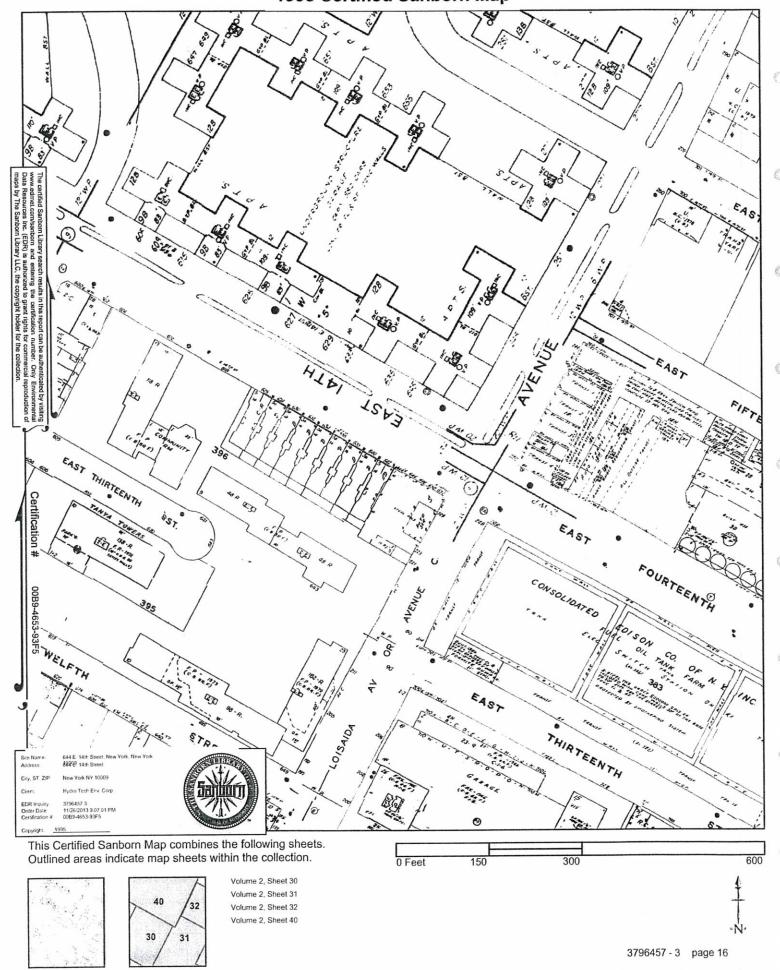


2001 Certified Sanborn Map EAST FOURTEENTH EAST THIRTEENTH 3 FOURTEENTE CONSOLIDATED 644 E. 14th Street, No 899°P 14th Street New York NY 10009 Hydra Tech Env. Corp • 57 This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection. 0 Feet 300 150 600 Volume 2, Sheet 30 Volume 2, Sheet 31



3796457 - 3 page 14

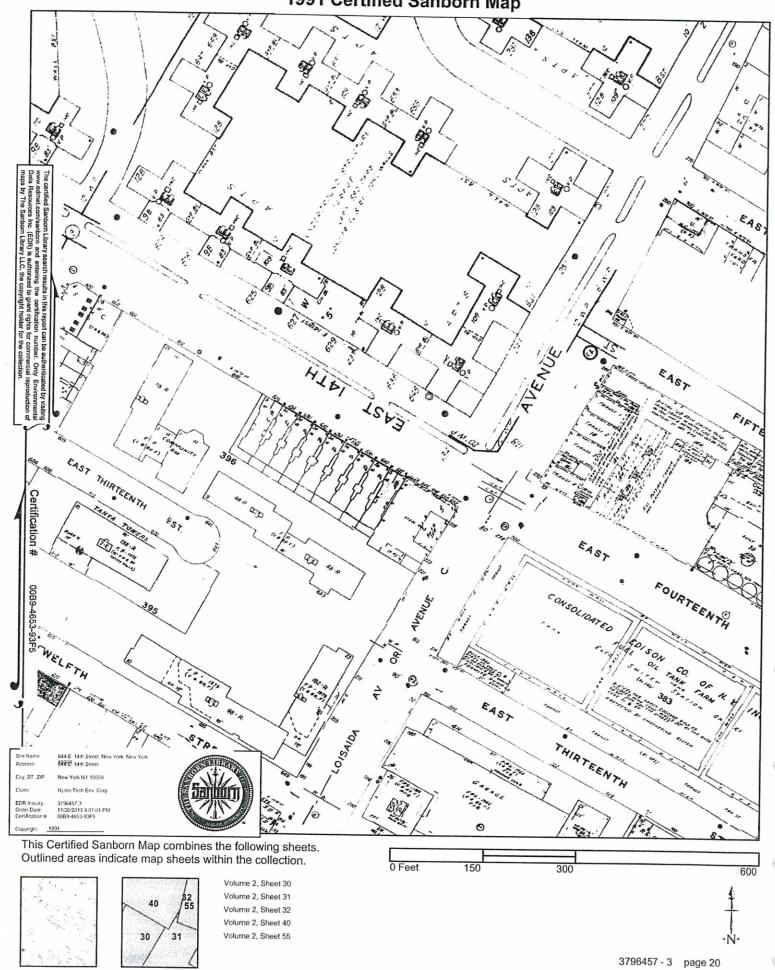


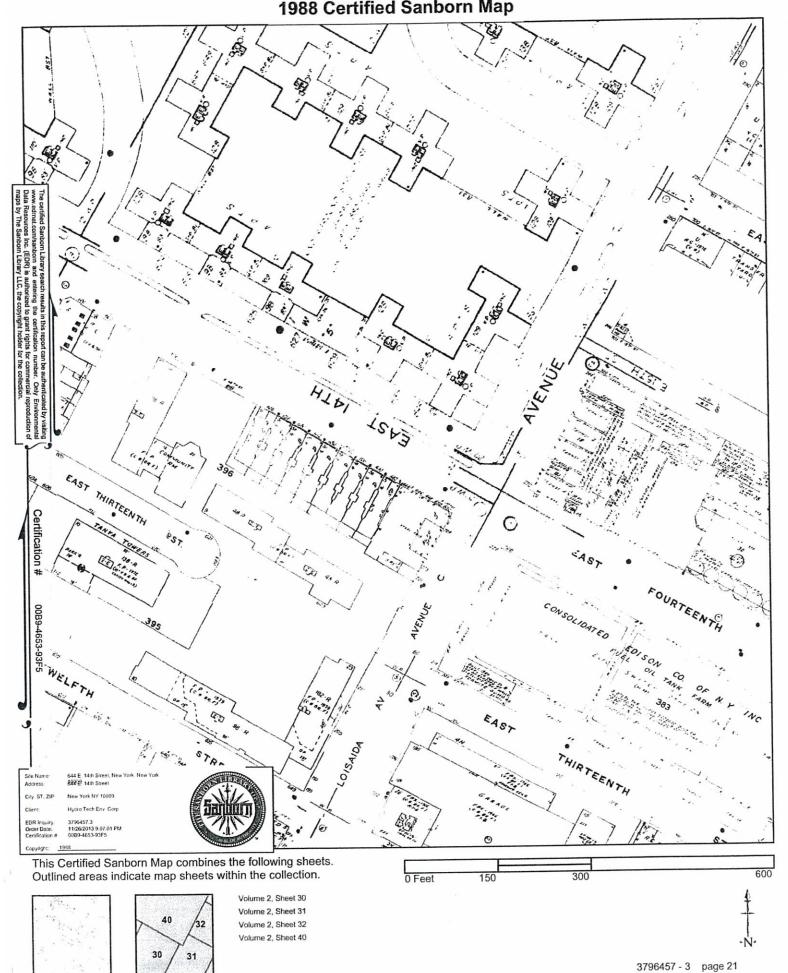


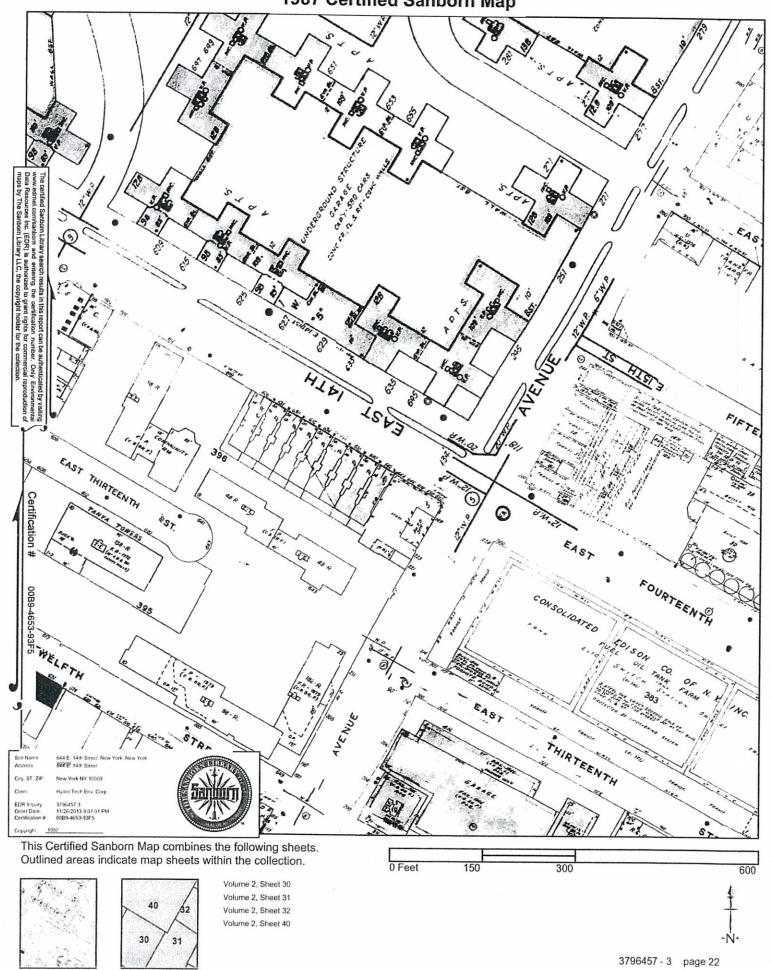
1994 Certified Sanborn Map EAST FIFTEE EAST THIRTEENTH 12<sup>6</sup> FOURTEENTH CONSOLIDATED THIRTEENTH 644 E. 14th Street, Nev 89909, 14th Street Site Name Address: City, ST. ZIF 0 This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection. 300 0 Feet 150 Volume 2, Sheet 30 Volume 2, Sheet 31 Volume 2, Sheet 32 Volume 2, Sheet 40

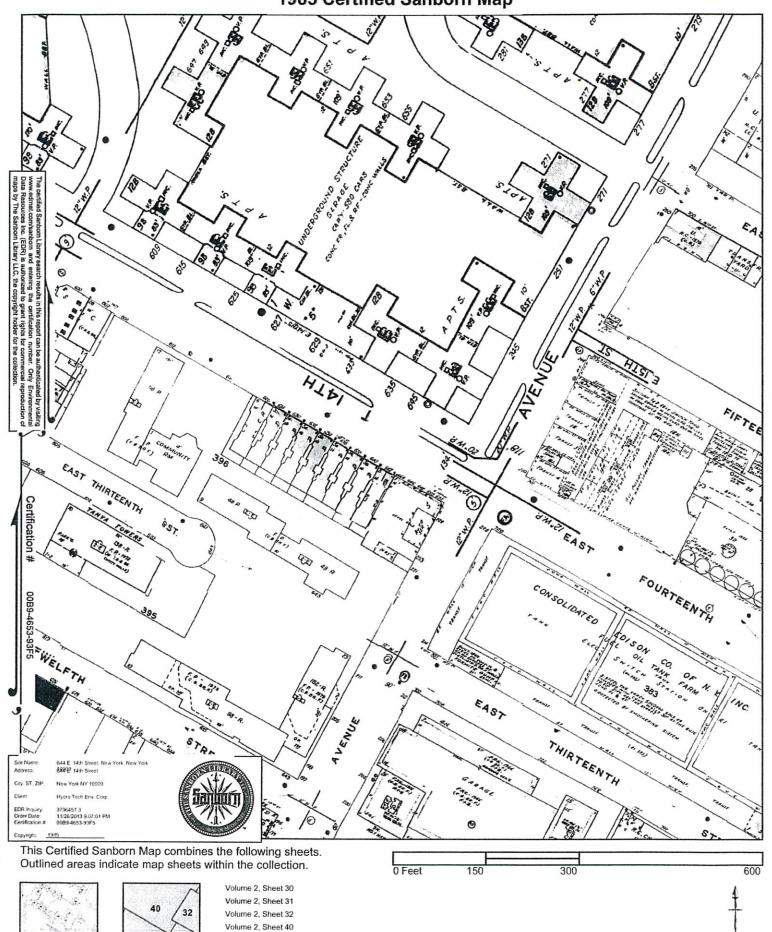
1993 Certified Sanborn Map EAST THIRTEENTH Certification zv<sup>ô</sup> FOURTEENTE CONSOLIDATED WELFTH THIRTEENTH New York NY 10009 EDR Inqu 0 This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection. 0 Feet 150 600 Volume 2, Sheet 40 Volume 2, Sheet 30 32 Volume 2, Sheet 31 Volume 2, Sheet 32 3796457 - 3 page 18

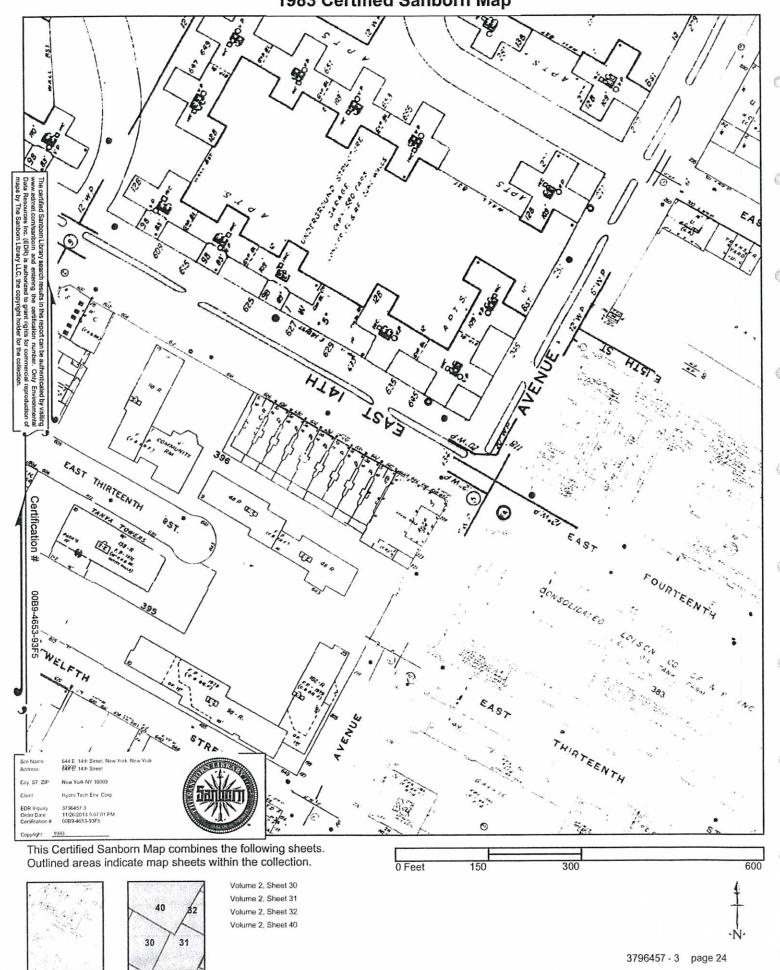
1992 Certified Sanborn Map EAST THIRTEENTH 40 RS Certification FOURTEENTH CONSOLIDATED WELFTH THIRTEENTH Site Name Address: Hydro Tech Env. Corp 3796457 3 11/26/2013 9.07.01 PM 00B9-4653-93F5 0 This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection. 600 300 0 Feet 150 Volume 2, Sheet 30 Volume 2, Sheet 31 Volume 2, Sheet 32 40 Volume 2, Sheet 40 3796457 - 3 page 19

