August 28, 2018

# LIMITED PHASE II SUBSURFACE INVESTIGATION REPORT

# **Property Identification:**

127 Pearl Street Port Chester, New York 10573

AEI Project No. 391628

## Prepared for:

Shorewood Properties, LLC 201 West 17th Street, Apartment 3D New York, New York 10011

## Prepared by:

AEI Consultants 30 Montgomery Street, Suite 220 Jersey City, New Jersey 07302 Environmental Due Diligence

Site Investigation & Remediation

Energy Performance & Benchmarking

Industrial Hygiene

Construction Consulting

Construction, Site Stabilization & Stormwater Services

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August 28, 2018

Mr. Ryan Shore Shorewood Properties, LLC 201 West 17th Street, Apartment 3D New York, New York 10011

Subject: Limited Phase II Subsurface Investigation

127 Pearl Street

Port Chester, New York 10573

AEI Project No. 391628

AEI Consultants (AEI) is pleased to provide this report which describes the activities and results of the Limited Phase II Subsurface Investigation (Phase II) performed at the above-referenced property, hereinafter referred to as the "Site". This investigation was completed in general accordance with the authorized scope of services outlined in our proposal number 59469 dated August 1, 2018.

## 1.0 SITE DESCRIPTION

The Site is located in an urban, mixed use area of Port Chester, New York consisting of residential, retail, commercial and light industrial properties on the Southeast side of Pearl Street and northwest side of New Broad Street. The Site is located south of Pearl Street and is developed with two buildings. The property was reportedly developed with these improvements in 1934 and 1950.

According to information obtained from the United States Geological Survey (USGS), the area surrounding the Site is underlain by Sedimentary deposits of the Mesozoic era. Based on a review of the United States Department of Agriculture (USDA) Soil Survey, the majority of the soils in the vicinity of the Site are classified as Urban Land. The Urban Land designation indicates that more than 85 percent of the original soils have been disturbed or covered by paved surfaces, buildings, or other structures. Due to the variability of the soil material, onsite investigation would be required to determine the specific soil composition at the Site.

Refer to Section 4.2 below for additional information on the Site geology and groundwater conditions.

## 2.0 BACKGROUND

A Phase I Environmental Site Assessment (ESA) was performed by AEI as described in our report dated July 31, 2018 (AEI Project Number 391628). As detailed in the Phase I ESA, the following Recognized Environmental Condition (REC) was identified at the Site:

 A vent pipe and fill port characteristic of an underground storage tank (UST) were observed on the southeastern exterior side of the mixed-use building at 127 Pearl Street. According to the property owner, the UST was formerly utilized for heating oil. The UST has been out of service since the Site building was connected to natural gas in 2004. No information regarding the date of installation or size of the UST was found at regulatory agencies or identified during interviews. Based on the lack of information regarding the UST closure, it is possible that a release of heating oil from the UST has resulted in an impact to the subsurface of the Site. Based on this information, the outof-use UST on the Site represents an REC.

#### **INVESTIGATION EFFORTS** 3.0

Based on the above findings, AEI was retained by Shorewood Properties, LLC ("Client") to perform an investigation to evaluate the subsurface for evidence of a UST and impacts associated with the possible UST.

#### 3.1 **Health and Safety Plan**

A Site-specific health and safety plan was prepared and kept onsite for the duration of the fieldwork.

#### 3.2 **Permitting and Utility Clearance**

Drilling permits were not required for this investigation. New York 811 was contacted to provide a mark out of public utilities servicing the Site. Delta Geophysics Inc. ("Delta") of Catasaugua, Pennsylvania provided geophysical services to investigate the presence, or absence, of a UST and to survey the areas of the potential boring locations to investigate potential underground hazards.

#### 3.3 Geophysical Survey

On August 14, 2018, a geophysical survey was conducted by Delta. The purpose of the survey was to identify the presence, or absence, of a UST and to clear boring locations to evaluate the presence of underground structures, including utilities, disturbed soils, and/or cavities, using ground penetrating radar (GPR) and other geophysical methods.

#### **Drilling and Soil Sample Collection** 3.4

On August 14, 2018, three (3) soil borings (SB-1, SB-2, and SB-3) were advanced at the Site. The borings were advanced by Core Down Drilling LLC ("Core Down") of Brewster, New York using a direct-push drill rig (Geoprobe<sup>®</sup>). The location and depth of each boring is listed below:

- Boring SB-1 was advanced to 15 feet below ground surface (bgs) to the southwest of the former UST. One soil sample was collected within the 9.5-10-foot bgs depth interval.
- Boring SB-2 was advanced to 15 feet bgs to the southeast of the former UST. One soil sample was collected within the 9.5-10-foot bgs depth interval. This boring location was also converted into a temporary well point for the collection of a groundwater sample
- Boring SB-3 was advanced to 15 feet bgs to the northeast of the former UST. One soil sample was collected within the 9.5-10-foot bgs depth interval.

Each boring was installed for the purpose of soil sample collection with the possibility of a temporary well point for groundwater sampling based on field screening results and groundwater flow direction. One (1) temporary well point was installed at boring location SB-2



for the collection of a groundwater sample (SB-1). Depth to groundwater was observed at approximately 12-13 feet bgs.

The borings were advanced using 2.25-inch outer diameter Macro-Core<sup>®</sup> samplers (rods), and samples were collected continuously by advancing the five-foot-long rods equipped with acetate sample liners. After each interval, the core was retrieved, core barrel disassembled, and the sample liner was removed and transferred to the onsite geologist. The target depth of 15 feet bgs was achieved at all boring locations.

The soil borings were logged using the Unified Soil Classification System. A photo ionization detector (PID) was used to screen soil samples in the field and the PID readings for each sample were recorded on the boring logs (Appendix A). Since no PID readings above background concentrations were detected and no staining/odors were observed, soil samples were collected from each boring location at a depth of 9.5-10 feet bgs, the likely depth of the invert of the former UST. The samples were then transferred into laboratory supplied glassware, and placed into a cooler containing ice.

# 3.5 Groundwater Sample Collection

On August 14, 2018, groundwater was sampled from a temporary well point installed at boring location SB-2. Groundwater was observed at approximately 12-13 feet bgs. The temporary well point was installed by using a PVC well screen inserted into the borehole. The groundwater sample was collected using a peristaltic pump and transferred into properly preserved laboratory-supplied bottles.

# 3.6 Boring Abandonment

Following completion of sample collection and removal of tooling, the borings were backfilled with drill cuttings and hydrated bentonite chips and completed at the surface with concrete patch to match surrounding conditions.