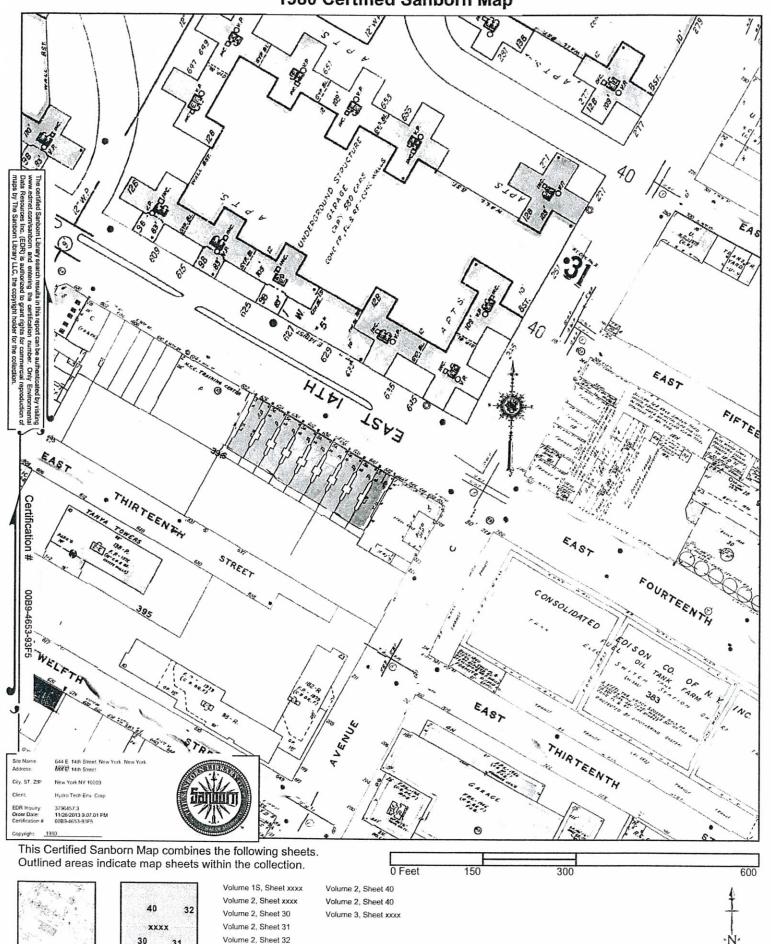


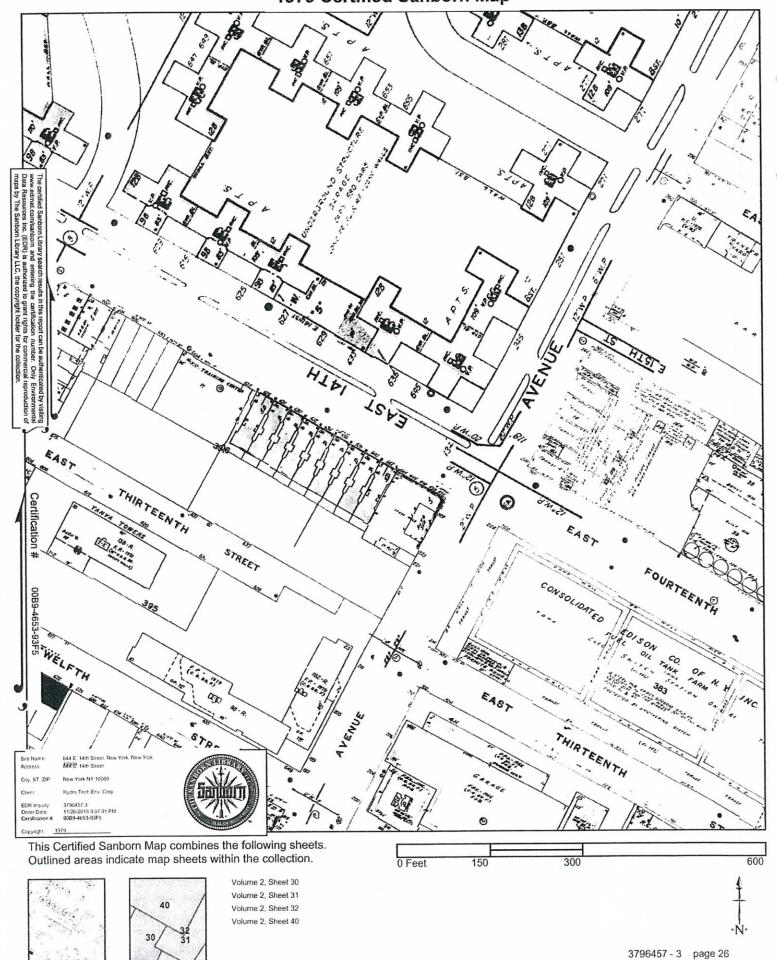




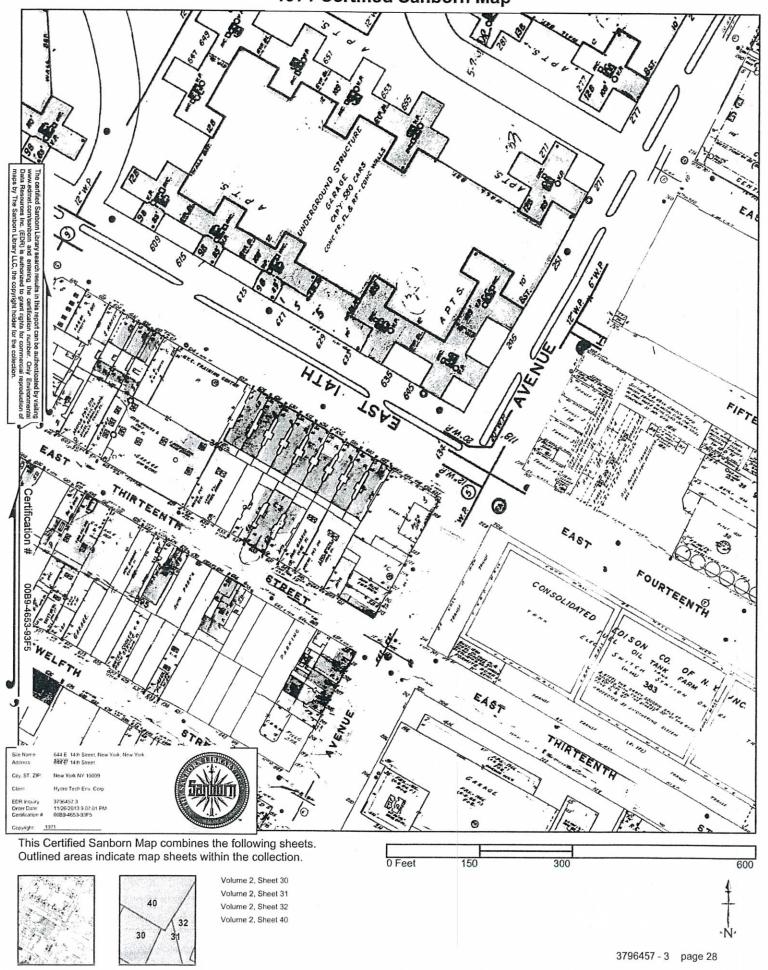








1976 Certified Sanborn Map FIFT EAST THIRTEENTH FOURTEENTO CONSOLIDATED 3-93F5 WELFTH THIRTEENTH New York NY 10009 City, ST. ZIP. 3 This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection. 600 150 300 0 Feet Volume 2, Sheet 30 Volume 2, Sheet 31 Volume 2, Sheet 32 Volume 2, Sheet 40



1950 Certified Sanborn Map EAST FOURTEENTH WELFTH New York NY 10009 Hydra Tech Env. Corp. 3796457.3 11/26/2013 9.07.01 PM 00B9-4653-93F5 This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection. 300 150 0 Feet Volume 3, Sheet xxxx

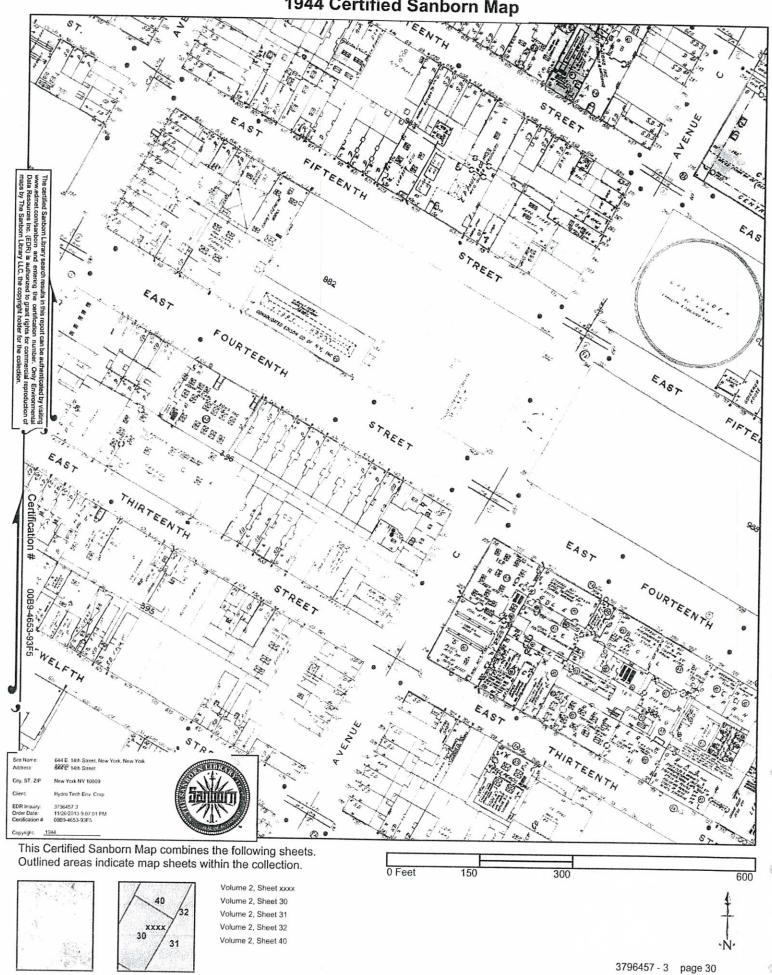




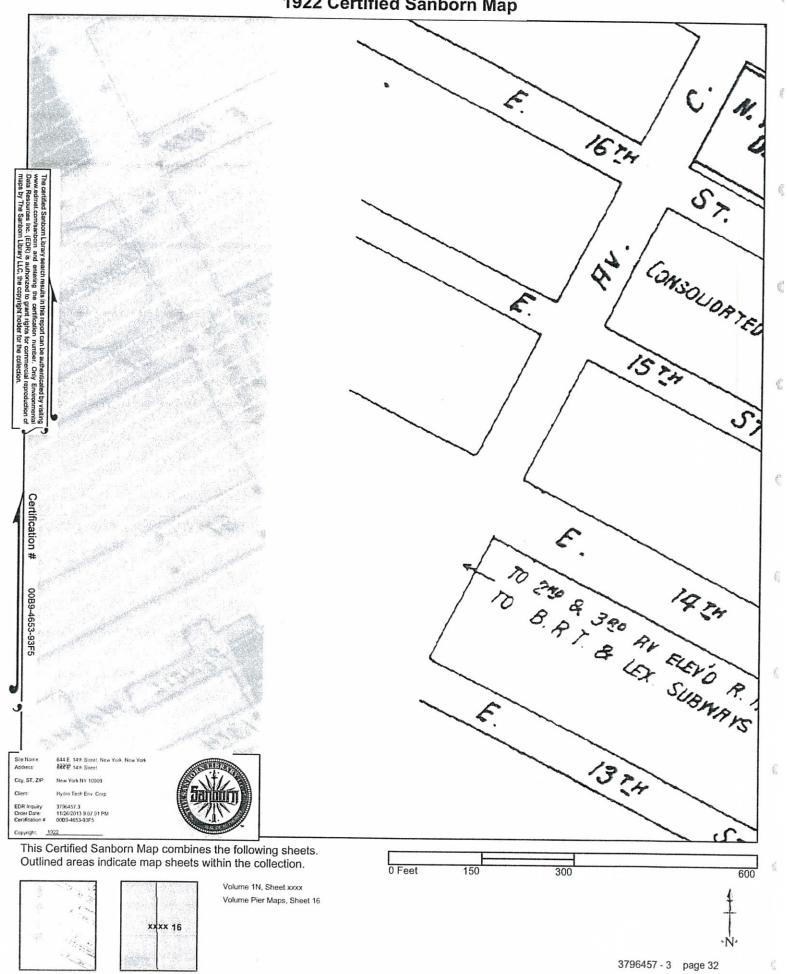
Volume 2, Sheet xxxx Volume 2, Sheet 30 Volume 2, Sheet 31 Volume 2, Sheet 32

Volume 2, Sheet 40

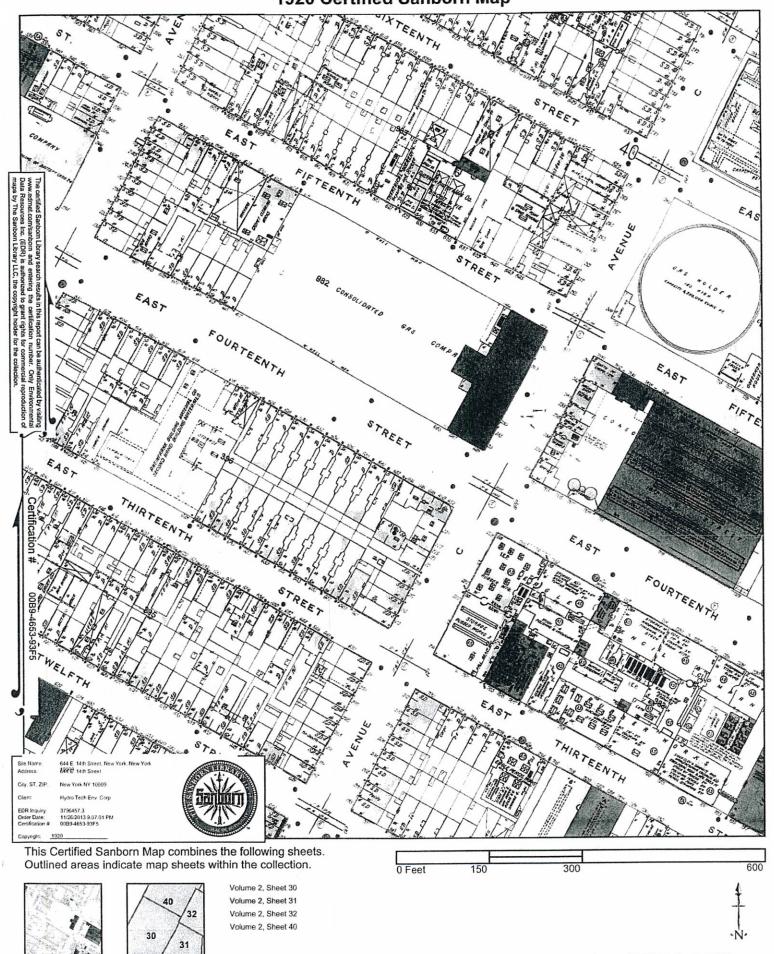
Volume 3, Sheet xxxx Volume 1S, Sheet xxxx



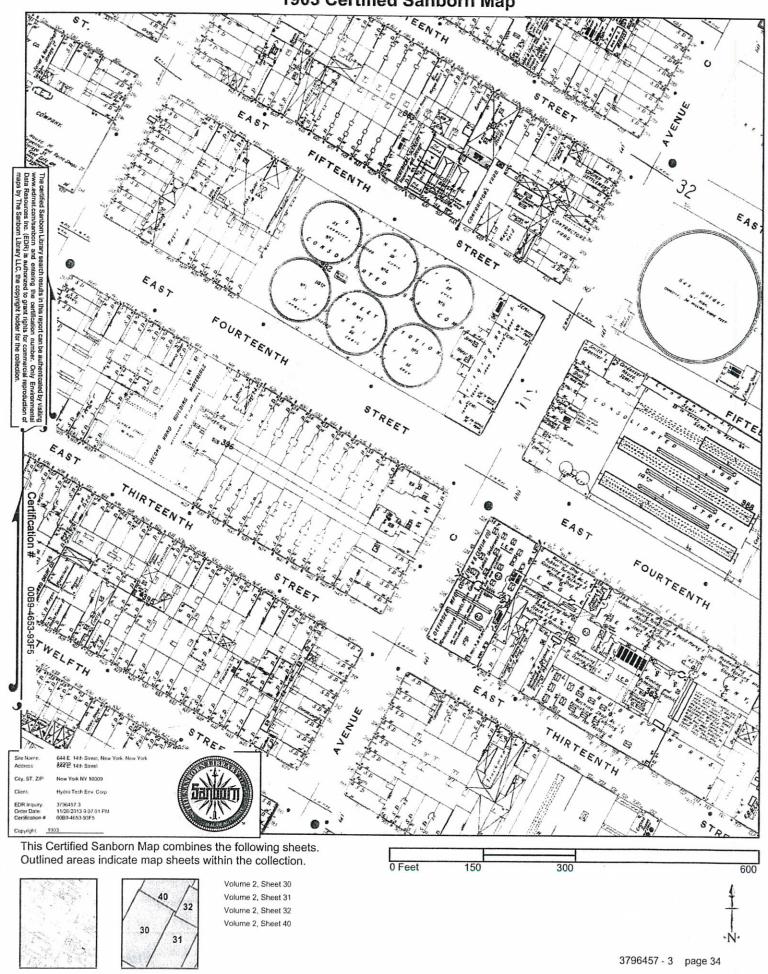
1928 Certified Sanborn Map E 1674. TO THE GROAN CITY OF A COMMAN E STATE E ATH Certification # FA 13/4 Site Name Address: 644 E. 14th Street, New York, New York 644'9: 14th Street City, ST, ZIP New York NY 10009 Hydra Tech Env. Corp Client 3796457.3 11/26/2013 9:07:01 PM 00B9-4653-93F5 This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection. 300 150 Volume Pier Maps, Sheet 16 16 3796457 - 3 page 31



### 1920 Certified Sanborn Map



### 1903 Certified Sanborn Map



# APPENDIX C CITY DIRECTORY SEARCH

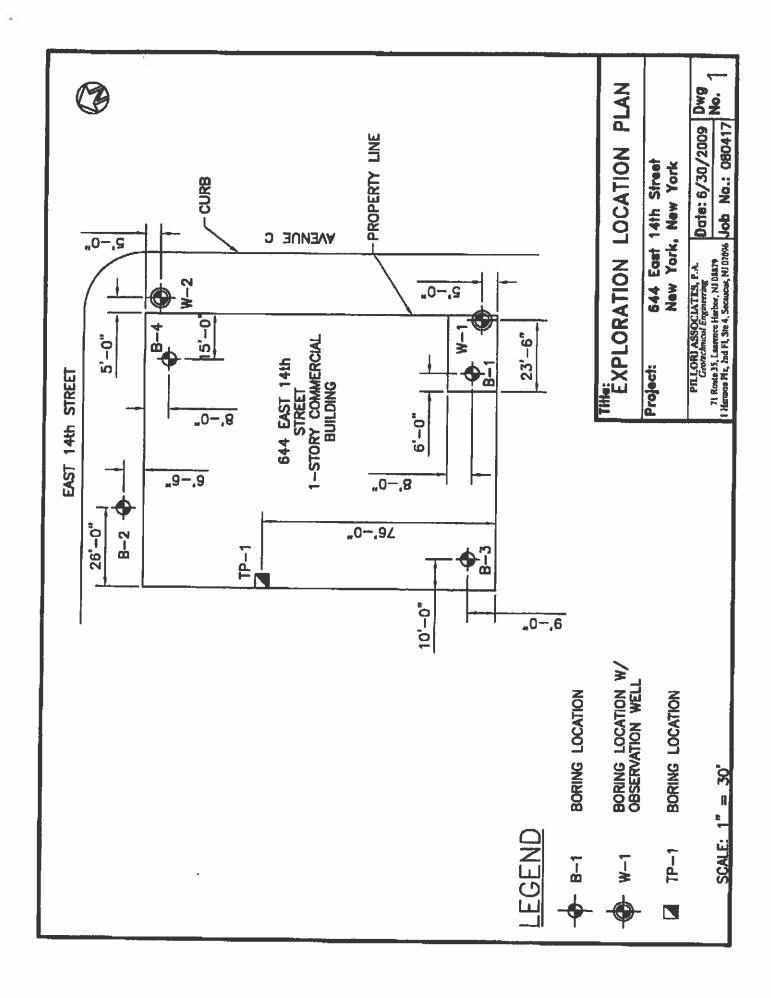
644 E. 14th Street, New York, New York 10009 644 E. 14th Street New York, NY 10009

Inquiry Number: 3796457.5

November 26, 2013

## **The EDR-City Directory Abstract**





٠.													
	LO	CATO	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Y012	4(4 °	ऽन छप	40)	A.S.	~	LORI ASSOC	CLATES, P.A.	BORING No. BILL	
		No.: NTRA	<u> </u>						E	ORING	LOG	SHEET i OF Z	
	DA DA	TE ST	ART: 5	8 0	ð.	-			ing Wler	O.D. 4	I.D. 1.D.	GROUND ELEVATION: 70 GROUND WATER ELEV: 00	·
	DEFTH	CASTHU ULOWS PER FOOT	ይረአጠይ ዝል ውግሥ			Medical Medica Medical Medical Medical Medical Medical Medical Medical Medical Medica Me	W 5-X	CONSITY	Ellyste			ATION OF SOILS REMARKS	
			1/3	100			-	MIO3810/42		FILL : B		SILM, LITTLE SIGT	
:			SZ	3	1				FILE	TRACE F	ing estinist	WIRELEN+ CONCROSE	
	- 5 -		35		15	7 (0)	2		(11-65)			·	
¥			5-7	-	75	12			Calin			, ,	
=			54 7:9	7	-1-	1	T	88	ज्यामार है। है। एउ	Brown 1	n.F SAND.	AND SILT	
1	10 -		<u> </u>	9	ا ج				SM	1	C.F SAND	LITTLE SILT	
			.10-12			7	<i>[</i> 3		(7:65)				
							•		ox/Pr	50P: 60	My ORGAN	ne sict - IPEAT	$\exists$
	15 -		56 15-17	네	2	12	ঠ		50	BUTTOM:	BROWN FU	UB SAWN, SOME SIEF	_
							0		(66)	LITTLE F	FIND GRAVEL		_
	- 20 -		63								_		
			20.22 20.22	14	8	10	U			BROWN	FINE SA	UD. SOME SILT	
					-		_						
	- 25 -		58	17	<u> </u>					(-0.1m)	Brown 5	ICT, LITTLE FINE SILD	
	!		25.27			13	4	ı	8.65	GP 344			$\exists$
									2.67		7		
	30 -		34.32	12	15	20 7				0.			
							=:-			7115			
	- 35 -		510	1/	117					Becira	C.F SAN	D. TRACT TO LITTLE	
			3537	16		31	22			515,	,	D, TRACT TO LITTLE	
							_	*	58			,	
	40	-	511	16	<u> </u>			\ \ \	6.65	De			
	×		40.42		<u>ک</u> ۲						ss (April	IN TIP	
	45.			-	-					(ଜ୍ଞେଷ	65		_
	43	-	45.47	18	27	25	47	}		Po -	IMEDIUM N	FIND GRADE IN TH	
				F	-	ورب	-/ 4	1		•			_
	- 50 -									CORBO	The Route 1	Bauchor	
	Bu	einecr	jihr	•		<u></u>		Dril	icr: 1	hw y	<u> </u>	Helper:	
		្				Proper	lions	used; tra	cc = 1 - 1	0 %, little = 10-7	20% som: = 20-35%,	and = 35-50%	