# 3.7 Laboratory Analyses

The soil and groundwater samples were labeled, placed in a cooler with ice for preservation, packaged, and transferred under appropriate chain-of-custody documentation to Alpha Analytical Laboratories (Alpha) of Westborough, Massachusetts. Laboratory analytical documentation is provided in Appendix B. The samples were analyzed as follows:

- Soil samples SB-1 and SB-3 were analyzed for New York Commissioner Policy (CP)-51
  Fuel Oil Contaminant List Volatile Organic Compounds (VOCs) and Semi-Volatile Organic
  Compound (SVOC) Base/Neutral Extractable Compounds (B/Ns)
- Groundwater sample SB-2 was analyzed for New York CP-51 Fuel Oil Contaminant List VOCs and SVOC B/Ns

The remaining soil sample from SB-2 was placed "on hold" at the laboratory for potential analysis of New York CP-51 Fuel Oil Contaminant List VOCs and SVOC B/Ns pending the initial soil and groundwater results.



# 3.8 Investigation Derived Wastes

No investigation derived waste was created during this investigation.

## 4.0 FINDINGS

For the purpose of providing context to the data obtained during this investigation, analytical results are compared to available regulatory screening levels. The New York State Department of Environmental Conservation (NYSDEC) has the responsibility for overseeing environmental cleanups which are managed under a variety of different regulatory programs. The results of this investigation were reviewed along with the NYSDEC CP-51 Soil Cleanup Levels for soil, New York Codes, Rules, and Regulations (NYCRR) Part 375 Restricted Use Commercial Criteria for soil, NYCRR Part 375 Unrestricted Use Criteria for soil, and New York Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS) Criteria for groundwater.

# 4.1 Geophysical Survey

The results of the geophysical survey revealed an anomaly consistent with that of a UST located to the rear of the northwestern onsite building (**Figure 1**). Additionally, the survey indicated no underground utilities were identified in the vicinity of the boring locations. As such, the boring locations were cleared of subsurface hazards.

The Client should be aware of the inherent limitations of geophysical surveying methods and that above and underground utilities and other man-made or natural features (i.e. automobiles, debris piles, tree roots, reinforced concrete, certain soil conditions, etc.), if in the area of the survey, may decrease the effectiveness of the survey. The Client should be aware that the lack of a detection of a feature from a geophysical survey does not mean that the feature does not exist only that it was not detected.

# 4.2 Geology and Hydrogeology

Material encountered in each of the borings generally consisted of brown fine sand (Appendix A). No odors, staining, or elevated PID readings were observed in any of the borings advanced at the Site. Since no evidence of contamination was observed during field screening, soil samples were collected for laboratory analysis from the 9.5-10-foot bgs depth interval, which is the estimated invert of the former UST.

Groundwater was encountered at approximately 12-13 feet bgs at boring location SB-2.

## 4.3 Soil Sample Analytical Results

The following information is a summary of the soil sample analytical test results (Appendix B). This information has also been included in Table 1.

No VOCs or SVOC B/Ns were detected in the soil samples analyzed (SB-1 and SB-3) above their respective laboratory method detection limits (MDLs). Additionally, the soil results were below the Unrestricted Use Criteria for soil, the most stringent of the NYSDEC soil cleanup objectives (SCOs).



Based on the absence of impacts in the two soil samples analyzed, analysis of the remaining soil sample (SB-2) placed "on hold" was not warranted.

# 4.4 Groundwater Sample Analytical Results

The following information is a summary of the groundwater sample analytical test results (Appendix B). This information has also been included in Table 2.

- No SVOC B/Ns were detected in the groundwater sample analyzed (SB-2) above their respective laboratory MDLs.
- With the exception of naphthalene, no VOCs were detected in the groundwater sample analyzed (SB-2) above their respective laboratory MDLs. Naphthalene was detected at a concentration of 0.07 micrograms per liter (ug/L), which is below the NYSDEC AWQS of 10 ug/L for naphthalene.

Based on the absence of VOCs and SVOC B/Ns in exceedance of the applicable NYSDEC AWQS in the groundwater sample analyzed, analysis of the soil sample placed "on hold" was not warranted.

## 5.0 SUMMARY AND CONCLUSIONS

AEI has completed a limited Phase II investigation at the Site that including a geophysical survey and the collection of soil and groundwater samples to evaluate the subsurface for evidence of a UST and impacts associated with the possible UST. A total of three (3) borings were advanced at the Site for the collection of soil samples. One (1) temporary well point was installed at boring location SB-2 for the collection of a groundwater sample.

The geophysical investigation identified an anomalous area consistent with that of a UST. The field screening results indicated no odors, staining, or elevated PID readings in the three borings advanced at the Site.

The soil and groundwater results indicated no detections of VOCs or SVOC B/Ns above the NYSDEC soil cleanup levels or AWQS in any of the samples analyzed.

Based on the above findings, AEI recommends no further investigation at this time.



## 6.0 REPORT LIMITATIONS AND RELIANCE

This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of Site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the requested information, subject to scope of work for which AEI was retained and limitations inherent in this type of work, but it cannot be assumed that they are representative of areas not sampled. This report should not be regarded as a guarantee that no further contamination beyond that which could have been detected within the scope of this investigation is present beneath the Site. Undocumented, unauthorized releases of hazardous material, the remains of which are not readily identifiable by visual inspection and are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation.

Any conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document. These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work. No other warranty, either expressed or implied, has been made.

This investigation was prepared for the sole use and benefit of Shorewood Properties, LLC. All reports, both verbal and written, whether in draft or final, are for the benefit of Shorewood Properties, LLC. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of AEI. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with AEI granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against AEI, its officers, employees, vendors, successors or assigns. Reliance is provided in accordance with AEI's Proposal and Standard Terms & Conditions executed by Shorewood Properties, LLC. The limitation of liability defined in the Terms and Conditions is the aggregate limit of AEI's liability to the client and all relying parties.

If there are any questions regarding our investigation, please do not hesitate to contact AEI at (732) 414-2720.