PROTECT: 44 GAST 14m 5. LOCATION: DEC YOLK 1, M. JOB NO: 25647 CONTRACTOR CM1  DATE FINISH: 4 Step  DATE FINISH: 4 Step  STEP 2 OF 2  BORING LOG  GROUNDELEVATION: 70  GROUNDELEV	<b>В</b>	: 12/28	เคล	11:43	732	?335	<b>851</b> :	5			PILLORI A	SSOCIATES	i	PAGE	94
DATE FINIS:	4 (04.00.00)	LOI JOE COI	CAT No NTR	NON: NO.	> 41° CM	2 <sup>2</sup> .16	، <del>کار</del>				GORY PHLLORI, P.	E.P.A.			
51-53 15 10 10 51 51 52 51 51 52 51		DAT	E FI	NISH: <u> </u>	91	<b>5</b> 0	-	S	AMPLE	ROD	4 J.D				
51.53 31.99  55 1900  50 50 50 65 92  60 50 65 92  60 60 50 65 92  60 60 60 60 60 60 60 60 60 60 60 60 60 6		DEPTO	LOC)	DOTTES	385	(F) (F)		र्हें ग्रास्टर	COUSINT PROBUNG	CLANGE DELTH		R	EMARKS		
60 59 68 92  60 59 68 92  60 60 59 68 92  60 70 80 70 80 70 80 70 80 80 80 80 80 80 80 80 80 80 80 80 80					15		31	49		69	GRANT C-F	SAMO, 1	merce to limb	COBBU	s  -
60 59 68 92 38 0R OROMPOSTO RECK:  (M. F. SAND LITTLE SUT)  (DU. 685 - 73.5'  (CO. 6		- 55 -								-					-
65 51 67 0 21 0.05 (M.F. S.A.H.D. LITTLE SUT)  -70						-3			•						
100. 685 - 73.5 PCG: 10070 Rep: 8870 HMAD, UNWEATHED, SLIENTY JONTON SCHIST BEDROCK  80 -95	:	60			54	ধ্ব		<u> 38</u>	٠			•			
100. 685 - 73.5 PCG: 10070 Rep: 8870 HMAD, UNWEATHED, SLIENTY JONTON SCHIST BEDROCK  80 -95	· ·	-65			ا منز					-00	_0x20MP051	y Rock.	: (		
200: 10070 Rep: 8870 MARO, UNINGATUSO, SIEMRY JOINTON SCHIST BERROCK					2'			સ્ર		(5.65)	(M.F SAN	10 ៤វ	यह इंटर		
Rep. 8870  Hard, Uning a tylish, Selenty Jourson  Schist Bedroch  85  95		- 70 - -										_			
80 - 80 - 85 - 85 - 85 - 85 - 85 - 85 -		-								s'	Rep: 887	٥	an Cludy	lavena	
95		75 -					·		*		Sch st 1	Benrock		ينه سي	, 
95	·	-80									**		*		
95								•			3				
95	 	85									8	¥			
-100-													2		
-100		30													_
Tuning Voca		- 95						٠							
Tuning VIV			•												
Driller: 0/009 Helper:		-100	Engino	- <u>Joy</u> e						Driller :	11009		Helper;		上

Project: 644 East 14th Street New York, New York Date: 05/08/2008 to 05/09/2008

Contractor: CMI Subsurface Investigations

Boring No.: B-1

Sheet: 1 of 2

Ground El: NA

Groundwater Depth: NA

Depth		SAMPLES			Classification	1
Feet	Number	Blows / 6"	Strata	SOIL DESCRIPTION	<u>Depth</u> Elevation	
2	S-1	100/6"		5" of Concrete		
	S-2	3-4-7-9				
5	S-3	9-15-100/2"	F	FILL: Brown coarse to fine Sand, little Silt, trace fine Gravel with Brick and Concrete	FILL (11-65)	
	S-4	7-1-1-1		fragments	(11-03)	H
10	S-5	9-8-9-13			13'0"	
15	S-6	WOH-2-12-8	МТМ	Gray organic Sand, and Peat	OL/Pt 16'0" (11-65) =	
				Brown fine Sand, some Silt, little fine Gravel	SM (7-65)	
20	S-7	11-8-10-10		Brown fine Sand, some Silt	SM _ (8-65)	
25	S-8	7-7-13-14	GA	Gray brown Silt, little fine Sand	ML (10-65)	
30	S-9	12-15-20-21			33'0"	
35	S-10	16-19-31-22		Brown coarse to fine Sand, trace to little Silt	SP-SM _ (7-65)	
40	S-11	100/6"		Cored through boulders from 41' to 44'	SP-SM	
45	S-12	18-27-25-42		Gray coarse to fine Sand, trace to little Silt, some coarse to fine Gravel w/boulders and cobbles	(6-65)	
50	S-13	25-20-31-44			ot No + 08041	

Project: 644 East 14th Street New York, New York Date: 05/08/2008 to 05/09/2008

Contractor: CMI Subsurface Investigations

Boring No.: B-1

Sheet: 2 of 2

Ground El: NA

Groundwater Depth: NA

	7	Subsurface III	vestigati	ions Groundwater Dej	
Depth		SAMPLES		COIL DESCRIPTION	Classification
Feet	Number	Blows / 6"	Strata	SOIL DESCRIPTION	Depth Elevation
55	S-13 S-14	25-20-31-44		Gray coarse to fine Sand, trace to little Silt, some coarse to fine Gravel w/boulders and	SP-SM
60 -	S-15	54-68-42-38		cobbles	(6-65)
65	S-16	51-67-70-81	TIL DR T	Decomposed Rock	(4-65)
70	R-1	RUN = 60" 68.5'-73.5' REC=100% RQD=88%	R	MICA SCHIST BEDROCK: Hard, unweathered, medium to closely jointed	(1-65)
75				End of Boring	
80					
85					
90					
95					
100				enical Engineering Project	nt No - 090417

Project: 644 East 14th Street

New York, New York Date: 11/10/2008 to 11/11/2008

Contractor: Warren George Inc

Boring No.: B-2

Sheet: 1 of 1

Project No.: 080417

Ground El: NA

Groundwater Depth: NA

Contract	OI WALL	ren George inc		Groundwater De	
Depth		SAMPLES		SOIL DESCRIPTION	Classification
Feet	Number	Blows / 6"	Strata	<u> </u>	<u>Depth</u> Elevation
4	S-1	18-12-15-10		6" of Concrete	
5	S-2	10-5-2-2	F	FILL: Bloak brown coarse to fine Sand, little Silt, trace fine Gravel with Brick fragments	FILL (11-65)
10	S-3	4-1-2-3			13'0"
15	S-4	WOR-4-2	MTM	Gray organic Silt, and Peat	OL/Pt (11-65)
20	S-5	12-9-12-11		Grey brown Clayey Silt, some fine Sand SM (7-65)	SM (8-65)
25	S-6	8-7-8-9	-GA	Brown grey Clayey Silt	ML (10-65)
30	S-7	17-13-29-24		Grey coarse to fine Sand, trace Silt, and brown Silt	SP-SM (7-65)
35	S-8	100/4"	<b>E</b>	Grey coarse to fine Sand, little Silt, some	SP-SM 35'6(7-65)
40	R-1	RUN = 60" 35.5'-40.5' REC=100% RQD=92% RUN = 60" 40.5'-45.5' REC=87% RQD=77%	N.	MICA SCHIST BEDROCK: Hard, slightly to moderately weathered, medium to closely jointed	(2-65)
50				End of Boring PRELIMINARY	45'6"

Project: 644 East 14th Street
New York, New York
Date: 6/16/2009 to 6/18/2009

Contractor: Warren George, Inc.

Boring No.: B-3

Sheet: 1 of 2

Ground El: NA Groundwater Depth: NA

				Groundwater Dej			
Depth		SAMPLES	1	SOIL DESCRIPTION	Classification Depth		
Feet	Number	Blows / 6"	Strata		Elevation		
	\$-1	38-10-5-2		6" Concrete Slab  FILL: Gray brown coarse to fine Sand, little			
5	S-2	8-4-3-5	F	Silt, little medium to fine Gravel with Brick & Asphalt fragments	FILL (11-65)		
10	S-3	I-2-1-1		Disabassasia Gila and David	OL .		
15	S-4	2-3-3-4	MIM	Black organic Silt, and Peat	(11-65) 18'0"		
20	S-5	19-22-12-9		Brown coarse to fine Sand, little Silt, trace fine Gravel	SM (7-65)		
25	S-6	8-11-14-19		Brown fine Sand, some Silt	SM (8-65)		
30	S-7	11-14-17-15	GA:		33'0"		
35	S-8	12-14-19-21			SP-SM		
10	\$-9	19 <b>-26-29-30</b>		Brown coarse to fine Sand, trace to little Silt	(7-65)		
45	S-10	19-46-29-38		Brown coarse to fine Sand, little Silt with boulders	SM (6-65)		
50	R-1	RUN = 60" 49'-54'		MICA SCHIST BEDROCK: Hard, slightly weathered, closely jointed	(1-65)		

Project: 644 East 14th Street New York, New York Date: 6/16/2009 to 6/18/2009

Contractor: Warren George Inc.

Boring No.: B-3

Sheet: 2 of 2

Ground El: NA Groundwater Depth: NA

Contract	or: Warr	ren George, Ind	C.	Groundwater De	pth: NA
Depth		SAMPLES		SOIL DESCRIPTION	Classification Depth
Feet	Number	Blows / 6"	Strata		<u>Depth</u> Elevation
	R-1	RUN = 60" 49'-54' REC=88% RQD=88%		MICA SCHIST BEDROCK: Hard, slightly weathered, closely jointed	(1-65)
55				End of Boring	+
60					
65					
70					-
75					
80					
85					
90					
95					
100					
$H$			ā.		
TLLORI	ASSOC	LATES, P.A.	Geotech	nical Engineering Proje	ct No.: 080417

Project: 644 East 14th Street
New York, New York
Date: 6/18/2009 to 6/22/2009

Contractor: Warren George, Inc.

Boring No.: B-4

Sheet: 1 of 2

Project No.: 080417

Ground El: NA Groundwater Depth: NA

<b></b>	77 611.	CAMPI EC	<del>-</del> .	Groundwater De	Classification
Depth Feet	Number	SAMPLES Blows / 6"	Strata	SOIL DESCRIPTION	<u>Depth</u>
1000	Manyoet	BJ0WS / O	Juana	6" Concrete Slab	Elevation
5	S-1 S-2	7-3-5-7 100/3"	F	FILL: Gray brown coarse to fine Sand, little Silt, little medium to fine Gravel with Brick, Tile, Concrete & Asphalt fragments	FILL (11-65)
10	S-3	4-5-2-3	MIM	Black organic Silt, and Peat	0L (11-65)
15	S-4	WOR-3			18'0"
20	S-5	9-12-13-10			
25	S-6	11-17-19-19	GA	Reddish brown fine Sand with alternating layers of Gray Silt	SM (8-65)
30	S-7	5-6-8-12			33'0"
35	S-8	22-22-16-24		Gray medium to fine Sand, little Silt, some medium to fine Gravel	SP-SM - (6-65) - 38'0"
40	S-9	7-14-25-100/5*	GIE	Gray coarse to fine Sand, little Silt with boulders	SP-SM
45				Cored through boulders from 43'-48'	(6-65)
50	S-10	17-23-30-28	F	Gray coarse to fine Sand, litte Silt	SP (7-65)

Project: 644 East 14th Street
New York, New York
Date: 6/18/2009 to 6/22/2009
Contractor: Warren George Inc.

7323358515

**Boring No.: B-4** 

Sheet: 2 of 2 Ground El: NA

Project No.: 080417

Contract	or: Wan	ren George, Inc	<b>3.</b>	Groundwater Depth: NA							
Depth		SAMPLES		SOIL DESCRIPTION	Classification Depth						
Feet	Number	Blows / 6"	Strata		<u>Depth</u> Elevation	T					
	S-10	17-23-30-28	SGTS	Gray coarse to fine Sand, little Silt	SP (7-65)						
55			DR.	Decomposed Rock	55'0" (4-65)						
	R-1	RUN = 60" 55'-60' REC=100% RQD=100%	R	MICA SCHIST BEDROCK: Hard, unweathered, thickly jointed	(1-65) 60'0"						
60	4			End of Boring		1					
H											
65						_					
_ H											
70					-						
75					-	-					
H						Ì					
A											
80					-	1					
H											
85					-	+					
日											
日						ŀ					
90					-	1					
日						ŀ					
95 🔠					_	+					
						-					
E.						F					
∞廿					_	ļ					

## APPENDIX B BORING LOGS





**B1** Depth to Water Site Elevation Datum Performed in northern most former service bay. Location: (ft. from grade.) Site Name: TRG1404 **Ground Elevation** Address: Date DTW 644 East 14th Street, Manhattan, Groundwater New York Drilling Company: Method: depth Eastern Environmental Solutions Geoprobe NA Well Specifications Date Started: Date Completed: 3/13/2014 3/13/2014 None Completion Depth: Geologist 6 feet Kevin Brussee DEPTH **SAMPLES** B1 (ft below Reco-SOIL DESCRIPTION Blow (NTS) grade) very PID per (in.) 6 in. (ppm) 0 22" - Fill Material to 22 0.0 3" - Fill Material to 12 6" - Brown/Grey sandy clay Refusal at 6ft



ENVIRONMENTA	L BUSINE	ESS CO	NSULTAN'	rs			
				В2			
Location: Perforr	ned in the t	former c	enter service	e bay.		Depth to Water (ft. from grade.)	Site Elevation Datum
Site Name: TRG14	104	Address	S:			Date DTW	Ground Elevation
		644 Eas New Yo	st 14th Stree ork	et, Manha	attan,	Groundwater	
Drilling Company:			Method:			depth	
Eastern Environme	ental Solution	ons	Geoprobe	-1-11		NA	Well Specifications
Date Started: 3/13/2014			Date Comp 3/13/2014	pleted:			None
Completion Depth: 2 feet			Geologist Kevin Brus	ssee			
B2	DEPTH		SAMPLES	3			
(NTS)	(ft below grade)	Reco- very (in.)	Blow per 6 in.	PID (ppm)		SOIL DESCRIF	PTION
		()	0 1111	(PP111)			
	0 <u></u> to _	0		0.0	No rec	overy, refusal at 2	ft
		-					
	_	-					
	_						
		<u> </u>					
	_						
	-  -	-					
	_	_					
	_						
	-  -	1					
	<u> </u>						
	_	1					
	L $\overline{\underline{}}$						



ENVIRONMENTAL BUSINESS CONSULTANTS **B3** Site Elevation Datum Performed in front of the northern most former service Depth to Water Location: (ft. from grade.) Site Name: TRG1404 Date DTW **Ground Elevation** Address: 644 East 14th Street, Manhattan, New York Groundwater Drilling Company: Method: depth Eastern Environmental Solutions Geoprobe NA Well Specifications Date Started: Date Completed: 3/13/2014 3/13/2014 None Completion Depth: Geologist 1 feet Kevin Brussee В3 DEPTH **SAMPLES** (ft below Reco-SOIL DESCRIPTION Blow (NTS) grade) very PID per (in.) 6 in. (ppm) 0 0.0 6" - Fill Material 6 \* Retained B3 @ 1'



#### ENVIRONMENTAL BUSINESS CONSULTANTS

**B4** Site Elevation Datum Performed in the front of the southern most former Depth to Water Location: service bay. (ft. from grade.) Site Name: TRG1404 **Ground Elevation** Address: Date DTW 644 East 14th Street, Manhattan, New York Groundwater Drilling Company: Method: depth Eastern Environmental Solutions Geoprobe NA Well Specifications Date Started: Date Completed: 3/13/2014 3/13/2014 None Completion Depth: Geologist 6 feet Kevin Brussee DEPTH **SAMPLES** B4 (ft below Reco-SOIL DESCRIPTION Blow (NTS) grade) very PID per (in.) 6 in. (ppm) 0 6" - Fill Material to 6 0.0 12" - Fill Material to 12 \* Retained B4 @6' Refusal at 6ft



#### ENVIRONMENTAL BUSINESS CONSULTANTS

**B5** Site Elevation Datum Performed in former repair area building in rear. Depth to Water Location: (ft. from grade.) Site Name: TRG1404 **Ground Elevation** Address: Date DTW 644 East 14th Street, Manhattan, New York Groundwater Drilling Company: Method: depth Eastern Environmental Solutions Geoprobe NA Well Specifications Date Started: Date Completed: 3/13/2014 3/13/2014 None Completion Depth: Geologist 7 feet Kevin Brussee B5 DEPTH **SAMPLES** (ft below Reco-SOIL DESCRIPTION Blow (NTS) grade) very PID per (in.) 6 in. (ppm) 0 8" - Fill Material 4" - Fine brown sand to 12 0.0 12" - Damp brown sandy silt to \* Retained B5 @7' 12 Refusal at 7ft



				_				
				B6		T		
Location: Perform	ned in sma	all open y	ard in rear.				to Water	Site Elevation Datum
O'ta Nama TDO44	10.4	ΙΑ .Ι.Ι					grade.)	One of Flooring
Site Name: TRG14	104	Address				Date	DTW	Ground Elevation
			t 14th Stree	t, Manh	attan,	_		
- ····		New Yo				4	dwater	
Drilling Company:			Method:				pth	
Eastern Environme	ental Soluti	ons	Geoprobe			\ \ \	۱A	Well Specifications
Date Started:			Date Comp	oleted:			1	
3/13/2014			3/13/2014					None
Completion Depth:			Geologist					
7 feet	1	ī	Kevin Brus					
B6	DEPTH		SAMPLES	1				
	(ft below	Reco-	Blow			SOIL	DESCRIF	PTION
(NTS)	grade)	very	per	PID				
		(in.)	6 in.	(ppm)				
	- <sub>0</sub> -							
	-				20" - Fi	ill Materi	al	
	to to	1			Refusa		ui	
		12		0.0	1101000	a at iii		
	4				* Retai	ned B6	@ 4'	
	_							
		_						
	<u> </u>	1						
	<b>-</b>							
	<u> </u>	1						
	_	_						
	_							
	_							
	_							
	L _							
		1						
	-	1						
	<u> </u>	1						
	<u> </u>							
	_							
	_	1						
					,			
	L _							
	_							

## APPENDIX C LABORATORY REPORT





Thursday, March 20, 2014

Attn: Mr. Charles B. Sosik, P.G. Environmental Business Consultants 1808 Middle Country Rd Ridge NY 11961-2406

Project ID: 644 EAST 14TH ST MANHATTAN NY

Sample ID#s: BG19213 - BG19218

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

**Laboratory Director** 

NELAC - #NY11301 CT Lab Registration #PH-0618 MA Lab Registration #MA-CT-007 ME Lab Registration #CT-007 NH Lab Registration #213693-A,B

RI Lab Registration #63
VT Lab Registration #VT11301

PA Lab Registration #68-03530

NJ Lab Registration #CT-003

NY Lab Registration #11301



### Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



### **Analysis Report**

March 20, 2014

FOR: Attn: Mr. Charles B. Sosik, P.G.