Sincerely,

**AEI Consultants** 

Joseph Maggiulli Project Scientist Anthony Cauterucci, CHMM

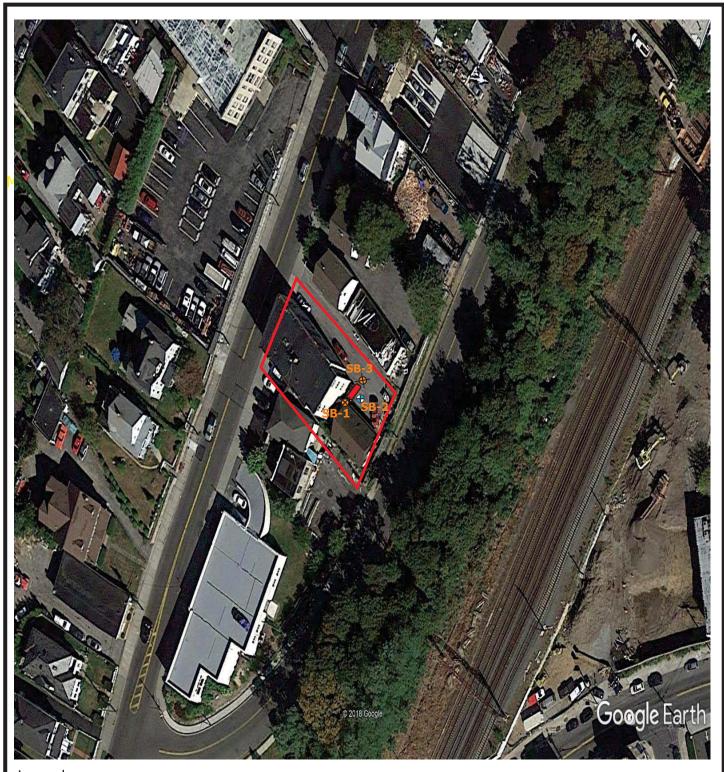
Inthony Carterin

Senior Author



# **FIGURES**





Legend

Approximate Property Boundary

Out-of-Use Heating Oil UST

Soil Boring/Temp Well Soil Boring





# **Figure 1: SAMPLE LOCATION MAP**

127 Pearl Street, Port Chester, New York 10573 Project Number: 391628



# **TABLES**



# Table 1: Soil Sample Analytical Summary 123,125,127 Pearl Street, Port Chester, NY AEI Project Number: 391628

LOCATION					SB-1		SB-3	
SAMPLING DATE					8/14/2018		8/14/2018	
SAMPLE TYPE					SOIL		SOIL	
SAMPLE DEPTH (ft.)					9.5-10.0		9.5-10.0	
	NY-RESC	NY-RESR	NY-UNRES	Units	Results	Qual	Results	Qual
General Chemistry								
Solids, Total				%	91.7		91.1	
Semivolatile Organics by GC/	MS							
Acenaphthene	500	100	20	mg/kg	ND		ND	
Acenaphthylene	500	100	100	mg/kg	ND		ND	
Anthracene	500	100	100	mg/kg	ND		ND	
Benzo(a)anthracene	5.6	1	1	mg/kg	ND		ND	
Benzo(a)pyrene	1	1	1	mg/kg	ND		ND	
Benzo(b)fluoranthene	5.6	1	1	mg/kg	ND		ND	
Benzo(ghi)perylene	500	100	100	mg/kg	ND		ND	
Benzo(k)fluoranthene	56	1	0.8	mg/kg	ND		ND	
Chrysene	56	1	1	mg/kg	ND		ND	
Dibenzo(a,h)anthracene	0.56	0.33	0.33	mg/kg	ND		ND	
Fluoranthene	500	100	100	mg/kg	ND		ND	
Fluorene	500	100	30	mg/kg	ND		ND	
Indeno(1,2,3-cd)pyrene	5.6	0.5	0.5	mg/kg	ND		ND	
Naphthalene	500	100	12	mg/kg	ND		ND	
Phenanthrene	500	100	100	mg/kg	ND		ND	
Pyrene	500	100	100	mg/kg	ND		ND	
Volatile Organics by 8260/50								
1,2,4-Trimethylbenzene	190	47	3.6	mg/kg	ND		ND	
1,3,5-Trimethylbenzene	190	47	8.4	mg/kg	ND		ND	
Benzene	44	2.9	0.06	mg/kg	ND		ND	
Ethylbenzene	390	30	1	mg/kg	ND		ND	
Isopropylbenzene				mg/kg	ND		ND	
Methyl tert butyl ether	500	62	0.93	mg/kg	ND		ND	
n-Butylbenzene	500	100	12	mg/kg	ND		ND	
n-Propylbenzene	500	100	3.9	mg/kg	ND		ND	
Naphthalene	500	100	12	mg/kg	ND		ND	
o-Xylene				mg/kg	ND		ND	
p-Isopropyltoluene				mg/kg	ND		ND	
p/m-Xylene				mg/kg	ND		ND	
sec-Butylbenzene	500	100	11	mg/kg	ND		ND	
tert-Butylbenzene	500	100	5.9	mg/kg	ND		ND	
Toluene	500	100	0.7	mg/kg	ND		ND	
Xylenes, Total	500	100	0.26	mg/kg	ND		ND	

ND= Non Detect

mg/kg = Milligrams per kilogram

NY-RESC: New York NYCRR Part 375 Commercial Criteria, New Restricted use NY-RESR: New York NYCRR Part 375 Residential Criteria, Restricted use

NY-UNRES: New York NYCRR Part 375 Unrestricted use

# Table 2: Groundwater Sample Analytical Summary 123,125,127 Pearl Street, Port Chester, NY AEI Project Number: 391628

LOCATION			SB-2	
SAMPLING DATE	8/14/2018			
LAB SAMPLE ID	L1831817-04			
SAMPLE TYPE	WATER			
SAMPLE DEPTH (ft.)				
	NY-AWQS	Units	Results	Qual
Semivolatile Organics by GC/MS-SIM				
Acenaphthene	20	ug/l	ND	
Fluoranthene	50	ug/l	ND	
Naphthalene	10	ug/l	0.07	J
Benzo(a)anthracene	0.002	ug/l	ND	
Benzo(a)pyrene	0	ug/l	ND	
Benzo(b)fluoranthene	0.002	ug/l	ND	
Benzo(k)fluoranthene	0.002	ug/l	ND	
Chrysene	0.002	ug/l	ND	
Acenaphthylene		ug/l	ND	
Anthracene	50	ug/l	ND	
Benzo(ghi)perylene		ug/l	ND	
Fluorene	50	ug/l	ND	
Phenanthrene	50	ug/l	ND	
Dibenzo(a,h)anthracene		ug/l	ND	
Indeno(1,2,3-cd)pyrene	0.002	ug/l	ND	
Pyrene	50	ug/l	ND	
Volatile Organics by GC/MS				
Benzene	1	ug/l	ND	
Toluene	5	ug/l	ND	
Ethylbenzene	5	ug/l	ND	
Methyl tert butyl ether	10	ug/l	ND	
p/m-Xylene	5	ug/l	ND	
o-Xylene	5	ug/l	ND	
Xylenes, Total		ug/l	ND	
n-Butylbenzene	5	ug/l	ND	
sec-Butylbenzene	5	ug/l	ND	
tert-Butylbenzene	5	ug/l	ND	
Isopropylbenzene	5	ug/l	ND	
p-Isopropyltoluene	5	ug/l	ND	
Naphthalene	10	ug/l	ND	
n-Propylbenzene	5	ug/l	ND	
1,3,5-Trimethylbenzene	5	ug/l	ND	
1,2,4-Trimethylbenzene	5	ug/l	ND	

ND = Non Detect

ug/I = Micrograms per liter

J = Estimated Value

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria

# **APPENDIX A**

# **SOIL BORING LOGS**





AEI BORING - GINT STD US LAB.GDT - 8/24/18 16:13 - C:\USERS\PUBLIC\DOCUMENTS\BENTLEY\GINT\PROJECTS\391628\_PORT CHESTER NY.GPJ

AEI CONSULTANTS 2500 CAMINO DIABLE WALNUT CREEK CA 94597

# BORING NUMBER SB-1 PAGE 1 OF 1

PROJECT NUMBE DATE STARTED DRILLING CONTR	od Properti ER 391628 8/14/18	Fax: 9 es, LLC  Core Down D	OMPLETED <u>8/14/18</u>	PROJECT NAME	Street, Port Chester NY
			HECKED BY		
NOTES					
O DEPTH (ft) (SAMPLE TYPE NUMBER	BLOW	PID DATA (ppm) GRAPHIC	90 M.	ATERIAL DESCRIPTION	COMPLETION
5		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1.0 asphalt  Fine SAND brown to  5.0  Fine SAND brown to  10.0  Fine SAND brown to	an with silt, dry	



AEI BORING - GINT STD US LAB.GDT - 8/24/18 16:13 - C:\USERS\PUBLIC\DOCUMENTS\BENTLEY\GINT\PROJECTS\391628\_PORT CHESTER NY.GPJ

AEI CONSULTANTS 2500 CAMINO DIABLE WALNUT CREEK CA 94597 Telephone: 925 746-6000

# BORING NUMBER SB-2 PAGE 1 OF 1

Environm	ental & Engineering	Services	_		5 746-6099		
						PROJECT NAME	
						PROJECT LOCATION 127 Pear	
						GROUND ELEVATION	
DRILL	ING CONTR	ACTOR_C	ore Dow	n Drill	ing	GROUND WATER LEVELS:	
DRILL	ING METHO	<b>D</b> Direct F	Push			AT TIME OF DRILLING	
LOGG	SED BY Joe	Maggiulli		CHE	CKED BY	AT END OF DRILLING	
NOTE	:s					AFTER DRILLING	
o DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW	PID DATA (ppm)	GRAPHIC LOG	N	ATERIAL DESCRIPTION	COMPLETION
 	<b>™</b> SB-2		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		1.0 asphalt Fine SAND brown t  5.0 Fine SAND brown t	an with silt, dry	
15			0.0		[15.0] Bot	tom of borehole at 15.0 feet.	I



AEI CONSULTANTS 2500 CAMINO DIABLE WALNUT CREEK CA 94597 Telephone: 925 746-6000

# BORING NUMBER SB-3 PAGE 1 OF 1

Environm	ental & Engineering	Services	Fa	x: 925	746-6099		
			es, LLC			PROJECT NAME	
PROJ	ECT NUMBE	R_391628	}			PROJECT LOCATION 127 Pearl	Street, Port Chester NY
DATE	DATE STARTED 8/14/18 COMPLETED 8/14/18  DRILLING CONTRACTOR Core Down Drilling					GROUND ELEVATION	HOLE SIZE 2.25 inches
DRILL	ING CONTR	ACTOR_C	ore Dow	n Drill	ng	GROUND WATER LEVELS:	
DRILL	ING METHO	D Direct F	Push			AT TIME OF DRILLING	
LOGG	SED BY Joe	Maggiulli		CHE	CKED BY	AT END OF DRILLING	
NOTE	:s					AFTER DRILLING	
o DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW	PID DATA (ppm)	GRAPHIC LOG		ATERIAL DESCRIPTION	COMPLETION
_					1.0 asphalt		
			0.0		Fine SAND brown to	an with silt, dry	
			0.0				
			0.0				
5			0.0		5.0		
			0.0		Fine SAND brown to	an with silt, dry	
			0.0				
			0.0				
			0.0				
10	<b>®</b> SB-3		0.0		10.0 Fine SAND brown to	on with cilt. dry	
			0.0		TIME SAIND BIOWITE	arr with siit, dry	
			0.0				
			0.0				
			0.0		45.0		
15			0.0		15.0 Bot	tom of borehole at 15.0 feet.	I

AEI BORING - GINT STD US LAB.GDT - 8/24/18 16:13 - C:\USERS\PUBLIC\DOCUMENTS\BENTLEY\GINT\PROJECTS\391628\_PORT CHESTER NY.GPJ

# APPENDIX B LABORATORY ANALYTICAL REPORT





## ANALYTICAL REPORT

Lab Number: L1831817

Client: AEI Consultants

30 Montgomery Street

Suite 220

Jersey City, NJ 07302

ATTN: Joseph Maggiulli
Phone: (201) 332-1844
Project Name: PORT CHESTER

Project Number: 391628 Report Date: 08/23/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: PORT CHESTER

Project Number: 391628

Lab Number:

L1831817

**Report Date:** 08/23/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1831817-01	SB-1	SOIL	127 PEARL STREET, PORT CHESTER, NY	08/14/18 09:00	08/14/18
L1831817-02	SB-2	SOIL	127 PEARL STREET, PORT CHESTER, NY	08/14/18 10:00	08/14/18
L1831817-03	SB-3	SOIL	127 PEARL STREET, PORT CHESTER, NY	08/14/18 11:00	08/14/18
L1831817-04	SB-2	WATER	127 PEARL STREET, PORT CHESTER, NY	08/14/18 12:00	08/14/18



Project Name: PORT CHESTER Lab Number: L1831817

Project Number: 301638 Papert Date: 09/33/48

Project Number: 391628 Report Date: 08/23/18

### **Case Narrative**

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.	



Project Name: PORT CHESTER Lab Number: L1831817

Project Number: 391628 Report Date: 08/23/18

# **Case Narrative (continued)**

Report Submission

August 23, 2018: This final report includes the results of all requested analyses.

August 23, 2018: This preliminary report includes the results of the Semivolatile Organics by SIM analysis

performed on L1831817-04.

August 22, 2018: This is a preliminary report.