**Environmental Business Consultants** 

1808 Middle Country Rd Ridge NY 11961-2406

Sample InformationCustody InformationDateTimeMatrix:GROUND WATERCollected by:03/13/140:00Location Code:EBCReceived by:LDA03/14/1416:02

Rush Request: 72 Hour Analyzed by: see "By" below

P.O.#:

Laboratory Data

SDG ID: GBG19213

Phoenix ID: BG19213

Project ID: 644 EAST 14TH ST MANHATTAN NY

Client ID: CORNER MW

RL/ Parameter Result **PQL** Units Date/Time Reference Βv **Volatiles** 1,1,1,2-Tetrachloroethane ND 1.0 ug/L 03/14/14 JLI SW8260 ND 03/14/14 JLI SW8260 1,1,1-Trichloroethane 1.0 ug/L ND 0.50 ug/L 03/14/14 JLI SW8260 1,1,2,2-Tetrachloroethane ND SW8260 1,1,2-Trichloroethane 1.0 ug/L 03/14/14 JLI ND 1.0 ug/L 03/14/14 JLI SW8260 1,1-Dichloroethane ND 03/14/14 JLI SW8260 1,1-Dichloroethene 1.0 ug/L SW8260 ND 1.0 ug/L 03/14/14 JLI 1,1-Dichloropropene ND SW8260 1,2,3-Trichlorobenzene 1.0 ug/L 03/14/14 1,2,3-Trichloropropane ND 1.0 ug/L 03/14/14 JLI SW8260 1,2,4-Trichlorobenzene ND 1.0 ug/L 03/14/14 JLI SW8260 SW8260 ND 03/14/14 JLI 1.0 ug/L 1,2,4-Trimethylbenzene ND 03/14/14 JLI SW8260 1,2-Dibromo-3-chloropropane 1.0 ug/L ND 1.0 ug/L 03/14/14 JLI SW8260 1,2-Dibromoethane ND 03/14/14 SW8260 1,2-Dichlorobenzene 1.0 ug/L ND 0.60 ug/L 03/14/14 SW8260 1,2-Dichloroethane ND 03/14/14 JLI SW8260 1.0 ug/L 1,2-Dichloropropane SW8260 ND 1.0 03/14/14 JLI 1,3,5-Trimethylbenzene ug/L ND 03/14/14 JH SW8260 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 03/14/14 JLI SW8260 1,3-Dichloropropane ND 1.0 ug/L 03/14/14 SW8260 1,4-Dichlorobenzene SW8260 ND 1.0 ug/L 03/14/14 JLI 2,2-Dichloropropane ND 1.0 ug/L 03/14/14 JLI SW8260 2-Chlorotoluene ND 5.0 03/14/14 JLI SW8260 ug/L 2-Hexanone ND 1.0 03/14/14 SW8260 ug/L JLL 2-Isopropyltoluene 4-Chlorotoluene ND 1.0 ug/L 03/14/14 JLI SW8260 SW8260 ND 5.0 ug/L 03/14/14 JLI 4-Methyl-2-pentanone

Page 1 of 26 Ver 1

Client ID: CORNER MW

Doromotor	Daguilt	RL/	11646	Data/Tim-	D	Deferen
Parameter	Result	PQL	Units	Date/Time	Ву	Reference
Acetone	ND	25	ug/L	03/14/14	JLI	SW8260
Acrylonitrile	ND	5.0	ug/L	03/14/14	JLI	SW8260
Benzene	ND	0.70	ug/L	03/14/14	JLI	SW8260
Bromobenzene	ND	1.0	ug/L	03/14/14	JLI	SW8260
Bromochloromethane	ND	1.0	ug/L	03/14/14	JLI	SW8260
Bromodichloromethane	ND	0.50	ug/L	03/14/14	JLI	SW8260
Bromoform	ND	1.0	ug/L	03/14/14	JLI	SW8260
Bromomethane	ND	1.0	ug/L	03/14/14	JLI	SW8260
Carbon Disulfide	ND	5.0	ug/L	03/14/14	JLI	SW8260
Carbon tetrachloride	ND	1.0	ug/L	03/14/14	JLI	SW8260
Chlorobenzene	ND	1.0	ug/L	03/14/14	JLI	SW8260
Chloroethane	ND	1.0	ug/L	03/14/14	JLI	SW8260
Chloroform	ND	1.0	ug/L	03/14/14	JLI	SW8260
Chloromethane	ND	1.0	ug/L	03/14/14	JLI	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	03/14/14	JLI	SW8260
cis-1,3-Dichloropropene	ND	0.40	ug/L	03/14/14	JLI	SW8260
Dibromochloromethane	ND	0.50	ug/L	03/14/14	JLI	SW8260
Dibromomethane	ND	1.0	ug/L	03/14/14	JLI	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	03/14/14	JLI	SW8260
Ethylbenzene	ND	1.0	ug/L	03/14/14	JLI	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	03/14/14	JLI	SW8260
sopropylbenzene	ND	1.0	ug/L	03/14/14	JLI	SW8260
m&p-Xylene	ND	1.0	ug/L	03/14/14	JLI	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	03/14/14	JLI	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	03/14/14	JLI	SW8260
Methylene chloride	ND	1.0	ug/L	03/14/14	JLI	SW8260
Naphthalene	ND	1.0	ug/L	03/14/14	JLI	SW8260
n-Butylbenzene	ND	1.0	ug/L	03/14/14	JLI	SW8260
n-Propylbenzene	ND	1.0	ug/L	03/14/14	JLI	SW8260
o-Xylene	ND	1.0	ug/L	03/14/14	JLI	SW8260
o-kylene o-Isopropyltoluene	ND	1.0	ug/L	03/14/14	JLI	SW8260
sec-Butylbenzene	ND	1.0	ug/L	03/14/14	JLI	SW8260
•	ND	1.0	ug/L	03/14/14	JLI	SW8260
Styrene tert-Butylbenzene	ND	1.0	ug/L	03/14/14	JLI	SW8260
Tetrachloroethene	ND	1.0	ug/L	03/14/14	JLI	SW8260
	ND	2.5		03/14/14	JLI	SW8260
Tetrahydrofuran (THF)	ND	1.0	ug/L	03/14/14	JLI	SW8260
Toluene			ug/L	03/14/14		
Total Xylenes	ND	2.0	ug/L		JLI	SW8260
rans-1,2-Dichloroethene	ND	1.0	ug/L	03/14/14	JLI	SW8260
rans-1,3-Dichloropropene	ND	0.40	ug/L	03/14/14	JLI 	SW8260
rans-1,4-dichloro-2-butene	ND	5.0	ug/L	03/14/14	JLI 	SW8260
Trichloroethene	ND	1.0	ug/L	03/14/14	JLI 	SW8260
Frichlorofluoromethane	ND	1.0	ug/L	03/14/14	JLI 	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	03/14/14	JLI 	SW8260
Vinyl chloride	ND	1.0	ug/L	03/14/14	JLI	SW8260
QA/QC Surrogates						
% 1,2-dichlorobenzene-d4	101		%	03/14/14	JLI	70 - 130 %
% Bromofluorobenzene	102		%	03/14/14	JLI	70 - 130 %
% Dibromofluoromethane	108		%	03/14/14	JLI	70 - 130 %

Page 2 of 26 Ver 1

Project ID: 644 EAST 14TH ST MANHATTAN NY

Client ID: CORNER MW

Parameter	Result	RL/ PQL	Units	Date/Time	Ву	Reference
% Toluene-d8	98		%	03/14/14	JLI	70 - 130 %

<sup>1 =</sup> This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time. RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected BRL=Below Reporting Level

#### **Comments:**

If there are any questions regarding this data, please call Phoenix Client Services at extension 200. This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

March 20, 2014

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Phoenix I.D.: BG19213

Page 3 of 26 Ver 1



### Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



### **Analysis Report**

March 20, 2014

FOR: Attn: Mr. Charles B. Sosik, P.G.

**Environmental Business Consultants** 

1808 Middle Country Rd Ridge NY 11961-2406

Sample InformationCustody InformationDateTimeMatrix:GROUND WATERCollected by:03/13/140:00Location Code:EBCReceived by:LDA03/14/1416:02

Rush Request: 72 Hour Analyzed by: see "By" below

P.O.#:

Laboratory Data

SDG ID: GBG19213 Phoenix ID: BG19214

Project ID: 644 EAST 14TH ST MANHATTAN NY

RL/

Client ID: EMPTY LOT MW

Units Parameter Result **PQL** Date/Time Reference Βv **Volatiles** 1,1,1,2-Tetrachloroethane ND 1.0 ug/L 03/15/14 JLI SW8260 ND 03/15/14 JLI SW8260 1,1,1-Trichloroethane 1.0 ug/L ND 0.50 ug/L 03/15/14 JLI SW8260 1,1,2,2-Tetrachloroethane ND SW8260 1,1,2-Trichloroethane 1.0 ug/L 03/15/14 JLI ND 1.0 ug/L 03/15/14 JLI SW8260 1,1-Dichloroethane ND 03/15/14 JLI SW8260 1,1-Dichloroethene 1.0 ug/L SW8260 ND 1.0 ug/L 03/15/14 JLI 1,1-Dichloropropene ND SW8260 1,2,3-Trichlorobenzene 1.0 ug/L 03/15/14 1,2,3-Trichloropropane ND 1.0 ug/L 03/15/14 JLI SW8260 1,2,4-Trichlorobenzene ND 1.0 ug/L 03/15/14 JLI SW8260 SW8260 ND 03/15/14 JLI 1.0 ug/L 1,2,4-Trimethylbenzene JLI ND 03/15/14 SW8260 1,2-Dibromo-3-chloropropane 1.0 ug/L ND 1.0 ug/L 03/15/14 JLI SW8260 1,2-Dibromoethane ND 03/15/14 SW8260 1,2-Dichlorobenzene 1.0 ug/L ND 0.60 ug/L 03/15/14 SW8260 1,2-Dichloroethane ND 03/15/14 JLI SW8260 1.0 ug/L 1,2-Dichloropropane SW8260 ND 1.0 03/15/14 JLI 1,3,5-Trimethylbenzene ug/L ND 03/15/14 JH SW8260 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 03/15/14 JLI SW8260 1,3-Dichloropropane ND 1.0 ug/L 03/15/14 SW8260 1,4-Dichlorobenzene SW8260 ND 1.0 ug/L 03/15/14 JLI 2,2-Dichloropropane ND 1.0 ug/L 03/15/14 JLI SW8260 2-Chlorotoluene ND 5.0 03/15/14 JLI SW8260 ug/L 2-Hexanone ND 1.0 03/15/14 SW8260 ug/L JLL 2-Isopropyltoluene 4-Chlorotoluene ND 1.0 ug/L 03/15/14 JLI SW8260 SW8260 ND 5.0 ug/L 03/15/14 JLI 4-Methyl-2-pentanone

Page 4 of 26 Ver 1

Parameter	Result	RL/ PQL	Units	Date/Time	Ву	Reference
Acetone	ND	25	ug/L	03/15/14	JLI	SW8260
Acrylonitrile	ND	5.0	ug/L	03/15/14	JLI	SW8260
Benzene	ND	0.70	ug/L	03/15/14	JLI	SW8260
Bromobenzene	ND	1.0	ug/L	03/15/14	JLI	SW8260
Bromochloromethane	ND	1.0	ug/L	03/15/14	JLI	SW8260
Bromodichloromethane	ND	0.50	ug/L	03/15/14	JLI	SW8260
Bromoform	ND	1.0	ug/L	03/15/14	JLI	SW8260
Bromomethane	ND	1.0	ug/L	03/15/14	JLI	SW8260
Carbon Disulfide	ND	5.0	ug/L	03/15/14	JLI	SW8260
Carbon tetrachloride	ND	1.0	ug/L	03/15/14	JLI	SW8260
Chlorobenzene	ND	1.0	ug/L	03/15/14	JLI	SW8260
Chloroethane	ND	1.0	ug/L	03/15/14	JLI	SW8260
Chloroform	ND	1.0	ug/L	03/15/14	JLI	SW8260
	ND	1.0	ug/L	03/15/14	JLI	SW8260
Chloromethane cis-1,2-Dichloroethene	ND	1.0	ug/L	03/15/14	JLI	SW8260
·	ND ND	0.40	ug/L ug/L	03/15/14	JLI	SW8260
cis-1,3-Dichloropropene	ND ND	0.40		03/15/14	JLI	SW8260 SW8260
Dibromochloromethane	ND ND		ug/L	03/15/14	JLI	SW8260
Dibromomethane		1.0	ug/L			
Dichlorodifluoromethane	ND	1.0	ug/L	03/15/14	JLI	SW8260
Ethylbenzene	ND	1.0	ug/L	03/15/14	JLI 	SW8260
Hexachlorobutadiene 	ND	0.40	ug/L	03/15/14	JLI 	SW8260
sopropylbenzene	ND	1.0	ug/L	03/15/14	JLI 	SW8260
n&p-Xylene	ND	1.0	ug/L	03/15/14	JLI	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	03/15/14	JLI	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	03/15/14	JLI	SW8260
Methylene chloride	ND	1.0	ug/L	03/15/14	JLI	SW8260
Naphthalene	ND	1.0	ug/L	03/15/14	JLI	SW8260
n-Butylbenzene	ND	1.0	ug/L	03/15/14	JLI	SW8260
n-Propylbenzene	ND	1.0	ug/L	03/15/14	JLI	SW8260
o-Xylene	ND	1.0	ug/L	03/15/14	JLI	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	03/15/14	JLI	SW8260
sec-Butylbenzene	ND	1.0	ug/L	03/15/14	JLI	SW8260
Styrene	ND	1.0	ug/L	03/15/14	JLI	SW8260
tert-Butylbenzene	ND	1.0	ug/L	03/15/14	JLI	SW8260
Tetrachloroethene	ND	1.0	ug/L	03/15/14	JLI	SW8260
Tetrahydrofuran (THF)	ND	2.5	ug/L	03/15/14	JLI	SW8260
Toluene	ND	1.0	ug/L	03/15/14	JLI	SW8260
Total Xylenes	ND	2.0	ug/L	03/15/14	JLI	SW8260
rans-1,2-Dichloroethene	ND	1.0	ug/L	03/15/14	JLI	SW8260
rans-1,3-Dichloropropene	ND	0.40	ug/L	03/15/14	JLI	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	03/15/14	JLI	SW8260
Trichloroethene	ND	1.0	ug/L	03/15/14	JLI	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	03/15/14	JLI	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	03/15/14	JLI	SW8260
Vinyl chloride	ND	1.0	ug/L	03/15/14	JLI	SW8260
QA/QC Surrogates			Ü			
% 1,2-dichlorobenzene-d4	102		%	03/15/14	JLI	70 - 130 %
% Bromofluorobenzene	103		%	03/15/14	JLI	70 - 130 %
			, .	33, 13, 11	J	. 5 . 50 /0

Page 5 of 26 Ver 1

Project ID: 644 EAST 14TH ST MANHATTAN NY

Client ID: EMPTY LOT MW

Parameter	Result	RL/ PQL	Units	Date/Time	Ву	Reference
% Toluene-d8	97		%	03/15/14	JLI	70 - 130 %

<sup>1 =</sup> This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time. RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected BRL=Below Reporting Level

#### **Comments:**

If there are any questions regarding this data, please call Phoenix Client Services at extension 200. This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

March 20, 2014

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Phoenix I.D.: BG19214

Page 6 of 26 Ver 1



### Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



### **Analysis Report**

March 20, 2014

FOR: Attn: Mr. Charles B. Sosik, P.G.

**Environmental Business Consultants** 

1808 Middle Country Rd Ridge NY 11961-2406

Sample InformationCustody InformationDateTimeMatrix:SOILCollected by:03/13/140:00Location Code:EBCReceived by:LDA03/14/1416:02

Rush Request: 72 Hour Analyzed by: see "By" below

P.O.#:

### **Laboratory Data**

SDG ID: GBG19213

Phoenix ID: BG19215

Project ID: 644 EAST 14TH ST MANHATTAN NY

Client ID: B3@1

		RL/				
Parameter	Result	PQL	Units	Date/Time	Ву	Reference
Percent Solid	86		%	03/14/14	1	E160.3
Soil Extraction for SVOA	Completed			03/14/14	BJ/FV	SW3545
Field Extraction	Completed			03/13/14		SW5035
<u>Volatiles</u>						
1,1,1,2-Tetrachloroethane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,1,1-Trichloroethane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,1,2,2-Tetrachloroethane	ND	3.6	ug/Kg	03/18/14	JLI	SW8260
1,1,2-Trichloroethane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,1-Dichloroethane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,1-Dichloroethene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,1-Dichloropropene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,2,3-Trichlorobenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,2,3-Trichloropropane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,2,4-Trichlorobenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,2,4-Trimethylbenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,2-Dibromo-3-chloropropane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,2-Dibromoethane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,2-Dichlorobenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,2-Dichloroethane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,2-Dichloropropane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,3,5-Trimethylbenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,3-Dichlorobenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,3-Dichloropropane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
1,4-Dichlorobenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
2,2-Dichloropropane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
2-Chlorotoluene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
2-Hexanone	ND	30	ug/Kg	03/18/14	JLI	SW8260

Page 7 of 26 Ver 1

Client ID: B3@1

Parameter	Result	RL/ PQL	Units	Date/Time	Ву	Reference
2-Isopropyltoluene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260 1
4-Chlorotoluene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
4-Methyl-2-pentanone	ND	30	ug/Kg	03/18/14	JLI	SW8260
Acetone	ND	36	ug/Kg	03/18/14	JLI	SW8260
Acrylonitrile	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Benzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Bromobenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Bromochloromethane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Bromodichloromethane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Bromoform	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Bromomethane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Carbon Disulfide	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Carbon tetrachloride	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Chlorobenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Chloroethane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Chloroform	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Chloromethane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
cis-1,2-Dichloroethene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
cis-1,3-Dichloropropene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Dibromochloromethane	ND	3.6	ug/Kg	03/18/14	JLI	SW8260
Dibromomethane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Dichlorodifluoromethane	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Ethylbenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Hexachlorobutadiene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Isopropylbenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
m&p-Xylene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Methyl Ethyl Ketone	ND	36	ug/Kg	03/18/14	JLI	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	03/18/14	JLI	SW8260
Methylene chloride	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Naphthalene	430	300	ug/Kg	03/15/14	JLI	SW8260
n-Butylbenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
n-Propylbenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
o-Xylene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
p-Isopropyltoluene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
sec-Butylbenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Styrene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
tert-Butylbenzene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Tetrachloroethene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	03/18/14	JLI	SW8260 1
Toluene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
Total Xylenes	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
trans-1,2-Dichloroethene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
trans-1,3-Dichloropropene	ND	5.9	ug/Kg	03/18/14	JLI	SW8260
• •	ND	12	ug/Kg ug/Kg	03/18/14	JLI	SW8260
trans-1,4-dichloro-2-butene Trichloroethene	ND	5.9	ug/Kg ug/Kg	03/18/14	JLI	SW8260
	ND	5.9	ug/Kg ug/Kg	03/18/14	JLI	SW8260
Trichlorofluoromethane Trichlorotrifluoroethane	ND ND	5.9 5.9	ug/Kg ug/Kg	03/18/14	JLI	SW8260
Trichlorotrifluoroethane	ND ND	5.9 5.9	ug/Kg ug/Kg	03/18/14	JLI	SW8260
Vinyl chloride  QA/QC Surrogates	ND	5.3	ug/itg	03/10/14	JLI	J V V U Z U U