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

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

Michelle M. Morris

Authorized Signature:

Title: Technical Director/Representative

Date: 08/23/18



# **ORGANICS**



# **VOLATILES**



Project Name: PORT CHESTER Lab Number: L1831817

Project Number: 391628 Report Date: 08/23/18

**SAMPLE RESULTS** 

Lab ID: L1831817-01 Date Collected: 08/14/18 09:00

Client ID: SB-1 Date Received: 08/14/18
Sample Location: 127 PEARL STREET, PORT CHESTER, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 08/17/18 21:20

Analyst: MKS Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - West	borough Lab					
Benzene	ND		ug/kg	0.43	0.14	1
Toluene	ND		ug/kg	0.86	0.47	1
Ethylbenzene	ND		ug/kg	0.86	0.12	1
Methyl tert butyl ether	ND		ug/kg	1.7	0.17	1
p/m-Xylene	ND		ug/kg	1.7	0.48	1
o-Xylene	ND		ug/kg	0.86	0.25	1
Xylenes, Total	ND		ug/kg	0.86	0.25	1
n-Butylbenzene	ND		ug/kg	0.86	0.14	1
sec-Butylbenzene	ND		ug/kg	0.86	0.13	1
tert-Butylbenzene	ND		ug/kg	1.7	0.10	1
Isopropylbenzene	ND		ug/kg	0.86	0.09	1
p-Isopropyltoluene	ND		ug/kg	0.86	0.09	1
Naphthalene	ND		ug/kg	3.5	0.56	1
n-Propylbenzene	ND		ug/kg	0.86	0.15	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.7	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.7	0.29	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	130	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	107	70-130	
Dibromofluoromethane	112	70-130	



**Project Name:** Lab Number: PORT CHESTER L1831817

**Project Number:** Report Date: 391628 08/23/18

**SAMPLE RESULTS** 

Lab ID: L1831817-03 Date Collected: 08/14/18 11:00

Client ID: Date Received: 08/14/18 SB-3 Field Prep: Not Specified

Sample Location: 127 PEARL STREET, PORT CHESTER, NY

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 08/17/18 21:46

Analyst: **MKS** 91% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 -	Westborough Lab					
Benzene	ND		ug/kg	0.47	0.16	1
Toluene	ND		ug/kg	0.94	0.51	1
Ethylbenzene	ND		ug/kg	0.94	0.13	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.53	1
o-Xylene	ND		ug/kg	0.94	0.27	1
Xylenes, Total	ND		ug/kg	0.94	0.27	1
n-Butylbenzene	ND		ug/kg	0.94	0.16	1
sec-Butylbenzene	ND		ug/kg	0.94	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
Isopropylbenzene	ND		ug/kg	0.94	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.94	0.10	1
Naphthalene	ND		ug/kg	3.8	0.61	1
n-Propylbenzene	ND		ug/kg	0.94	0.16	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.31	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	125	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	102	70-130	
Dibromofluoromethane	109	70-130	



Project Name: PORT CHESTER Lab Number: L1831817

Project Number: 391628 Report Date: 08/23/18

SAMPLE RESULTS

Lab ID: L1831817-04 Date Collected: 08/14/18 12:00

Client ID: SB-2 Date Received: 08/14/18

Sample Location: 127 PEARL STREET, PORT CHESTER, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/17/18 15:49

Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Volatile Organics by GC/MS - Westborough Lab								
Benzene	ND		ug/l	0.50	0.16	1		
Toluene	ND		ug/l	2.5	0.70	1		
Ethylbenzene	ND		ug/l	2.5	0.70	1		
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1		
p/m-Xylene	ND		ug/l	2.5	0.70	1		
o-Xylene	ND		ug/l	2.5	0.70	1		
Xylenes, Total	ND		ug/l	2.5	0.70	1		
n-Butylbenzene	ND		ug/l	2.5	0.70	1		
sec-Butylbenzene	ND		ug/l	2.5	0.70	1		
tert-Butylbenzene	ND		ug/l	2.5	0.70	1		
Isopropylbenzene	ND		ug/l	2.5	0.70	1		
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1		
Naphthalene	ND		ug/l	2.5	0.70	1		
n-Propylbenzene	ND		ug/l	2.5	0.70	1		
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1		
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1		

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	108	70-130	
Toluene-d8	108	70-130	
4-Bromofluorobenzene	103	70-130	
Dibromofluoromethane	102	70-130	



L1831817

Lab Number:

Project Name: PORT CHESTER

Project Number: 391628 Report Date: 08/23/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/17/18 09:38

Analyst: PD

Parameter	Result	Qualifier Uni	ts	RL	MDL	
Volatile Organics by GC/MS - W	estborough Lab	for sample(s):	04	Batch:	WG1147945-5	
Benzene	ND	ug	ı/l	0.50	0.16	
Toluene	ND	ug	ı/I	2.5	0.70	
Ethylbenzene	ND	ug	ı/I	2.5	0.70	
Methyl tert butyl ether	ND	ug	ı/I	2.5	0.70	
p/m-Xylene	ND	ug	ı/I	2.5	0.70	
o-Xylene	ND	ug	ı/I	2.5	0.70	
Xylenes, Total	ND	ug	ı/I	2.5	0.70	
n-Butylbenzene	ND	ug	ı/I	2.5	0.70	
sec-Butylbenzene	ND	ug	ı/I	2.5	0.70	
tert-Butylbenzene	ND	ug	ı/I	2.5	0.70	
Isopropylbenzene	ND	ug	ı/I	2.5	0.70	
p-Isopropyltoluene	ND	ug	ı/I	2.5	0.70	
Naphthalene	ND	ug	ı/l	2.5	0.70	
n-Propylbenzene	ND	ug	ı/I	2.5	0.70	
1,3,5-Trimethylbenzene	ND	ug	ı/I	2.5	0.70	
1,2,4-Trimethylbenzene	ND	ug	ı/I	2.5	0.70	

		Acceptance
Surrogate	%Recovery	Qualifier Criteria
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	102	70-130
Dibromofluoromethane	101	70-130



L1831817

Lab Number:

Project Name: PORT CHESTER

Project Number: 391628 Report Date: 08/23/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/17/18 18:39

Analyst: MKS

Parameter	Result	Qualifier	Units	RL		MDL	
Volatile Organics by 8260/5035 - V	Westborough	Lab for sai	mple(s):	01,03	Batch:	WG1148260-5	
Benzene	ND		ug/kg	0.50	0	0.17	
Toluene	ND		ug/kg	1.0	)	0.54	
Ethylbenzene	ND		ug/kg	1.0	)	0.14	
Methyl tert butyl ether	ND		ug/kg	2.0	)	0.20	
p/m-Xylene	ND		ug/kg	2.0	)	0.56	
o-Xylene	ND		ug/kg	1.0	)	0.29	
Xylenes, Total	ND		ug/kg	1.0	)	0.29	
n-Butylbenzene	ND		ug/kg	1.0	)	0.17	
sec-Butylbenzene	ND		ug/kg	1.0	)	0.15	
tert-Butylbenzene	ND		ug/kg	2.0	)	0.12	
Isopropylbenzene	ND		ug/kg	1.0	)	0.11	
p-Isopropyltoluene	ND		ug/kg	1.0	)	0.11	
Naphthalene	ND		ug/kg	4.0	)	0.65	
n-Propylbenzene	ND		ug/kg	1.0	)	0.17	
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	)	0.19	
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	)	0.33	