Page 8 of 26 Ver 1

Client ID: B3@1

Client ID: B3@1		DI.				
Parameter	Result	RL/ PQL	Units	Date/Time	Ву	Reference
% 1,2-dichlorobenzene-d4	99		%	03/18/14	JLI	70 - 130 %
% Bromofluorobenzene	98		%	03/15/14	JLI	70 - 130 %
% Dibromofluoromethane	91		%	03/18/14	JLI	70 - 130 %
% Toluene-d8	102		%	03/18/14	JLI	70 - 130 %
<u>Semivolatiles</u>						
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	03/15/14	DD	SW 8270
1,2,4-Trichlorobenzene	ND	270	ug/Kg	03/15/14	DD	SW 8270
1,2-Dichlorobenzene	ND	270	ug/Kg	03/15/14	DD	SW 8270
1,2-Diphenylhydrazine	ND	390	ug/Kg	03/15/14	DD	SW 8270
1,3-Dichlorobenzene	ND	270	ug/Kg	03/15/14	DD	SW 8270
1,4-Dichlorobenzene	ND	270	ug/Kg	03/15/14	DD	SW 8270
2,4,5-Trichlorophenol	ND	270	ug/Kg	03/15/14	DD	SW 8270
2,4,6-Trichlorophenol	ND	270	ug/Kg	03/15/14	DD	SW 8270
2,4-Dichlorophenol	ND	270	ug/Kg	03/15/14	DD	SW 8270
2,4-Dimethylphenol	ND	270	ug/Kg	03/15/14	DD	SW 8270
2,4-Dinitrophenol	ND	620	ug/Kg	03/15/14	DD	SW 8270
2,4-Dinitrotoluene	ND	270	ug/Kg	03/15/14	DD	SW 8270
2,6-Dinitrotoluene	ND	270	ug/Kg	03/15/14	DD	SW 8270
2-Chloronaphthalene	ND	270	ug/Kg	03/15/14	DD	SW 8270
2-Chlorophenol	ND	270	ug/Kg	03/15/14	DD	SW 8270
2-Methylnaphthalene	390	270	ug/Kg	03/15/14	DD	SW 8270
2-Methylphenol (o-cresol)	ND	270	ug/Kg	03/15/14	DD	SW 8270
2-Nitroaniline	ND	620	ug/Kg	03/15/14	DD	SW 8270
2-Nitrophenol	ND	270	ug/Kg	03/15/14	DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	03/15/14	DD	SW 8270
3,3'-Dichlorobenzidine	ND	270	ug/Kg	03/15/14	DD	SW 8270
3-Nitroaniline	ND	620	ug/Kg	03/15/14	DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	03/15/14	DD	SW 8270
4-Bromophenyl phenyl ether	ND	390	ug/Kg	03/15/14	DD	SW 8270
4-Chloro-3-methylphenol	ND	270	ug/Kg	03/15/14	DD	SW 8270
4-Chloroaniline	ND	270	ug/Kg	03/15/14	DD	SW 8270
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	03/15/14	DD	SW 8270
4-Nitroaniline	ND	620	ug/Kg	03/15/14	DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	03/15/14	DD	SW 8270
Acenaphthene	1000	270	ug/Kg	03/15/14	DD	SW 8270
Acenaphthylene	ND	270	ug/Kg	03/15/14	DD	SW 8270
Acetophenone	ND	270	ug/Kg	03/15/14	DD	SW 8270
Aniline	ND	1100	ug/Kg	03/15/14	DD	SW 8270
Anthracene	1800	270	ug/Kg	03/15/14	DD	SW 8270
Benz(a)anthracene	2300	270	ug/Kg	03/15/14	DD	SW 8270
Benzidine	ND	460	ug/Kg	03/15/14	DD	SW 8270
Benzo(a)pyrene	2100	270	ug/Kg	03/15/14	DD	SW 8270
Benzo(b)fluoranthene	2600	270	ug/Kg	03/15/14	DD	SW 8270
Benzo(ghi)perylene	750	270	ug/Kg	03/15/14	DD	SW 8270
Benzo(k)fluoranthene	1000	270	ug/Kg	03/15/14	DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	03/15/14	DD	SW 8270
Benzyl butyl phthalate	13000	270	ug/Kg ug/Kg	03/15/14	DD	SW 8270
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	03/15/14	DD	SW 8270
Bis(2-chloroethyl)ether	ND	390	ug/Kg ug/Kg	03/15/14	DD	SW 8270

Page 9 of 26 Ver 1

61

% Terphenyl-d14

OHOTICID: BOOT						
Parameter	Result	RL/ PQL	Units	Date/Time	Ву	Reference
	Nesuit	FQL			Бу	
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	03/15/14	DD	SW 8270
Bis(2-ethylhexyl)phthalate	2300	270	ug/Kg	03/15/14	DD	SW 8270
Carbazole	1300	580	ug/Kg	03/15/14	DD	SW 8270
Chrysene	2000	270	ug/Kg	03/15/14	DD	SW 8270
Dibenz(a,h)anthracene	ND	270	ug/Kg	03/15/14	DD	SW 8270
Dibenzofuran	820	270	ug/Kg	03/15/14	DD	SW 8270
Diethyl phthalate	ND	270	ug/Kg	03/15/14	DD	SW 8270
Dimethylphthalate	ND	270	ug/Kg	03/15/14	DD	SW 8270
Di-n-butylphthalate	ND	270	ug/Kg	03/15/14	DD	SW 8270
Di-n-octylphthalate	ND	270	ug/Kg	03/15/14	DD	SW 8270
Fluoranthene	6500	270	ug/Kg	03/15/14	DD	SW 8270
Fluorene	1100	270	ug/Kg	03/15/14	DD	SW 8270
Hexachlorobenzene	ND	270	ug/Kg	03/15/14	DD	SW 8270
Hexachlorobutadiene	ND	270	ug/Kg	03/15/14	DD	SW 8270
Hexachlorocyclopentadiene	ND	270	ug/Kg	03/15/14	DD	SW 8270
Hexachloroethane	ND	270	ug/Kg	03/15/14	DD	SW 8270
Indeno(1,2,3-cd)pyrene	750	270	ug/Kg	03/15/14	DD	SW 8270
Isophorone	ND	270	ug/Kg	03/15/14	DD	SW 8270
Naphthalene	900	270	ug/Kg	03/15/14	DD	SW 8270
Nitrobenzene	ND	270	ug/Kg	03/15/14	DD	SW 8270
N-Nitrosodimethylamine	ND	390	ug/Kg	03/15/14	DD	SW 8270
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	03/15/14	DD	SW 8270
N-Nitrosodiphenylamine	ND	390	ug/Kg	03/15/14	DD	SW 8270
Pentachloronitrobenzene	ND	390	ug/Kg	03/15/14	DD	SW 8270
Pentachlorophenol	ND	390	ug/Kg	03/15/14	DD	SW 8270
Phenanthrene	9900	270	ug/Kg	03/15/14	DD	SW 8270
Phenol	ND	270	ug/Kg	03/15/14	DD	SW 8270
Pyrene	5800	270	ug/Kg	03/15/14	DD	SW 8270
Pyridine	ND	390	ug/Kg	03/15/14	DD	SW 8270
QA/QC Surrogates						
% 2,4,6-Tribromophenol	53		%	03/15/14	DD	30 - 130 %
% 2-Fluorobiphenyl	54		%	03/15/14	DD	30 - 130 %
% 2-Fluorophenol	50		%	03/15/14	DD	30 - 130 %
% Nitrobenzene-d5	54		%	03/15/14	DD	30 - 130 %
% Phenol-d5	53		%	03/15/14	DD	30 - 130 %
			0.4	22/1-//		

Page 10 of 26 Ver 1

03/15/14

DD 30 - 130 %

Project ID: 644 EAST 14TH ST MANHATTAN NY

Client ID: B3@1

RL/

Parameter Result PQL Units Date/Time By Reference

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time. RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level

#### **Comments:**

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

March 20, 2014

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Phoenix I.D.: BG19215

Page 11 of 26 Ver 1



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



# **Analysis Report**

March 20, 2014

FOR: Attn: Mr. Charles B. Sosik, P.G.

**Environmental Business Consultants** 

1808 Middle Country Rd Ridge NY 11961-2406

Sample Informa	<u>tion</u>	Custody Inform	<u>ation</u>	<u>Date</u>	<u>Time</u>
Matrix:	SOIL	Collected by:		03/13/14	0:00
Location Code:	EBC	Received by:	LDA	03/14/14	16:02

Rush Request: 72 Hour Analyzed by: see "By" below

P.O.#:

# **Laboratory Data**

SDG ID: GBG19213

Phoenix ID: BG19216

Project ID: 644 EAST 14TH ST MANHATTAN NY

Client ID: B4@4

		RL/				
Parameter	Result	PQL	Units	Date/Time	Ву	Reference
Percent Solid	88		%	03/14/14	ı	E160.3
Soil Extraction for SVOA	Completed			03/14/14	BJ/FV	SW3545
Field Extraction	Completed			03/13/14		SW5035
<u>Volatiles</u>						
1,1,1,2-Tetrachloroethane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,1,1-Trichloroethane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,1,2,2-Tetrachloroethane	ND	3.8	ug/Kg	03/18/14	JLI	SW8260
1,1,2-Trichloroethane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,1-Dichloroethane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,1-Dichloroethene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,1-Dichloropropene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,2,3-Trichlorobenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,2,3-Trichloropropane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,2,4-Trichlorobenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,2,4-Trimethylbenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,2-Dibromo-3-chloropropane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,2-Dibromoethane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,2-Dichlorobenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,2-Dichloroethane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,2-Dichloropropane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,3,5-Trimethylbenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,3-Dichlorobenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,3-Dichloropropane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
1,4-Dichlorobenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
2,2-Dichloropropane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
2-Chlorotoluene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
2-Hexanone	ND	31	ug/Kg	03/18/14	JLI	SW8260

Page 12 of 26 Ver 1

Client ID: B4@4

Parameter	Result	RL/ PQL	Units	Date/Time	Ву	Reference
2-Isopropyltoluene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260 <sup>1</sup>
4-Chlorotoluene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	03/18/14	JLI	SW8260
Acetone	ND	38	ug/Kg	03/18/14	JLI	SW8260
Acrylonitrile	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Benzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Bromobenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Bromochloromethane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Bromodichloromethane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Bromoform	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Bromomethane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Carbon Disulfide	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Carbon tetrachloride	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Chlorobenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Chloroethane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Chloroform	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Chloromethane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
cis-1,2-Dichloroethene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
cis-1,3-Dichloropropene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Dibromochloromethane	ND	3.8	ug/Kg	03/18/14	JLI	SW8260
Dibromomethane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Dichlorodifluoromethane	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Ethylbenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Hexachlorobutadiene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Isopropylbenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
m&p-Xylene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Methyl Ethyl Ketone	ND	38	ug/Kg	03/18/14	JLI	SW8260
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	03/18/14	JLI	SW8260
Methylene chloride	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Naphthalene	200	6.3	ug/Kg	03/18/14	JLI	SW8260
n-Butylbenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
n-Propylbenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
o-Xylene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
p-Isopropyltoluene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
sec-Butylbenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Styrene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
tert-Butylbenzene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Tetrachloroethene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Tetrahydrofuran (THF)	ND	13	ug/Kg	03/18/14	JLI	SW8260 1
Toluene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
Total Xylenes	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
trans-1,2-Dichloroethene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
trans-1,3-Dichloropropene	ND	6.3	ug/Kg	03/18/14	JLI	SW8260
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	03/18/14	JLI	SW8260
Trichloroethene	ND	6.3	ug/Kg ug/Kg	03/18/14	JLI	SW8260
	ND	6.3	ug/Kg ug/Kg	03/18/14	JLI	SW8260
Trichlorofluoromethane	ND	6.3	ug/Kg ug/Kg	03/18/14	JLI	SW8260
Trichlorotrifluoroethane	ND	6.3	ug/Kg ug/Kg	03/18/14	JLI	SW8260
Vinyl chloride  QA/QC Surrogates	ND	0.5	ug/itg	03/10/14	JLI	3440200

Page 13 of 26 Ver 1

Client ID: B4@4

Client ID. B4@4		DL /				
Parameter	Result	RL/ PQL	Units	Date/Time	Ву	Reference
% 1,2-dichlorobenzene-d4	100		%	03/18/14	JLI	70 - 130 %
% Bromofluorobenzene	98		%	03/18/14	JLI	70 - 130 %
% Dibromofluoromethane	98		%	03/18/14	JLI	70 - 130 %
% Toluene-d8	100		%	03/18/14	JLI	70 - 130 %
<u>Semivolatiles</u>						
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
1,2,4-Trichlorobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
1,2-Dichlorobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
1,2-Diphenylhydrazine	ND	370	ug/Kg	03/15/14	DD	SW 8270
1,3-Dichlorobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
1,4-Dichlorobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
2,4,5-Trichlorophenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
2,4,6-Trichlorophenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
2,4-Dichlorophenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
2,4-Dimethylphenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
2,4-Dinitrophenol	ND	600	ug/Kg	03/15/14	DD	SW 8270
2,4-Dinitrotoluene	ND	260	ug/Kg	03/15/14	DD	SW 8270
2,6-Dinitrotoluene	ND	260	ug/Kg	03/15/14	DD	SW 8270
2-Chloronaphthalene	ND	260	ug/Kg	03/15/14	DD	SW 8270
2-Chlorophenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
2-Methylnaphthalene	ND	260	ug/Kg	03/15/14	DD	SW 8270
2-Methylphenol (o-cresol)	ND	260	ug/Kg	03/15/14	DD	SW 8270
2-Nitroaniline	ND	600	ug/Kg	03/15/14	DD	SW 8270
2-Nitrophenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	03/15/14	DD	SW 8270
3,3'-Dichlorobenzidine	ND	260	ug/Kg	03/15/14	DD	SW 8270
3-Nitroaniline	ND	600	ug/Kg	03/15/14	DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	03/15/14	DD	SW 8270
4-Bromophenyl phenyl ether	ND	370	ug/Kg	03/15/14	DD	SW 8270
4-Chloro-3-methylphenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
4-Chloroaniline	ND	260	ug/Kg	03/15/14	DD	SW 8270
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	03/15/14	DD	SW 8270
4-Nitroaniline	ND	600	ug/Kg	03/15/14	DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	03/15/14	DD	SW 8270
Acenaphthene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Acenaphthylene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Acetophenone	ND	260	ug/Kg ug/Kg	03/15/14	DD	SW 8270
Aniline	ND	1100	ug/Kg ug/Kg	03/15/14	DD	SW 8270
Anthracene	280	260	ug/Kg	03/15/14	DD	SW 8270
	370	260	ug/Kg	03/15/14	DD	SW 8270
Benzidina	ND	450	ug/Kg	03/15/14	DD	SW 8270
Benzidine Renzo(a)pyrone	340	260	ug/Kg	03/15/14	DD	SW 8270
Benzo(a)pyrene	340 440	260	ug/Kg ug/Kg	03/15/14	DD	SW 8270
Benzo(b)fluoranthene	ND	260	ug/Kg ug/Kg	03/15/14	DD	SW 8270 SW 8270
Benzo(ghi)perylene						
Benzo(k)fluoranthene	ND	260	ug/Kg	03/15/14	DD	SW 8270 SW 8270
Benzoic acid	ND	1100	ug/Kg	03/15/14	DD	
Benzyl butyl phthalate	ND	260	ug/Kg	03/15/14	DD	SW 8270
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	03/15/14	DD	SW 8270
Bis(2-chloroethyl)ether	ND	370	ug/Kg	03/15/14	DD	SW 8270

Page 14 of 26 Ver 1

Client ID: B4@4

		RL/				
Parameter	Result	PQL	Units	Date/Time	Ву	Reference
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	03/15/14	DD	SW 8270 <sup>1</sup>
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	03/15/14	DD	SW 8270
Carbazole	ND	560	ug/Kg	03/15/14	DD	SW 8270
Chrysene	360	260	ug/Kg	03/15/14	DD	SW 8270
Dibenz(a,h)anthracene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Dibenzofuran	ND	260	ug/Kg	03/15/14	DD	SW 8270
Diethyl phthalate	ND	260	ug/Kg	03/15/14	DD	SW 8270
Dimethylphthalate	ND	260	ug/Kg	03/15/14	DD	SW 8270
Di-n-butylphthalate	ND	260	ug/Kg	03/15/14	DD	SW 8270
Di-n-octylphthalate	ND	260	ug/Kg	03/15/14	DD	SW 8270
Fluoranthene	1200	260	ug/Kg	03/15/14	DD	SW 8270
Fluorene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Hexachlorobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Hexachlorobutadiene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Hexachlorocyclopentadiene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Hexachloroethane	ND	260	ug/Kg	03/15/14	DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Isophorone	ND	260	ug/Kg	03/15/14	DD	SW 8270
Naphthalene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Nitrobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
N-Nitrosodimethylamine	ND	370	ug/Kg	03/15/14	DD	SW 8270
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	03/15/14	DD	SW 8270
N-Nitrosodiphenylamine	ND	370	ug/Kg	03/15/14	DD	SW 8270
Pentachloronitrobenzene	ND	370	ug/Kg	03/15/14	DD	SW 8270
Pentachlorophenol	ND	370	ug/Kg	03/15/14	DD	SW 8270
Phenanthrene	1300	260	ug/Kg	03/15/14	DD	SW 8270
Phenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
Pyrene	1000	260	ug/Kg	03/15/14	DD	SW 8270
Pyridine	ND	370	ug/Kg	03/15/14	DD	SW 8270
QA/QC Surrogates						
% 2,4,6-Tribromophenol	41		%	03/15/14	DD	30 - 130 %
% 2-Fluorobiphenyl	49		%	03/15/14	DD	30 - 130 %
% 2-Fluorophenol	46		%	03/15/14	DD	30 - 130 %
% Nitrobenzene-d5	49		%	03/15/14	DD	30 - 130 %
% Phenol-d5	50		%	03/15/14	DD	30 - 130 %
% Terphenyl-d14	59		%	03/15/14	DD	30 - 130 %

Page 15 of 26 Ver 1

Project ID: 644 EAST 14TH ST MANHATTAN NY Phoenix I.D.: BG19216

Client ID: B4@4

RL/

Parameter Result PQL Units Date/Time By Reference

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time. RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected

BRL=Below Reporting Level

#### **Comments:**

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

March 20, 2014

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Page 16 of 26 Ver 1



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



# **Analysis Report**

March 20, 2014

FOR: Attn: Mr. Charles B. Sosik, P.G.

**Environmental Business Consultants** 

1808 Middle Country Rd Ridge NY 11961-2406

Sample InformationCustody InformationDateTimeMatrix:SOILCollected by:03/13/140:00Location Code:EBCReceived by:LDA03/14/1416:02

Rush Request: 72 Hour Analyzed by: see "By" below

P.O.#:

# Laboratory Data

SDG ID: GBG19213

Phoenix ID: BG19217

Project ID: 644 EAST 14TH ST MANHATTAN NY

Client ID: B5@7

		RL/				
Parameter	Result	PQL	Units	Date/Time	Ву	Reference
Percent Solid	74		%	03/14/14	I	E160.3
Soil Extraction for SVOA	Completed			03/14/14	BJ/FV	SW3545
Field Extraction	Completed			03/13/14		SW5035
<u>Volatiles</u>						
1,1,1,2-Tetrachloroethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,1,1-Trichloroethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,1,2,2-Tetrachloroethane	ND	4.1	ug/Kg	03/15/14	JLI	SW8260
1,1,2-Trichloroethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,1-Dichloroethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,1-Dichloroethene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,1-Dichloropropene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,2,3-Trichlorobenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,2,3-Trichloropropane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,2,4-Trichlorobenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,2,4-Trimethylbenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,2-Dibromo-3-chloropropane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,2-Dibromoethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,2-Dichlorobenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,2-Dichloroethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,2-Dichloropropane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,3,5-Trimethylbenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,3-Dichlorobenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,3-Dichloropropane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
1,4-Dichlorobenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
2,2-Dichloropropane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
2-Chlorotoluene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
2-Hexanone	ND	34	ug/Kg	03/15/14	JLI	SW8260

Page 17 of 26 Ver 1

Client ID: B5@7

Client ID: B5@7		51.7				
Parameter	Result	RL/ PQL	Units	Date/Time	Ву	Reference
	ND					
2-Isopropyltoluene	ND ND	6.8	ug/Kg	03/15/14 03/15/14	JLI JLI	OW0200
4-Chlorotoluene		6.8	ug/Kg	03/15/14		SW8260
4-Methyl-2-pentanone	ND	34	ug/Kg		JLI	SW8260
Acetone	ND	41	ug/Kg	03/15/14	JLI	SW8260
Acrylonitrile	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Benzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Bromobenzene	ND	6.8	ug/Kg	03/15/14	JLI 	SW8260
Bromochloromethane	ND	6.8	ug/Kg	03/15/14	JLI 	SW8260
Bromodichloromethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Bromoform	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Bromomethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Carbon Disulfide	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Carbon tetrachloride	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Chlorobenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Chloroethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Chloroform	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Chloromethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
cis-1,2-Dichloroethene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
cis-1,3-Dichloropropene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Dibromochloromethane	ND	4.1	ug/Kg	03/15/14	JLI	SW8260
Dibromomethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Dichlorodifluoromethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Ethylbenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Hexachlorobutadiene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Isopropylbenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
m&p-Xylene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Methyl Ethyl Ketone	ND	41	ug/Kg	03/15/14	JLI	SW8260
Methyl t-butyl ether (MTBE)	ND	14	ug/Kg	03/15/14	JLI	SW8260
Methylene chloride	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Naphthalene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
n-Butylbenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
n-Propylbenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
o-Xylene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
p-Isopropyltoluene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
sec-Butylbenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Styrene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
tert-Butylbenzene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Tetrachloroethene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Tetrahydrofuran (THF)	ND	14	ug/Kg	03/15/14	JLI	SW8260 1
Toluene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Total Xylenes	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
trans-1,2-Dichloroethene	ND	6.8	ug/Kg ug/Kg	03/15/14	JLI	SW8260
	ND	6.8	ug/Kg ug/Kg	03/15/14	JLI	SW8260
trans-1,3-Dichloropropene						
trans-1,4-dichloro-2-butene	ND ND	14 6 9	ug/Kg	03/15/14	JLI	SW8260
Trichloroethene	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Trichlorofluoromethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Trichlorotrifluoroethane	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
Vinyl chloride	ND	6.8	ug/Kg	03/15/14	JLI	SW8260
QA/QC Surrogates						

Page 18 of 26 Ver 1

Client ID: B5@7

Client ID: B5@7		DL /				
Parameter	Result	RL/ PQL	Units	Date/Time	Ву	Reference
% 1,2-dichlorobenzene-d4	96		%	03/15/14	JLI	70 - 130 %
% Bromofluorobenzene	97		%	03/15/14	JLI	70 - 130 %
% Dibromofluoromethane	93		%	03/15/14	JLI	70 - 130 %
% Toluene-d8	110		%	03/15/14	JLI	70 - 130 %
<u>Semivolatiles</u>						
1,2,4,5-Tetrachlorobenzene	ND	310	ug/Kg	03/15/14	DD	SW 8270
1,2,4-Trichlorobenzene	ND	310	ug/Kg	03/15/14	DD	SW 8270
1,2-Dichlorobenzene	ND	310	ug/Kg	03/15/14	DD	SW 8270
1,2-Diphenylhydrazine	ND	440	ug/Kg	03/15/14	DD	SW 8270
1,3-Dichlorobenzene	ND	310	ug/Kg	03/15/14	DD	SW 8270
1,4-Dichlorobenzene	ND	310	ug/Kg	03/15/14	DD	SW 8270
2,4,5-Trichlorophenol	ND	310	ug/Kg	03/15/14	DD	SW 8270
2,4,6-Trichlorophenol	ND	310	ug/Kg	03/15/14	DD	SW 8270
2,4-Dichlorophenol	ND	310	ug/Kg	03/15/14	DD	SW 8270
2,4-Dimethylphenol	ND	310	ug/Kg	03/15/14	DD	SW 8270
2,4-Dinitrophenol	ND	710	ug/Kg	03/15/14	DD	SW 8270
2,4-Dinitrotoluene	ND	310	ug/Kg	03/15/14	DD	SW 8270
2,6-Dinitrotoluene	ND	310	ug/Kg	03/15/14	DD	SW 8270
2-Chloronaphthalene	ND	310	ug/Kg	03/15/14	DD	SW 8270
2-Chlorophenol	ND	310	ug/Kg	03/15/14	DD	SW 8270
2-Methylnaphthalene	ND	310	ug/Kg	03/15/14	DD	SW 8270
2-Methylphenol (o-cresol)	ND	310	ug/Kg	03/15/14	DD	SW 8270
2-Nitroaniline	ND	710	ug/Kg	03/15/14	DD	SW 8270
2-Nitrophenol	ND	310	ug/Kg	03/15/14	DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	440	ug/Kg	03/15/14	DD	SW 8270
3,3'-Dichlorobenzidine	ND	310	ug/Kg ug/Kg	03/15/14	DD	SW 8270
3-Nitroaniline	ND	710	ug/Kg ug/Kg	03/15/14	DD	SW 8270
	ND	1300	ug/Kg	03/15/14	DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	440		03/15/14	DD	SW 8270
4-Bromophenyl phenyl ether	ND		ug/Kg			
4-Chloro-3-methylphenol		310	ug/Kg	03/15/14	DD	SW 8270
4-Chloroaniline	ND	310	ug/Kg	03/15/14	DD	SW 8270
4-Chlorophenyl phenyl ether	ND	310	ug/Kg	03/15/14	DD	SW 8270
4-Nitroaniline	ND	710	ug/Kg	03/15/14	DD	SW 8270
4-Nitrophenol	ND	1300	ug/Kg	03/15/14	DD	SW 8270
Acenaphthene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Acenaphthylene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Acetophenone	ND	310	ug/Kg	03/15/14	DD	SW 8270
Aniline	ND	1300	ug/Kg	03/15/14	DD	SW 8270
Anthracene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Benz(a)anthracene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Benzidine	ND	530	ug/Kg	03/15/14	DD	SW 8270
Benzo(a)pyrene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Benzo(b)fluoranthene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Benzo(ghi)perylene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Benzo(k)fluoranthene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Benzoic acid	ND	1300	ug/Kg	03/15/14	DD	SW 8270 1
Benzyl butyl phthalate	ND	310	ug/Kg	03/15/14	DD	SW 8270
Bis(2-chloroethoxy)methane	ND	310	ug/Kg	03/15/14	DD	SW 8270
Bis(2-chloroethyl)ether	ND	440	ug/Kg	03/15/14	DD	SW 8270

Page 19 of 26 Ver 1

Client ID: B5@7

		RL/				
Parameter	Result	PQL	Units	Date/Time	Ву	Reference
Bis(2-chloroisopropyl)ether	ND	310	ug/Kg	03/15/14	DD	SW 8270 <sup>1</sup>
Bis(2-ethylhexyl)phthalate	ND	310	ug/Kg	03/15/14	DD	SW 8270
Carbazole	ND	670	ug/Kg	03/15/14	DD	SW 8270
Chrysene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Dibenz(a,h)anthracene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Dibenzofuran	ND	310	ug/Kg	03/15/14	DD	SW 8270
Diethyl phthalate	ND	310	ug/Kg	03/15/14	DD	SW 8270
Dimethylphthalate	ND	310	ug/Kg	03/15/14	DD	SW 8270
Di-n-butylphthalate	ND	310	ug/Kg	03/15/14	DD	SW 8270
Di-n-octylphthalate	ND	310	ug/Kg	03/15/14	DD	SW 8270
Fluoranthene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Fluorene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Hexachlorobenzene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Hexachlorobutadiene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Hexachlorocyclopentadiene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Hexachloroethane	ND	310	ug/Kg	03/15/14	DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Isophorone	ND	310	ug/Kg	03/15/14	DD	SW 8270
Naphthalene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Nitrobenzene	ND	310	ug/Kg	03/15/14	DD	SW 8270
N-Nitrosodimethylamine	ND	440	ug/Kg	03/15/14	DD	SW 8270
N-Nitrosodi-n-propylamine	ND	310	ug/Kg	03/15/14	DD	SW 8270
N-Nitrosodiphenylamine	ND	440	ug/Kg	03/15/14	DD	SW 8270
Pentachloronitrobenzene	ND	440	ug/Kg	03/15/14	DD	SW 8270
Pentachlorophenol	ND	440	ug/Kg	03/15/14	DD	SW 8270
Phenanthrene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Phenol	ND	310	ug/Kg	03/15/14	DD	SW 8270
Pyrene	ND	310	ug/Kg	03/15/14	DD	SW 8270
Pyridine	ND	440	ug/Kg	03/15/14	DD	SW 8270
QA/QC Surrogates						
% 2,4,6-Tribromophenol	59		%	03/15/14	DD	30 - 130 %
% 2-Fluorobiphenyl	50		%	03/15/14	DD	30 - 130 %
% 2-Fluorophenol	48		%	03/15/14	DD	30 - 130 %
% Nitrobenzene-d5	53		%	03/15/14	DD	30 - 130 %
% Phenol-d5	51		%	03/15/14	DD	30 - 130 %
% Terphenyl-d14	64		%	03/15/14	DD	30 - 130 %

Page 20 of 26 Ver 1

Project ID: 644 EAST 14TH ST MANHATTAN NY Phoenix I.D.: BG19217

Client ID: B5@7

RL/

Parameter Result PQL Units Date/Time By Reference

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time. RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected BRL=Below Reporting Level

#### **Comments:**

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

March 20, 2014

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Page 21 of 26 Ver 1



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



# **Analysis Report**

March 20, 2014

FOR: Attn: Mr. Charles B. Sosik, P.G. Environmental Business Consultants

1808 Middle Country Rd Ridge NY 11961-2406

Sample InformationCustody InformationDateTimeMatrix:SOILCollected by:03/13/140:00Location Code:EBCReceived by:LDA03/14/1416:02

Rush Request: 72 Hour Analyzed by: see "By" below

P.O.#:

## **Laboratory Data**

SDG ID: GBG19213

Phoenix ID: BG19218

Project ID: 644 EAST 14TH ST MANHATTAN NY

Client ID: B6@4

		RL/				
Parameter	Result	PQL	Units	Date/Time	Ву	Reference
Percent Solid	86		%	03/14/14	I	E160.3
Soil Extraction for SVOA	Completed			03/14/14	BJ/FV	SW3545
Field Extraction	Completed			03/13/14		SW5035
<u>Volatiles</u>						
1,1,1,2-Tetrachloroethane	ND	5.8	ug/Kg	03/15/14	НМ	SW8260
1,1,1-Trichloroethane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,1,2,2-Tetrachloroethane	ND	3.5	ug/Kg	03/15/14	HM	SW8260
1,1,2-Trichloroethane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,1-Dichloroethane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,1-Dichloroethene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,1-Dichloropropene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,2,3-Trichlorobenzene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,2,3-Trichloropropane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,2,4-Trichlorobenzene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,2,4-Trimethylbenzene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,2-Dibromo-3-chloropropane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,2-Dibromoethane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,2-Dichlorobenzene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,2-Dichloroethane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,2-Dichloropropane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,3,5-Trimethylbenzene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,3-Dichlorobenzene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,3-Dichloropropane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
1,4-Dichlorobenzene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
2,2-Dichloropropane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
2-Chlorotoluene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
2-Hexanone	ND	29	ug/Kg	03/15/14	НМ	SW8260

Page 22 of 26 Ver 1

Client ID: B6@4

Client ID: B6@4		,				
Parameter	Result	RL/ PQL	Units	Date/Time	Ву	Reference
2-Isopropyltoluene	ND	5.8	ug/Kg	03/15/14	HM	SW8260 <sup>1</sup>
4-Chlorotoluene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg ug/Kg	03/15/14	HM	SW8260
Acetone	ND	35	ug/Kg ug/Kg	03/15/14	HM	SW8260
Acrylonitrile	ND	5.8	ug/Kg ug/Kg	03/15/14	HM	SW8260
Benzene	ND	5.8	ug/Kg ug/Kg	03/15/14	HM	SW8260
Bromobenzene	ND	5.8	ug/Kg ug/Kg	03/15/14	HM	SW8260
Bromochloromethane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Bromodichloromethane	ND	5.8	ug/Kg ug/Kg	03/15/14	HM	SW8260
Bromoform	ND	5.8	ug/Kg ug/Kg	03/15/14	HM	SW8260
	ND	5.8		03/15/14	НМ	SW8260
Bromomethane			ug/Kg			
Carbon Disulfide	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Carbon tetrachloride	ND ND	5.8 5.8	ug/Kg	03/15/14 03/15/14	HM	SW8260 SW8260
Chlorobenzene			ug/Kg		HM	
Chloroethane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Chloroform	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Chloromethane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
cis-1,2-Dichloroethene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
cis-1,3-Dichloropropene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Dibromochloromethane	ND	3.5	ug/Kg	03/15/14	HM	SW8260
Dibromomethane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Dichlorodifluoromethane	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Ethylbenzene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Hexachlorobutadiene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Isopropylbenzene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
m&p-Xylene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Methyl Ethyl Ketone	ND	35	ug/Kg	03/15/14	HM	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	03/15/14	HM	SW8260
Methylene chloride	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Naphthalene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
n-Butylbenzene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
n-Propylbenzene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
o-Xylene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
p-Isopropyltoluene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
sec-Butylbenzene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Styrene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
tert-Butylbenzene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Tetrachloroethene	280	150	ug/Kg	03/17/14	HM	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	03/15/14	HM	SW8260 1
Toluene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
Total Xylenes	ND	5.8	ug/Kg	03/15/14	HM	SW8260
trans-1,2-Dichloroethene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
trans-1,3-Dichloropropene	ND	5.8	ug/Kg	03/15/14	HM	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	03/15/14	HM	SW8260
Trichloroethene	ND	5.8	ug/Kg	03/15/14	НМ	SW8260
Trichlorofluoromethane	ND	5.8	ug/Kg	03/15/14	НМ	SW8260
Trichlorotrifluoroethane	ND	5.8	ug/Kg	03/15/14	НМ	SW8260
Vinyl chloride	ND	5.8	ug/Kg	03/15/14	НМ	SW8260
QA/QC Surrogates						

Page 23 of 26 Ver 1

Client ID: B6@4

Client ID: B6@4		DL /				
Parameter	Result	RL/ PQL	Units	Date/Time	Ву	Reference
% 1,2-dichlorobenzene-d4	101		%	03/15/14	НМ	70 - 130 %
% Bromofluorobenzene	99		%	03/15/14	НМ	70 - 130 %
% Dibromofluoromethane	98		%	03/15/14	НМ	70 - 130 %
% Toluene-d8	102		%	03/17/14	НМ	70 - 130 %
<u>Semivolatiles</u>						
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
1,2,4-Trichlorobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
1,2-Dichlorobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
1,2-Diphenylhydrazine	ND	380	ug/Kg	03/15/14	DD	SW 8270
1,3-Dichlorobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
1,4-Dichlorobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
2,4,5-Trichlorophenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
2,4,6-Trichlorophenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
2,4-Dichlorophenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
2,4-Dimethylphenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
2,4-Dinitrophenol	ND	600	ug/Kg	03/15/14	DD	SW 8270
2,4-Dinitrotoluene	ND	260	ug/Kg	03/15/14	DD	SW 8270
2,6-Dinitrotoluene	ND	260	ug/Kg	03/15/14	DD	SW 8270
2-Chloronaphthalene	ND	260	ug/Kg	03/15/14	DD	SW 8270
2-Chlorophenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
2-Methylnaphthalene	ND	260	ug/Kg	03/15/14	DD	SW 8270
2-Methylphenol (o-cresol)	ND	260	ug/Kg	03/15/14	DD	SW 8270
2-Nitroaniline	ND	600	ug/Kg	03/15/14	DD	SW 8270
2-Nitrophenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	03/15/14	DD	SW 8270
3,3'-Dichlorobenzidine	ND	260	ug/Kg	03/15/14	DD	SW 8270
3-Nitroaniline	ND	600	ug/Kg	03/15/14	DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	03/15/14	DD	SW 8270
4-Bromophenyl phenyl ether	ND	380	ug/Kg	03/15/14	DD	SW 8270
4-Chloro-3-methylphenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
4-Chloroaniline	ND	260	ug/Kg	03/15/14	DD	SW 8270
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	03/15/14	DD	SW 8270
4-Nitroaniline	ND	600	ug/Kg	03/15/14	DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	03/15/14	DD	SW 8270
Acenaphthene	930	260	ug/Kg	03/15/14	DD	SW 8270
Acenaphthylene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Acetophenone	ND	260	ug/Kg	03/15/14	DD	SW 8270
Aniline	ND	1100	ug/Kg	03/15/14	DD	SW 8270
Anthracene	1400	260	ug/Kg	03/15/14	DD	SW 8270
Benz(a)anthracene	1600	260	ug/Kg	03/15/14	DD	SW 8270
Benzidine	ND	450	ug/Kg	03/15/14	DD	SW 8270
Benzo(a)pyrene	1400	260	ug/Kg	03/15/14	DD	SW 8270
Benzo(b)fluoranthene	1600	260	ug/Kg	03/15/14	DD	SW 8270
Benzo(ghi)perylene	560	260	ug/Kg	03/15/14	DD	SW 8270
Benzo(k)fluoranthene	700	260	ug/Kg	03/15/14	DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	03/15/14	DD	SW 8270 1
Benzyl butyl phthalate	ND	260	ug/Kg	03/15/14	DD	SW 8270
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	03/15/14	DD	SW 8270
Bis(2-chloroethyl)ether	ND	380	ug/Kg	03/15/14	DD	SW 8270