		Acceptance			
Surrogate	%Recovery Qu	alifier Criteria			
1,2-Dichloroethane-d4	122	70-130			
Toluene-d8	101	70-130			
4-Bromofluorobenzene	104	70-130			
Dibromofluoromethane	107	70-130			



# Lab Control Sample Analysis Batch Quality Control

Project Name: PORT CHESTER

Project Number: 391628

Lab Number: L1831817

**Report Date:** 08/23/18

aramatar	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
arameter	76Necovery	Quai	70Necovery	Quai	Lillits	RPD	Quai	Lillits
olatile Organics by GC/MS - Westborough I	_ab Associated	sample(s): 04	4 Batch: WG	1147945-3	WG1147945-4			
Benzene	99		110		70-130	11		20
Toluene	110		120		70-130	9		20
Ethylbenzene	100		110		70-130	10		20
Methyl tert butyl ether	100		100		63-130	0		20
p/m-Xylene	100		110		70-130	10		20
o-Xylene	100		110		70-130	10		20
n-Butylbenzene	100		110		53-136	10		20
sec-Butylbenzene	98		110		70-130	12		20
tert-Butylbenzene	99		110		70-130	11		20
Isopropylbenzene	100		110		70-130	10		20
p-Isopropyltoluene	99		110		70-130	11		20
Naphthalene	75		76		70-130	1		20
n-Propylbenzene	99		110		69-130	11		20
1,3,5-Trimethylbenzene	98		110		64-130	12		20
1,2,4-Trimethylbenzene	100		110		70-130	10		20

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	103	101	70-130
Toluene-d8	107	107	70-130
4-Bromofluorobenzene	104	102	70-130
Dibromofluoromethane	101	102	70-130



# Lab Control Sample Analysis Batch Quality Control

Project Name: PORT CHESTER

Project Number: 391628

Lab Number: L1831817

**Report Date:** 08/23/18

arameter	LCS %Recovery	Qual	LCSD %Recovery	' Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by 8260/5035 - Westboroug	gh Lab Associate	ed sample(s):	01,03 Bat	ch: WG11482	260-3 WG114826	0-4		
Benzene	97		95		70-130	2	1	30
Toluene	96		96		70-130	0		30
Ethylbenzene	100		100		70-130	0		30
Methyl tert butyl ether	88		90		66-130	2		30
p/m-Xylene	98		97		70-130	1		30
o-Xylene	94		93		70-130	1		30
n-Butylbenzene	109		109		70-130	0		30
sec-Butylbenzene	100		99		70-130	1		30
tert-Butylbenzene	91		91		70-130	0		30
Isopropylbenzene	93		92		70-130	1		30
p-Isopropyltoluene	93		90		70-130	3		30
Naphthalene	82		84		70-130	2		30
n-Propylbenzene	103		100		70-130	3		30
1,3,5-Trimethylbenzene	99		100		70-130	1		30
1,2,4-Trimethylbenzene	100		97		70-130	3		30

Surrogate	LCS	LCSD	Acceptance
	%Recovery Qual	%Recovery Qual	Criteria
1,2-Dichloroethane-d4	118	116	70-130
Toluene-d8	102	101	70-130
4-Bromofluorobenzene Dibromofluoromethane	112	107	70-130
	103	100	70-130



# **SEMIVOLATILES**



Project Name: PORT CHESTER Lab Number: L1831817

Project Number: 391628 Report Date: 08/23/18

SAMPLE RESULTS

Lab ID: L1831817-01 Date Collected: 08/14/18 09:00

Client ID: SB-1 Date Received: 08/14/18
Sample Legation: 127 DEADL STREET DORT CHESTER NV. Field Bran: Net Specific

Sample Location: 127 PEARL STREET, PORT CHESTER, NY Field Prep: Not Specified

Sample Depth:

Analytical Date:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 08/16/18 23:05

Analyst: EK Percent Solids: 92%

08/20/18 23:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - West	borough Lab					
Acenaphthene	ND		ug/kg	140	19.	1
Fluoranthene	ND		ug/kg	110	21.	1
Naphthalene	ND		ug/kg	180	22.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
Nitrobenzene-d5	86	23-120	
2-Fluorobiphenyl	79	30-120	
4-Terphenyl-d14	79	18-120	



**Project Name:** Lab Number: PORT CHESTER L1831817

Report Date: **Project Number:** 391628 08/23/18

**SAMPLE RESULTS** 

Lab ID: L1831817-03 Date Collected: 08/14/18 11:00

Date Received: Client ID: SB-3 08/14/18

Sample Location: 127 PEARL STREET, PORT CHESTER, NY Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil **Extraction Date:** 08/16/18 23:05 Analytical Method: 1,8270D Analytical Date: 08/20/18 23:40

Analyst: ΕK 91% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - W	estborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1	
Fluoranthene	ND		ug/kg	110	21.	1	
Naphthalene	ND		ug/kg	180	22.	1	
Benzo(a)anthracene	ND		ug/kg	110	20.	1	
Benzo(a)pyrene	ND		ug/kg	140	44.	1	
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1	
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1	
Chrysene	ND		ug/kg	110	19.	1	
Acenaphthylene	ND		ug/kg	140	28.	1	
Anthracene	ND		ug/kg	110	35.	1	
Benzo(ghi)perylene	ND		ug/kg	140	21.	1	
Fluorene	ND		ug/kg	180	18.	1	
Phenanthrene	ND		ug/kg	110	22.	1	
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1	
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1	
Pyrene	ND		ug/kg	110	18.	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
Nitrobenzene-d5	85	23-120	
2-Fluorobiphenyl	77	30-120	
4-Terphenyl-d14	76	18-120	



Project Name: PORT CHESTER Lab Number: L1831817

Project Number: 391628 Report Date: 08/23/18

**SAMPLE RESULTS** 

Lab ID: L1831817-04 Date Collected: 08/14/18 12:00

Client ID: SB-2 Date Received: 08/14/18
Sample Location: 127 PEARL STREET, PORT CHESTER, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM Extraction Date: 08/18/18 02:24
Analytical Date: 08/23/18 15:56

Analyst: DV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM	- Westborough La	ab				
Assessables	ND			0.40	0.04	
Acenaphthene	ND		ug/l	0.10	0.01	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Naphthalene	0.07	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	62	21-120	
Phenol-d6	58	10-120	
Nitrobenzene-d5	87	23-120	
2-Fluorobiphenyl	85	15-120	
2,4,6-Tribromophenol	91	10-120	
4-Terphenyl-d14	85	41-149	



**Project Name:** PORT CHESTER

**Project Number:** 391628 Lab Number: L1831817

Report Date: 08/23/18

Method Blank Analysis Batch Quality Control

Analytical Method: Analytical Date:

1,8270D

Analyst:

08/17/18 19:52

RC

Extraction Method: EPA 3546 08/16/18 23:05 **Extraction Date:** 

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS -	Westborough	Lab for s	sample(s):	01,03	Batch:	WG1147517-1
Acenaphthene	ND		ug/kg	130		17.
Fluoranthene	ND		ug/kg	97		18.
Naphthalene	ND		ug/kg	160		20.
Benzo(a)anthracene	ND		ug/kg	97		18.
Benzo(a)pyrene	ND		ug/kg	130		39.
Benzo(b)fluoranthene	ND		ug/kg	97		27.
Benzo(k)fluoranthene	ND		ug/kg	97		26.
Chrysene	ND		ug/kg	97		17.
Acenaphthylene	ND		ug/kg	130		25.
Anthracene	ND		ug/kg	97		32.
Benzo(ghi)perylene	ND		ug/kg	130		19.
Fluorene	ND		ug/kg	160		16.
Phenanthrene	ND		ug/kg	97		20.
Dibenzo(a,h)anthracene	ND		ug/kg	97		19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130		22.
Pyrene	ND		ug/kg	97		16.

Tentatively Identified Compounds				
Total TIC Compounds	912	J	ug/kg	
Unknown	438	J	ug/kg	
Aldol Condensates	312	J	ug/kg	
Unknown	162	J	ug/kg	



L1831817

Lab Number:

Project Name: PORT CHESTER

Project Number: 391628 Report Date: 08/23/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D Extraction Method: EPA 3546
Analytical Date: 08/17/18 19:52 Extraction Date: 08/16/18 23:05

Analyst: RC

ParameterResultQualifierUnitsRLMDLSemivolatile Organics by GC/MS - Westborough Lab for sample(s): 01,03Batch: WG1147517-1

Surrogate	%Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	80	25-120
Phenol-d6	81	10-120
Nitrobenzene-d5	75	23-120
2-Fluorobiphenyl	72	30-120
2,4,6-Tribromophenol	77	10-136
4-Terphenyl-d14	79	18-120



Project Name: PORT CHESTER

Project Number: 391628

Lab Number:

L1831817

**Report Date:** 08/23/18

Method Blank Analysis Batch Quality Control

Analytical Method: Analytical Date: 1,8270D-SIM 08/20/18 15:02

Analyst:

СВ

Extraction Method: EPA 3510C Extraction Date: 08/18/18 02:24

Extraction Date: 08/18/18 02:24

arameter	Result	Qualifier	Units	RL	MDL	
emivolatile Organics by GC/	MS-SIM - Westbo	orough Lab	for sample	e(s): 04	Batch: WG11480	01-1
Acenaphthene	ND		ug/l	0.10	0.01	
Fluoranthene	0.05	J	ug/l	0.10	0.02	
Naphthalene	ND		ug/l	0.10	0.05	
Benzo(a)anthracene	0.05	J	ug/l	0.10	0.02	
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	
Benzo(b)fluoranthene	0.01	J	ug/l	0.10	0.01	
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	
Chrysene	0.02	J	ug/l	0.10	0.01	
Acenaphthylene	ND		ug/l	0.10	0.01	
Anthracene	ND		ug/l	0.10	0.01	
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	
Fluorene	ND		ug/l	0.10	0.01	
Phenanthrene	0.05	J	ug/l	0.10	0.02	
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	
Pyrene	0.05	J	ug/l	0.10	0.02	

Surrogate	%Recovery	Acceptance Qualifier Criteria
Ouriogate	/altecovery	Qualifici Officia
2-Fluorophenol	69	21-120
Phenol-d6	56	10-120
Nitrobenzene-d5	96	23-120
2-Fluorobiphenyl	93	15-120
2,4,6-Tribromophenol	102	10-120
4-Terphenyl-d14	112	41-149



Project Name: PORT CHESTER

Project Number: 391628

Lab Number: L1831817

**Report Date:** 08/23/18

arameter	LCS %Recovery	Qual	LCSE %Recov		%Recovery Qual Limits	RPD	Qual	RPD Limits	
emivolatile Organics by GC/MS - Westborou	ıgh Lab Associ	ated sample(s):	01,03	Batch:	WG1147517-2 WG114	7517-3			
Acenaphthene	70		70		31-137	0		50	
Fluoranthene	75		74		40-140	1		50	
Naphthalene	68		69		40-140	1		50	
Benzo(a)anthracene	70		72		40-140	3		50	
Benzo(a)pyrene	76		76		40-140	0		50	
Benzo(b)fluoranthene	73		74		40-140	1		50	
Benzo(k)fluoranthene	72		73		40-140	1		50	
Chrysene	73		74		40-140	1		50	
Acenaphthylene	72		73		40-140	1		50	
Anthracene	74		74		40-140	0		50	
Benzo(ghi)perylene	74		74		40-140	0		50	
Fluorene	72		72		40-140	0		50	
Phenanthrene	74		72		40-140	3		50	
Dibenzo(a,h)anthracene	73		73		40-140	0		50	
Indeno(1,2,3-cd)pyrene	74		72		40-140	3		50	
Pyrene	74		74		35-142	0		50	



**Project Name:** PORT CHESTER Lab Number:

L1831817

**Project Number:** 391628

Report Date:

08/23/18

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

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1147517-2 WG1147517-3

%Recovery	Qual	%Recovery	Qual	Criteria
78		77		25-120
80		80		10-120
78		77		23-120
73		72		30-120
77		79		10-136
76		73		18-120
	80 78 73 77	%Recovery Qual  78 80 78 73 77	78 77 80 80 78 77 73 72 77 79	%Recovery         Qual         %Recovery         Qual           78         77         80         80           78         77         77         73         72           77         79         79         79



Project Name: PORT CHESTER

Project Number: 391628

Lab Number: L1831817

**Report Date:** 08/23/18

arameter	LCS %Recovery	LCSD Qual %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
emivolatile Organics by GC/MS-SIM - Westl	oorough Lab As	ssociated sample(s): 04 Ba	tch: WG1148001-2 WG1148	001-3	
Acenaphthene	87	104	40-140	18	40
Fluoranthene	101	128	40-140	24	40
Naphthalene	80	96	40-140	18	40
Benzo(a)anthracene	90	100	40-140	11	40
Benzo(a)pyrene	98	113	40-140	14	40
Benzo(b)fluoranthene	96	109	40-140	13	40
Benzo(k)fluoranthene	89	104	40-140	16	40
Chrysene	86	98	40-140	13	40
Acenaphthylene	110	122	40-140	10	40
Anthracene	92	105	40-140	13	40
Benzo(ghi)perylene	62	92	40-140	39	40
Fluorene	96	111	40-140	14	40
Phenanthrene	86	97	40-140	12	40
Dibenzo(a,h)anthracene	100	123	40-140	21	40
Indeno(1,2,3-cd)pyrene	99	119	40-140	18	40
Pyrene	104	118	40-140	13	40