Page 24 of 26 Ver 1

Client ID: B6@4

Parameter	Result	RL/ PQL	Units	Date/Time	Dν	Deference
					Ву	Reference
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	03/15/14	DD	SW 8270 <sup>1</sup>
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	03/15/14	DD	SW 8270
Carbazole	650	570	ug/Kg	03/15/14	DD	SW 8270
Chrysene	1600	260	ug/Kg	03/15/14	DD	SW 8270
Dibenz(a,h)anthracene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Dibenzofuran	460	260	ug/Kg	03/15/14	DD	SW 8270
Diethyl phthalate	ND	260	ug/Kg	03/15/14	DD	SW 8270
Dimethylphthalate	ND	260	ug/Kg	03/15/14	DD	SW 8270
Di-n-butylphthalate	ND	260	ug/Kg	03/15/14	DD	SW 8270
Di-n-octylphthalate	ND	260	ug/Kg	03/15/14	DD	SW 8270
Fluoranthene	3700	260	ug/Kg	03/15/14	DD	SW 8270
Fluorene	770	260	ug/Kg	03/15/14	DD	SW 8270
Hexachlorobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Hexachlorobutadiene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Hexachlorocyclopentadiene	ND	260	ug/Kg	03/15/14	DD	SW 8270
Hexachloroethane	ND	260	ug/Kg	03/15/14	DD	SW 8270
Indeno(1,2,3-cd)pyrene	570	260	ug/Kg	03/15/14	DD	SW 8270
Isophorone	ND	260	ug/Kg	03/15/14	DD	SW 8270
Naphthalene	550	260	ug/Kg	03/15/14	DD	SW 8270
Nitrobenzene	ND	260	ug/Kg	03/15/14	DD	SW 8270
N-Nitrosodimethylamine	ND	380	ug/Kg	03/15/14	DD	SW 8270
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	03/15/14	DD	SW 8270
N-Nitrosodiphenylamine	ND	380	ug/Kg	03/15/14	DD	SW 8270
Pentachloronitrobenzene	ND	380	ug/Kg	03/15/14	DD	SW 8270
Pentachlorophenol	ND	380	ug/Kg	03/15/14	DD	SW 8270
Phenanthrene	3600	260	ug/Kg	03/15/14	DD	SW 8270
Phenol	ND	260	ug/Kg	03/15/14	DD	SW 8270
Pyrene	3100	260	ug/Kg	03/15/14	DD	SW 8270
Pyridine	ND	380	ug/Kg	03/15/14	DD	SW 8270
QA/QC Surrogates						
% 2,4,6-Tribromophenol	60		%	03/15/14	DD	30 - 130 %
% 2-Fluorobiphenyl	52		%	03/15/14	DD	30 - 130 %
% 2-Fluorophenol	51		%	03/15/14	DD	30 - 130 %
% Nitrobenzene-d5	53		%	03/15/14	DD	30 - 130 %
% Phenol-d5	53		%	03/15/14	DD	30 - 130 %
% Terphenyl-d14	60		%	03/15/14	DD	30 - 130 %

Page 25 of 26 Ver 1

Project ID: 644 EAST 14TH ST MANHATTAN NY

Client ID: B6@4

RL/

Parameter Result PQL Units Date/Time By Reference

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time. RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected BRL=Below Reporting Level

#### **Comments:**

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

March 20, 2014

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Phoenix I.D.: BG19218

Page 26 of 26 Ver 1



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



# QA/QC Report

### QA/QC Data

March 20, 2014		QA/QC Dat	C Data SDG I.D.:						GBG19213		
Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits		
QA/QC Batch 268785, QC Sam	nple No: BG18531 (E	3G19215, BG19216, BG	19217, E	3G1921	18)						
Semivolatiles - Soil					•						
1,2,4,5-Tetrachlorobenzene	ND	60	67	11.0	68	69	1.5	30 - 130	30		
1,2,4-Trichlorobenzene	ND	59	64	8.1	65	65	0.0	30 - 130	30		
1,2-Dichlorobenzene	ND	60	65	8.0	65	65	0.0	30 - 130	30		
1,2-Diphenylhydrazine	ND	67	75	11.3	76	78	2.6	30 - 130	30		
1,3-Dichlorobenzene	ND	60	66	9.5	65	64	1.6	30 - 130	30		
1,4-Dichlorobenzene	ND	58	64	9.8	63	63	0.0	30 - 130	30		
2,4,5-Trichlorophenol	ND	66	75	12.8	78	86	9.8	30 - 130	30		
2,4,6-Trichlorophenol	ND	70	80	13.3	81	83	2.4	30 - 130	30		
2,4-Dichlorophenol	ND	66	74	11.4	76	76	0.0	30 - 130	30		
2,4-Dimethylphenol	ND	44	50	12.8	54	55	1.8	30 - 130	30		
2,4-Dinitrophenol	ND	<5	15	NC	12	<5	NC	30 - 130	30	I,m	
2,4-Dinitrotoluene	ND	69	77	11.0	77	78	1.3	30 - 130	30	.,	
2,6-Dinitrotoluene	ND	68	77	12.4	77	78	1.3	30 - 130	30		
2-Chloronaphthalene	ND	63	68	7.6	70	71	1.4	30 - 130	30		
2-Chlorophenol	ND	64	72	11.8	71	72	1.4	30 - 130	30		
2-Methylnaphthalene	ND	61	68	10.9	68	69	1.5	30 - 130	30		
2-Methylphenol (o-cresol)	ND	60	66	9.5	68	67	1.5	30 - 130	30		
2-Nitroaniline	ND	122	137	11.6	133	135	1.5	30 - 130	30	l,m	
2-Nitrophenol	ND	63	75	17.4	76	76	0.0	30 - 130	30		
3&4-Methylphenol (m&p-cresol)	ND	60	66	9.5	67	67	0.0	30 - 130	30		
3,3'-Dichlorobenzidine	ND	105	121	14.2	118	113	4.3	30 - 130	30		
3-Nitroaniline	ND	95	107	11.9	88	91	3.4	30 - 130	30		
4,6-Dinitro-2-methylphenol	ND	23	58	86.4	64	43	39.3	30 - 130	30	l,r	
4-Bromophenyl phenyl ether	ND	63	72	13.3	72	74	2.7	30 - 130	30		
4-Chloro-3-methylphenol	ND	70	79	12.1	80	82	2.5	30 - 130	30		
4-Chloroaniline	ND	51	57	11.1	41	47	13.6	30 - 130	30		
4-Chlorophenyl phenyl ether	ND	60	69	14.0	70	72	2.8	30 - 130	30		
4-Nitroaniline	ND	72	81	11.8	82	84	2.4	30 - 130	30		
4-Nitrophenol	ND	71	86	19.1	93	94	1.1	30 - 130	30		
Acenaphthene	ND	56	64	13.3	64	68	6.1	30 - 130	30		
Acenaphthylene	ND	61	67	9.4	69	71	2.9	30 - 130	30		
Acetophenone	ND	64	71	10.4	70	70	0.0	30 - 130	30		
Aniline	ND	75	83	10.1	69	72	4.3	30 - 130	30		
Anthracene	ND	61	68	10.9	69	74	7.0	30 - 130	30		
Benz(a)anthracene	ND	65	74	12.9	77	95	20.9	30 - 130	30		
Benzidine	ND	49	53	7.8	18	21	15.4	30 - 130	30	m	
Benzo(a)pyrene	ND	59	66	11.2	69	82	17.2	30 - 130	30		
Benzo(b)fluoranthene	ND	67	74	9.9	74	99	28.9	30 - 130	30		
Benzo(ghi)perylene	ND	69	79	13.5	78	84	7.4	30 - 130	30		
Benzo(k)fluoranthene	ND	63	70	10.5	75	75	0.0	30 - 130	30		
Benzyl butyl phthalate	ND	58	65	11.4	68	71	4.3	30 - 130	30		

SDG I.D.: GBG19213

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bis(2-chloroethoxy)methane	ND	63	70	10.5	70	70	0.0	30 - 130	30	
Bis(2-chloroethyl)ether	ND	61	67	9.4	70	69	1.4	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	62	70	12.1	69	69	0.0	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	59	66	11.2	69	72	4.3	30 - 130	30	
Carbazole	ND	76	85	11.2	90	94	4.3	30 - 130	30	
Chrysene	ND	59	67	12.7	70	83	17.0	30 - 130	30	
Dibenz(a,h)anthracene	ND	67	76	12.6	76	78	2.6	30 - 130	30	
Dibenzofuran	ND	62	68	9.2	70	71	1.4	30 - 130	30	
Diethyl phthalate	ND	64	72	11.8	72	74	2.7	30 - 130	30	
Dimethylphthalate	ND	64	71	10.4	72	73	1.4	30 - 130	30	
Di-n-butylphthalate	ND	62	69	10.7	70	72	2.8	30 - 130	30	
Di-n-octylphthalate	ND	54	62	13.8	61	63	3.2	30 - 130	30	
Fluoranthene	ND	64	71	10.4	77	116	40.4	30 - 130	30	r
Fluorene	ND	60	68	12.5	69	73	5.6	30 - 130	30	
Hexachlorobenzene	ND	63	70	10.5	70	72	2.8	30 - 130	30	
Hexachlorobutadiene	ND	58	65	11.4	66	65	1.5	30 - 130	30	
Hexachlorocyclopentadiene	ND	54	61	12.2	50	39	24.7	30 - 130	30	
Hexachloroethane	ND	61	67	9.4	65	64	1.6	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	67	76	12.6	78	84	7.4	30 - 130	30	
Isophorone	ND	66	74	11.4	73	73	0.0	30 - 130	30	
Naphthalene	ND	57	63	10.0	65	64	1.6	30 - 130	30	
Nitrobenzene	ND	63	69	9.1	69	70	1.4	30 - 130	30	
N-Nitrosodimethylamine	ND	59	65	9.7	63	61	3.2	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	62	70	12.1	68	67	1.5	30 - 130	30	
N-Nitrosodiphenylamine	ND	74	82	10.3	82	84	2.4	30 - 130	30	
Pentachloronitrobenzene	ND	65	74	12.9	73	76	4.0	30 - 130	30	
Pentachlorophenol	ND	45	65	36.4	83	90	8.1	30 - 130	30	r
Phenanthrene	ND	61	68	10.9	72	100	32.6	30 - 130	30	r
Phenol	ND	64	71	10.4	70	71	1.4	30 - 130	30	
Pyrene	ND	65	72	10.2	77	110	35.3	30 - 130	30	r
Pyridine	ND	50	57	13.1	52	49	5.9	30 - 130	30	
% 2,4,6-Tribromophenol	69	72	83	14.2	84	88	4.7	30 - 130	30	
% 2-Fluorobiphenyl	62	59	66	11.2	65	67	3.0	30 - 130	30	
% 2-Fluorophenol	60	60	65	8.0	65	66	1.5	30 - 130	30	
% Nitrobenzene-d5	64	63	70	10.5	68	69	1.5	30 - 130	30	
% Phenol-d5	64	63	69	9.1	68	69	1.5	30 - 130	30	
% Terphenyl-d14 Comment:	69	71	77	8.1	77	82	6.3	30 - 130	30	

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 268981, QC Sample No: BG19146 (BG19215 (50X), BG19217, BG19218)

Volatiles - Soil										
1,1,1,2-Tetrachloroethane	ND	103	105	1.9	92	93	1.1	70 - 130	30	
1,1,1-Trichloroethane	ND	110	108	1.8	103	102	1.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	99	102	3.0	108	102	5.7	70 - 130	30	
1,1,2-Trichloroethane	ND	107	106	0.9	109	103	5.7	70 - 130	30	
1,1-Dichloroethane	ND	97	93	4.2	93	92	1.1	70 - 130	30	
1,1-Dichloroethene	ND	107	101	5.8	96	89	7.6	70 - 130	30	
1,1-Dichloropropene	ND	109	106	2.8	109	109	0.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	107	90	17.3	112	95	16.4	70 - 130	30	
1,2,3-Trichloropropane	ND	105	113	7.3	106	96	9.9	70 - 130	30	
1,2,4-Trichlorobenzene	ND	104	90	14.4	111	98	12.4	70 - 130	30	

QA/QC Data

SDG I.D.: GBG19213

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,2,4-Trimethylbenzene	ND	113	112	0.9	110	105	4.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	96	91	5.3	86	80	7.2	70 - 130	30	
1,2-Dibromoethane	ND	106	105	0.9	107	102	4.8	70 - 130	30	
1,2-Dichlorobenzene	ND	103	100	3.0	109	103	5.7	70 - 130	30	
1,2-Dichloroethane	ND	108	105	2.8	111	104	6.5	70 - 130	30	
1,2-Dichloropropane	ND	111	110	0.9	114	106	7.3	70 - 130	30	
1,3,5-Trimethylbenzene	ND	110	109	0.9	109	105	3.7	70 - 130	30	
1,3-Dichlorobenzene	ND	105	103	1.9	109	106	2.8	70 - 130	30	
1,3-Dichloropropane	ND	105	104	1.0	107	103	3.8	70 - 130	30	
1,4-Dichlorobenzene	ND	104	102	1.9	110	106	3.7	70 - 130	30	
2,2-Dichloropropane	ND	111	108	2.7	101	100	1.0	70 - 130	30	
2-Chlorotoluene	ND	105	107	1.9	109	106	2.8	70 - 130	30	
2-Hexanone	ND	125	109	13.7	102	97	5.0	70 - 130	30	
2-Isopropyltoluene	ND	110	108	1.8	110	107	2.8	70 - 130	30	
4-Chlorotoluene	ND	108	109	0.9	109	108	0.9	70 - 130	30	
4-Methyl-2-pentanone	ND	114	111	2.7	116	108	7.1	70 - 130	30	
Acetone	ND	137	69	66.0	70	56	22.2	70 - 130	30	I,m,r
Acrylonitrile	ND	92	89	3.3	96	96	0.0	70 - 130	30	
Benzene	ND	109	107	1.9	111	106	4.6	70 - 130	30	
Bromobenzene	ND	105	107	1.9	107	106	0.9	70 - 130	30	
Bromochloromethane	ND	108	106	1.9	105	107	1.9	70 - 130	30	
Bromodichloromethane	ND	103	103	0.0	97	94	3.1	70 - 130	30	
Bromoform	ND	91	95	4.3	74	75	1.3	70 - 130	30	
Bromomethane	ND	120	100	18.2	69	48	35.9	70 - 130	30	m,r
Carbon Disulfide	ND	104	99	4.9	95	89	6.5	70 - 130	30	
Carbon tetrachloride	ND	104	102	1.9	80	86	7.2	70 - 130	30	
Chlorobenzene	ND	106	105	0.9	108	107	0.9	70 - 130	30	
Chloroethane	ND	111	108	2.7	43	37	15.0	70 - 130	30	m
Chloroform	ND	111	108	2.7	108	105	2.8	70 - 130	30	
Chloromethane	ND	122	119	2.5	106	115	8.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	110	107	2.8	107	108	0.9	70 - 130	30	
cis-1,3-Dichloropropene	ND	104	104	0.0	104	100	3.9	70 - 130	30	
Dibromochloromethane	ND	99	101	2.0	82	83	1.2	70 - 130	30	
Dibromomethane	ND	103	103	0.0	107	101	5.8	70 - 130	30	
Dichlorodifluoromethane	ND	112	111	0.9	96	100	4.1	70 - 130	30	
Ethylbenzene	ND	107	106	0.9	110	109	0.9	70 - 130	30	
Hexachlorobutadiene	ND	107	98	8.8	109	102	6.6	70 - 130	30	
Isopropylbenzene	ND	111	112	0.9	110	108	1.8	70 - 130	30	
m&p-Xylene	ND	107	105	1.9	110	107	2.8	70 - 130	30	
Methyl ethyl ketone	ND	132	120	9.5	118	106	10.7	70 - 130	30	ı
Methyl t-butyl ether (MTBE)	ND	78	74	5.3	81	80	1.2	70 - 130	30	
Methylene chloride	ND ND	98	94	4.2	97 111	89	8.6	70 - 130	30	
Naphthalene n Butulbangana	ND ND	110	93	16.7 3.6	111	94	16.6	70 - 130	30	
n-Butylbenzene	ND ND	112	108		110	106	3.7	70 - 130	30	
n-Propylbenzene	ND ND	114 103	117 102	2.6 1.0	109 111	108 109	0.9 1.8	70 - 130	30	
o-Xylene								70 - 130	30	
p-Isopropyltoluene sec-Butylbenzene	ND ND	111 108	109 107	1.8 0.9	110 109	107 107	2.8 1.9	70 - 130 70 - 130	30 30	
Styrene	ND ND	108	107	1.0	109	107	2.7	70 - 130 70 - 130	30	
tert-Butylbenzene	ND ND	111	102	0.0	109	108	1.9	70 - 130 70 - 130	30	
Tetrachloroethene	ND ND	105	103	1.9	109	107	1.9	70 - 130 70 - 130	30	
Tetrahydrofuran (THF)	ND ND	109	105	3.7	119	110	7.9	70 - 130 70 - 130	30	
Toluene	ND	109	103	1.9	112	106	5.5	70 - 130 70 - 130	30	
TOIGCHE	שויו	109	107	1.7	112	100	5.5	10-130	30	

	QA/QC Data SDG I.D.: GBG19213					213				
Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
trans-1,2-Dichloroethene	ND	102	90	12.5	102	92	10.3	70 - 130	30	
trans-1,3-Dichloropropene	ND	103	101	2.0	103	99	4.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	98	106	7.8	90	89	1.1	70 - 130	30	
Trichloroethene	ND	110	109	0.9	108	106	1.9	70 - 130	30	
Trichlorofluoromethane	ND	114	109	4.5	30	27	10.5	70 - 130	30	m
Trichlorotrifluoroethane	ND	109	104	4.7	97	89	8.6	70 - 130	30	
Vinyl chloride	ND	121	113	6.8	99	92	7.3	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	100	100	0.0	100	99	1.0	70 - 130	30	
% Bromofluorobenzene	99	99	100	1.0	99	100	1.0	70 - 130	30	
% Dibromofluoromethane	96	98	100	2.0	91	98	7.4	70 - 130	30	
% Toluene-d8	106	98	99	1.0	100	98	2.0	70 - 130	30	
Comment:										
Additional 8260 criteria: 10% of	LCS/LCSD compounds	can be outside of acceptan	ce criteria	as long	as reco	very is 4	0-160%.			
QA/QC Batch 269064, QC Sa	emple No: BG19152 (F	RG19218 (50X) )				,				
Volatiles - Soil	pio 140. DO 17102 (1	7017210 (0071)								
· <u> </u>	ND	99	108	8.7	99	102	2.0	70 120	20	
Tetrachloroethene % Toluene-d8	101	99	98	1.0	99 97	98	3.0 1.0	70 - 130	30	
Comment:	101	99	90	1.0	91	90	1.0	70 - 130	30	
	1.00/1.000						0.44004			
Additional 8260 criteria: 10% of	•	•	ce criteria	a as long	as reco	overy is 4	0-160%.			
QA/QC Batch 269004, QC Sa	ample No: BG19213 (E	3G19213, BG19214)								
Volatiles - Ground Water	<u>er</u>									
1,1,1,2-Tetrachloroethane	ND	116	112	3.5	113	113	0.0	70 - 130	30	
1,1,1-Trichloroethane	ND	105	102	2.9	103	107	3.8	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	114	115	0.9	120	122	1.7	70 - 130	30	
1,1,2-Trichloroethane	ND	123	124	0.8	127	126	0.8	70 - 130	30	
1,1-Dichloroethane	ND	112	109	2.7	113	113	0.0	70 - 130	30	
1,1-Dichloroethene	ND	98	96	2.1	102	104	1.9	70 - 130	30	
1,1-Dichloropropene	ND	101	95	6.1	98	100	2.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	123	123	0.0	121	69	54.7	70 - 130	30	m,r
1,2,3-Trichloropropane	ND	116	117	0.9	117	98	17.7	70 - 130	30	
1,2,4-Trichlorobenzene	ND	120	115	4.3	112	67	50.3	70 - 130	30	m,r
1,2,4-Trimethylbenzene	ND	114	107	6.3	103	108	4.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	123	130	5.5	126	116	8.3	70 - 130	30	
1,2-Dibromoethane	ND	129	129	0.0	133	132	0.8	70 - 130	30	m
1,2-Dichlorobenzene	ND	112	109	2.7	108	109	0.9	70 - 130	30	
1,2-Dichloroethane	ND	119	118	8.0	125	125	0.0	70 - 130	30	
1,2-Dichloropropane	ND	119	115	3.4	118	116	1.7	70 - 130	30	
1,3,5-Trimethylbenzene	ND	106	99	6.8	100	107	6.8	70 - 130	30	
1,3-Dichlorobenzene	ND	109	105	3.7	104	107	2.8	70 - 130	30	
1,3-Dichloropropane	ND	119	122	2.5	123	121	1.6	70 - 130	30	

Page 4 of 7

109

118

107

130

108

110

125

103

117

109

113

105

110

101

145

101

105

128

103

121

102

109

3.7

7.0

5.8

10.9

6.7

4.7

2.4

0.0

3.4

6.6

3.6

105

95

102

136

103

103

137

106

139

106

108

107

94

110

131

108

110

135

123

130

108

116

1.9

1.1

7.5

3.7

4.7

6.6

1.5

14.8

6.7

1.9

7.1

70 - 130

70 - 130

70 - 130

70 - 130

70 - 130

70 - 130

70 - 130

70 - 130

70 - 130

70 - 130

70 - 130

30

30

30

30

30

30

30

30

30

30

30

l,m

1,4-Dichlorobenzene

2,2-Dichloropropane

2-Chlorotoluene

2-Isopropyltoluene

4-Methyl-2-pentanone

4-Chlorotoluene

2-Hexanone

Acetone

Benzene

Acrylonitrile

Bromobenzene

ND

SDG I.D.: GBG19213

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromochloromethane	ND	120	122	1.7	127	130	2.3	70 - 130	30	
Bromodichloromethane	ND	117	116	0.9	122	121	8.0	70 - 130	30	
Bromoform	ND	124	131	5.5	130	123	5.5	70 - 130	30	1
Bromomethane	ND	121	114	6.0	112	117	4.4	70 - 130	30	
Carbon Disulfide	ND	102	99	3.0	108	110	1.8	70 - 130	30	
Carbon tetrachloride	ND	101	92	9.3	98	100	2.0	70 - 130	30	
Chlorobenzene	ND	111	107	3.7	109	108	0.9	70 - 130	30	
Chloroethane	ND	105	98	6.9	102	102	0.0	70 - 130	30	
Chloroform	ND	112	110	1.8	117	116	0.9	70 - 130	30	
Chloromethane	ND	105	102	2.9	102	104	1.9	70 - 130	30	
cis-1,2-Dichloroethene	ND	112	111	0.9	112	114	1.8	70 - 130	30	
cis-1,3-Dichloropropene	ND	124	121	2.4	123	124	8.0	70 - 130	30	
Dibromochloromethane	ND	127	124	2.4	128	125	2.4	70 - 130	30	
Dibromomethane	ND	124	121	2.4	130	125	3.9	70 - 130	30	
Dichlorodifluoromethane	ND	86	81	6.0	86	92	6.7	70 - 130	30	
Ethylbenzene	ND	107	101	5.8	101	103	2.0	70 - 130	30	
Hexachlorobutadiene	ND	109	101	7.6	110	79	32.8	70 - 130	30	r
Isopropylbenzene	ND	109	103	5.7	101	110	8.5	70 - 130	30	
m&p-Xylene	ND	107	102	4.8	102	104	1.9	70 - 130	30	
Methyl ethyl ketone	ND	122	144	16.5	>150	>150	NC	70 - 130	30	l,m
Methyl t-butyl ether (MTBE)	ND	82	82	0.0	87	88	1.1	70 - 130	30	
Methylene chloride	ND	104	104	0.0	106	107	0.9	70 - 130	30	
Naphthalene	ND	130	133	2.3	129	79	48.1	70 - 130	30	l,r
n-Butylbenzene	ND	114	107	6.3	108	114	5.4	70 - 130	30	
n-Propylbenzene	ND	112	102	9.3	100	108	7.7	70 - 130	30	
o-Xylene	ND	115	110	4.4	107	108	0.9	70 - 130	30	
p-Isopropyltoluene	ND	109	103	5.7	103	111	7.5	70 - 130	30	
sec-Butylbenzene	ND	102	94	8.2	101	110	8.5	70 - 130	30	
Styrene	ND	122	114	6.8	109	109	0.0	70 - 130	30	
tert-Butylbenzene	ND	107	99	7.8	102	111	8.5	70 - 130	30	
Tetrachloroethene	ND	104	97	7.0	96	98	2.1	70 - 130	30	
Tetrahydrofuran (THF)	ND	116	124	6.7	131	131	0.0	70 - 130	30	m
Toluene	ND	112	105	6.5	107	108	0.9	70 - 130	30	
trans-1,2-Dichloroethene	ND	106	101	4.8	107	107	0.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	124	124	0.0	130	128	1.6	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	134	132	1.5	130	135	3.8	70 - 130	30	l,m
Trichloroethene	ND	113	105	7.3	106	108	1.9	70 - 130	30	
Trichlorofluoromethane	ND	93	89	4.4	91	97	6.4	70 - 130	30	
Trichlorotrifluoroethane	ND	93	88	5.5	91	99	8.4	70 - 130	30	
Vinyl chloride	ND	106	101	4.8	103	108	4.7	70 - 130	30	
% 1,2-dichlorobenzene-d4	100	103	104	1.0	104	103	1.0	70 - 130	30	
% Bromofluorobenzene	100	101	105	3.9	105	103	1.9	70 - 130	30	
% Dibromofluoromethane	110	106	111	4.6	108	113	4.5	70 - 130	30	
% Toluene-d8	95	101	101	0.0	100	100	0.0	70 - 130	30	
Comment:										
A blank MC/MCD was analyzed	with this botch									

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 269163, QC Sample No: BG19713 (BG19216 (50X))

				$\overline{}$	
Vol	lati	IDC	_	$\sim$	٦IJ

% 1,2-dichlorobenzene-d4	98	99	100	1.0	99	100	1.0	70 - 130	30	
% Bromofluorobenzene	95	98	97	1.0	101	99	2.0	70 - 130	30	
% Dibromofluoromethane	93	102	95	7.1	99	95	4.1	70 - 130	30	

SDG I.D.: GBG19213

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% Toluene-d8	98	101	100	1.0	100	97	3.0	70 - 130	30	
Comment:	00/1 000						0.4.007			
Additional 8260 criteria: 10% of L	•	•	ce criteria	as long	as reco	overy is 4	0-160%.			
QA/QC Batch 269057, QC Sar	mple No: BG19717 (BG1	9215, BG19216)								
Volatiles - Soil										
1,1,1,2-Tetrachloroethane	ND	108	111	2.7	95	102	7.1	70 - 130	30	
1,1,1-Trichloroethane	ND	92	93	1.1	84	85	1.2	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	100	101	1.0	94	99	5.2	70 - 130	30	
1,1,2-Trichloroethane	ND	97	97	0.0	89	90	1.1	70 - 130	30	
1,1-Dichloroethane	ND	91	91	0.0	85	86	1.2	70 - 130	30	
1,1-Dichloroethene	ND	83	83	0.0	82	82	0.0	70 - 130	30	
1,1-Dichloropropene	ND	99	97	2.0	92	93	1.1	70 - 130	30	
1,2,3-Trichlorobenzene	ND	119	102	15.4	96	88	8.7	70 - 130	30	
1,2,3-Trichloropropane	ND	99	106	6.8	88	98	10.8	70 - 130	30	
1,2,4-Trichlorobenzene	ND	112	101	10.3	91	87	4.5	70 - 130	30	
1,2,4-Trimethylbenzene	ND	110	111	0.9	92	95	3.2	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	117	108	8.0	96	95	1.0	70 - 130	30	
1,2-Dibromoethane	ND	99	101	2.0	88	91	3.4	70 - 130	30	
1,2-Dichlorobenzene	ND	105	103	1.9	94	96	2.1	70 - 130	30	
1,2-Dichloroethane	ND	95	95	0.0	88	89	1.1	70 - 130	30	
1,2-Dichloropropane	ND	96	97	1.0	88	90	2.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	106	106	0.0	92	97	5.3	70 - 130	30	
1,3-Dichlorobenzene	ND	107	106	0.9	95	98	3.1	70 - 130	30	
1,3-Dichloropropane	ND	103	104	1.0	93	98	5.2	70 - 130	30	
1,4-Dichlorobenzene	ND	105	105	0.0	92	97	5.3	70 - 130	30	
2,2-Dichloropropane	ND	91	92	1.1	82	85	3.6	70 - 130	30	
2-Chlorotoluene	ND	105	106	0.9	96	101	5.1	70 - 130	30	
2-Hexanone	ND	117	100	15.7	56	57	1.8	70 - 130	30	m
2-Isopropyltoluene	ND	106	106	0.0	96	100	4.1	70 - 130	30	
4-Chlorotoluene	ND	108	109	0.9	94	98	4.2	70 - 130	30	
4-Methyl-2-pentanone	ND	93	92	1.1	73	71	2.8	70 - 130	30	
Acetone	ND	124	64	63.8	49	49	0.0	70 - 130	30	I,m,r
Acrylonitrile	ND	87	87	0.0	78	79	1.3	70 - 130	30	
Benzene	ND	95	95	0.0	89	90	1.1	70 - 130	30	
Bromobenzene	ND	109	112	2.7	98	105	6.9	70 - 130	30	
Bromochloromethane	ND	98	97	1.0	90	94	4.3	70 - 130	30	
Bromodichloromethane	ND	96	97	1.0	90	92	2.2	70 - 130	30	
Bromoform	ND	107	110	2.8	92	99	7.3	70 - 130	30	
Bromomethane	ND	90	78	14.3	90	79	13.0	70 - 130	30	
Carbon Disulfide	ND	81	81	0.0	82	83	1.2	70 - 130	30	
Carbon tetrachloride	ND	100	98	2.0	92	91	1.1	70 - 130	30	
Chlorobenzene	ND	103	105	1.9	93	98	5.2	70 - 130	30	
Chloroethane	ND	87	88	1.1	81	87	7.1	70 - 130	30	
Chloroform	ND	91	91	0.0	85	89	4.6	70 - 130	30	
Chloromethane	ND	87	85	2.3	82	84	2.4	70 - 130	30	
cis-1,2-Dichloroethene	ND	94	95	1.1	87	89	2.3	70 - 130	30	
cis-1,3-Dichloropropene	ND	96	96	0.0	87	89	2.3	70 - 130	30	
Dibromochloromethane	ND	110	112	1.8	95	101	6.1	70 - 130	30	
Dibromomethane	ND	97	98	1.0	88	91	3.4	70 - 130	30	
Dichlorodifluoromethane	ND	77	78	1.3	78	82	5.0	70 - 130	30	
Ethylbenzene	ND	102	103	1.0	94	98	4.2	70 - 130	30	
Hexachlorobutadiene	ND	120	113	6.0	97	97	0.0	70 - 130	30	

### QA/QC Data

SDG I.D.: GBG19213

		LCS	LCSD	LCS	MS	MSD	MS	% Rec	% RPD	
Parameter	Blank	%	%	RPD	%	%	RPD	Limits	Limits	
Isopropylbenzene	ND	107	111	3.7	96	101	5.1	70 - 130	30	
m&p-Xylene	ND	102	102	0.0	90	95	5.4	70 - 130	30	
Methyl ethyl ketone	ND	97	88	9.7	54	51	5.7	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	92	91	1.1	87	88	1.1	70 - 130	30	
Methylene chloride	ND	85	84	1.2	78	80	2.5	70 - 130	30	
Naphthalene	ND	118	100	16.5	95	84	12.3	70 - 130	30	
n-Butylbenzene	ND	108	108	0.0	85	87	2.3	70 - 130	30	
n-Propylbenzene	ND	113	115	1.8	95	99	4.1	70 - 130	30	
o-Xylene	ND	97	99	2.0	92	97	5.3	70 - 130	30	
p-Isopropyltoluene	ND	109	108	0.9	87	88	1.1	70 - 130	30	
sec-Butylbenzene	ND	104	105	1.0	93	96	3.2	70 - 130	30	
Styrene	ND	97	98	1.0	89	95	6.5	70 - 130	30	
tert-Butylbenzene	ND	107	110	2.8	97	101	4.0	70 - 130	30	
Tetrachloroethene	ND	110	111	0.9	97	102	5.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	85	82	3.6	77	79	2.6	70 - 130	30	
Toluene	ND	96	97	1.0	87	89	2.3	70 - 130	30	
trans-1,2-Dichloroethene	ND	86	80	7.2	84	76	10.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	93	95	2.1	86	87	1.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	103	109	5.7	82	90	9.3	70 - 130	30	
Trichloroethene	ND	101	102	1.0	91	92	1.1	70 - 130	30	
Trichlorofluoromethane	ND	87	86	1.2	84	86	2.4	70 - 130	30	
Trichlorotrifluoroethane	ND	88	86	2.3	83	85	2.4	70 - 130	30	
Vinyl chloride	ND	85	86	1.2	81	82	1.2	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	101	99	2.0	100	99	1.0	70 - 130	30	
% Dibromofluoromethane	99	101	101	0.0	99	101	2.0	70 - 130	30	
% Toluene-d8	101	97	98	1.0	97	96	1.0	70 - 130	30	
Comment:										

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

**RPD** - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis/Shiller, Laboratory Director

March 20, 2014

I = This parameter is outside laboratory lcs/lcsd specified recovery limits.

m = This parameter is outside laboratory ms/msd specified recovery limits.

r = This parameter is outside laboratory rpd specified recovery limits.

#### Page 1 of 1

#### **Sample Criteria Exceedences Report** Criteria: NY: 375, 375RRS, 375RS GBG19213 - EBC

State: NY

Thursday, March 20, 2014

State:	NY		020.02.0 220				RL	Analysis
SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	Criteria	Units
BG19215	\$8270-SMR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential	2300	270	1000	1000	ug/Kg
BG19215	\$8270-SMR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	2300	270	1000	1000	ug/Kg
BG19215	\$8270-SMR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2300	270	1000	1000	ug/Kg
BG19215	\$8270-SMR	Chrysene	NY / 375-6.8 Semivolatiles / Residential	2000	270	1000	1000	ug/Kg
BG19215	\$8270-SMR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2000	270	1000	1000	ug/Kg
BG19215	\$8270-SMR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	2600	270	1000	1000	ug/Kg
BG19215	\$8270-SMR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	2600	270	1000	1000	ug/Kg
BG19215	\$8270-SMR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2600	270	1000	1000	ug/Kg
BG19215	\$8270-SMR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1000	270	800	800	ug/Kg
BG19215	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential	2100	270	1000	1000	ug/Kg
BG19215	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	2100	270	1000	1000	ug/Kg
BG19215	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2100	270	1000	1000	ug/Kg
BG19215	\$8270-SMR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	750	270	500	500	ug/Kg
BG19215	\$8270-SMR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	750	270	500	500	ug/Kg
BG19215	\$8270-SMR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	750	270	500	500	ug/Kg
BG19218	\$8270-SMR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential	1600	260	1000	1000	ug/Kg
BG19218	\$8270-SMR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	1600	260	1000	1000	ug/Kg
BG19218	\$8270-SMR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1600	260	1000	1000	ug/Kg
BG19218	\$8270-SMR	Chrysene	NY / 375-6.8 Semivolatiles / Residential	1600	260	1000	1000	ug/Kg
BG19218	\$8270-SMR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1600	260	1000	1000	ug/Kg
BG19218	\$8270-SMR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1600	260	1000	1000	ug/Kg
BG19218	\$8270-SMR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	1600	260	1000	1000	ug/Kg
BG19218	\$8270-SMR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1600	260	1000	1000	ug/Kg
BG19218	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential	1400	260	1000	1000	ug/Kg
BG19218	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1400	260	1000	1000	ug/Kg
BG19218	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1400	260	1000	1000	ug/Kg
BG19218	\$8270-SMR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	570	260	500	500	ug/Kg
BG19218	\$8270-SMR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	570	260	500	500	ug/Kg
BG19218	\$8270-SMR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	570	260	500	500	ug/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



# **NY Temperature Narration**

March 20, 2014

**SDG I.D.: GBG19213** 

The samples in this delivery group were received at  $4^{\circ}C$ . (Note acceptance criteria is above freezing up to  $6^{\circ}C$ )

# NY/NJ CHAIN OF CUSTODY RECORD

:			N	NY/NJ CHA	IN OF	CUSTOL	HAIN OF CUSTODY RECORD			Temp	Temp LLGC Pg (of /	
			587 East	t Middle Tur	npike, P.O	. Box 370, M	587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040	Data Delivery:	rery:		91513	
Environmen	Environmental Laboratories, Inc.	nc.	E	Email: info@phoenixlabs.com Client Services (8)	hoenixlabs. <b>Service</b> s	@phoenixlabs.com Fax (860) 64: ent Services (860) 645-8726	Fax (860) 645-0823 <b>645-8726</b>		1 1	HBKUSSEE CEBCINCAY COM	esway com	
Customer:	EBC				Project:		LHY EAS 14TH	4 ST MANHATTAN NY	TAN. N	Y Project P.O.		Γ
Address:	1808 Misser Country	SIL			Repo	] ; <u>;</u>			+		(63) 504-6000	
	, W,				Invoi	Invoice to:	EBC			_ Fax #:		
Sampler's Signature	Clert Sample - Information - Identification	- Identifical	tion Date: 3	Haz/El	Analysis	sis.				ST STREET	14001	
fatrix Code: W=drinking water	ww=wastewater S=soil/solid SL=sludge A=air	id <b>O</b> =oil X=olher				200				\$ 100 C	(400, 1400; ) 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	
Phoenix Sample #	Customer Sample Identification	Sample	Date	Time	12				197.198	Palay E	TO BE STATE OF THE PARTY OF THE	
19213	CORNER MW	ž v	8/13		×							
19214	. ~	cw	2//3		×					W		
19215	B361'	Se 11	3/13		y y				*			
91661	8466,	Soil	3/3		×				쏫		\ \ \	
19217	85@7'	Soil	3/13		メメ				7-			
8166	86@ 4 '	Souc	2/13		メメ				7	ļ		
											,	
Relinguished by	Achepte	epted by:		Date:	77.77	Time:	Turnaround:	NJ Res Criteria		<u>Y</u> TTOGS GA GW	Data Format	
	Man	1	7 7 7 7	7.00	7-17 19	9.15	T	☐ Nor-Res. Criteria		CP-51 Soil	Excel	
All I	1 Ton	1		7	27/27/2	750		☐ Impact to GW Soil Cleanup Criteria		XNY375 Unrestricted Soil	PDF GIS/Key	
omments. Special	omments. Special Requirements or Regulations						10 Days	☐ GW Criteria		X NY375 Residential	EQuIS	
* Reuveo	* Reuved 2 Vials Tab	xled	Galacted Conscr	ou-	2 Voas	⊗	* SURCHARGE APPLIES		<u> </u>	NY375 Restricted Non-Residential Soil	☐ NJ Hazsite EUU ☐ NY EZ EDD (ASP) ☐ Other	
labeke	labella emply, 10t	7)								-	Data Package	
							State where	State where samples were collected:	cted:	2	NJ Reduced Deliv. * NY Enhanced (ASP B)	*
												_