Project Name: PORT CHESTER

Lab Number:

L1831817

Project Number: 391628

Report Date:

08/23/18

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

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 04 Batch: WG1148001-2 WG1148001-3

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
2-Fluorophenol	68	74	21-120
Phenol-d6	63	71	10-120
Nitrobenzene-d5	88	97	23-120
2-Fluorobiphenyl	91	108	15-120
2,4,6-Tribromophenol	105	116	10-120
4-Terphenyl-d14	101	122	41-149



# INORGANICS & MISCELLANEOUS



Project Name: PORT CHESTER Lab Number: L1831817

Project Number: 391628 Report Date: 08/23/18

**SAMPLE RESULTS** 

Lab ID: L1831817-01 Date Collected: 08/14/18 09:00

Client ID: SB-1 Date Received: 08/14/18
Sample Location: 127 PEARL STREET, PORT CHESTER, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab	)								
Solids, Total	91.7		%	0.100	NA	1	-	08/15/18 14:00	121,2540G	RI



Project Name: PORT CHESTER Lab Number: L1831817

Project Number: 391628 Report Date: 08/23/18

**SAMPLE RESULTS** 

Lab ID: L1831817-03 Date Collected: 08/14/18 11:00

Client ID: SB-3 Date Received: 08/14/18
Sample Location: 127 PEARL STREET, PORT CHESTER, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab	)								
Solids, Total	91.1		%	0.100	NA	1	-	08/15/18 14:00	121,2540G	RI



L1831817

Lab Duplicate Analysis

Batch Quality Control

Lab Number:

08/23/18 Project Number: 391628 Report Date:

Parameter	Native Sam	ple [	<b>Duplicate Sample</b>	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01,03	QC Batch ID:	: WG1146856-1	QC Sample:	L1831737-01	Client ID:	DUP Sample
Solids, Total	87.2		88.3	%	1		20



**Project Name:** 

PORT CHESTER

Project Name: PORT CHESTER

Project Number: 391628

**Lab Number:** L1831817 **Report Date:** 08/23/18

## Sample Receipt and Container Information

Were project specific reporting limits specified?

**Cooler Information** 

Cooler Custody Seal

A Absent

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1831817-01A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		NYTCL-8260HLW(14)
L1831817-01B	Vial water preserved	Α	NA		3.8	Υ	Absent	15-AUG-18 07:30	NYTCL-8260HLW(14)
L1831817-01C	Vial water preserved	Α	NA		3.8	Υ	Absent	15-AUG-18 07:30	NYTCL-8260HLW(14)
L1831817-01D	Plastic 2oz unpreserved for TS	Α	NA		3.8	Υ	Absent		TS(7)
L1831817-01E	Glass 120ml/4oz unpreserved	Α	NA		3.8	Υ	Absent		NYTCL-8270(14)
L1831817-02A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		HOLD-8260HLW(14)
L1831817-02B	Vial water preserved	Α	NA		3.8	Υ	Absent	15-AUG-18 07:30	HOLD-8260HLW(14)
L1831817-02C	Vial water preserved	Α	NA		3.8	Υ	Absent	15-AUG-18 07:30	HOLD-8260HLW(14)
L1831817-02D	Plastic 2oz unpreserved for TS	Α	NA		3.8	Υ	Absent		HOLD-WETCHEM()
L1831817-02E	Glass 120ml/4oz unpreserved	Α	NA		3.8	Υ	Absent		HOLD-8270(14)
L1831817-03A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		NYTCL-8260HLW(14)
L1831817-03B	Vial water preserved	Α	NA		3.8	Υ	Absent	15-AUG-18 07:30	NYTCL-8260HLW(14)
L1831817-03C	Vial water preserved	Α	NA		3.8	Υ	Absent	15-AUG-18 07:30	NYTCL-8260HLW(14)
L1831817-03D	Plastic 2oz unpreserved for TS	Α	NA		3.8	Υ	Absent		TS(7)
L1831817-03E	Glass 120ml/4oz unpreserved	Α	NA		3.8	Υ	Absent		NYTCL-8270(14)
L1831817-04A	Vial HCl preserved	Α	NA		3.8	Υ	Absent		NYTCL-8260(14)
L1831817-04B	Vial HCl preserved	Α	NA		3.8	Υ	Absent		NYTCL-8260(14)
L1831817-04C	Vial HCl preserved	Α	NA		3.8	Υ	Absent		NYTCL-8260(14)
L1831817-04D	Amber 250ml unpreserved	Α	NA		3.8	Υ	Absent		NYTCL-8270-SIM-LVI(7)
L1831817-04E	Amber 250ml unpreserved	Α	7	7	3.8	Υ	Absent		NYTCL-8270-SIM-LVI(7)

YES



L1831817

Project Name: PORT CHESTER Lab Number:

Project Number: 391628 Report Date: 08/23/18

## **GLOSSARY**

## Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis

of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case

estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any

adjustments from dilutions, concentrations or moisture content, where applicable.

adjustments from unutions, concentrations of moisture content, where applicable

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the

precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the

values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample is toxicity derived by multiplying each dioxin and furan by its corresponding TEF

and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

### **Footnotes**

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

### Terms

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

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name:PORT CHESTERLab Number:L1831817Project Number:391628Report Date:08/23/18

#### Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name:PORT CHESTERLab Number:L1831817Project Number:391628Report Date:08/23/18

## REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

## **LIMITATION OF LIABILITIES**

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

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



Published Date: 1/8/2018 4:15:49 PM

ID No.:17873

Revision 11

Page 1 of 1

Alpha Analytical, Inc.
Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

## **Certification Information**

## The following analytes are not included in our Primary NELAP Scope of Accreditation:

## Westborough Facility

EPA 624: m/p-xylene, o-xylene

**EPA 8260C:** <u>NPW</u>: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 300: <u>DW:</u> Bromide EPA 6860: <u>SCM:</u> Perchlorate

**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

## Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

### The following analytes are included in our Massachusetts DEP Scope of Accreditation

#### Westborough Facility:

### **Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

### Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, EPA 351.1, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics,

**EPA 608**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.

## **Mansfield Facility:**

## Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

## Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

**EPA 245.1** Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Document Type: Form Pre-Qualtrax Document ID: 08-113

Дігна	NEW JERSEY CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Albany, NY 12205: 14 Walker W Tonawanda, NY 14150: 275 Co	e of /	Date Rec'd 8/14/18						12	ALPHA Job# 1917					
Westborough, MA 01581 8 Walkup Dr.	Mansfield, MA 02048 320 Forbes Blvd	Project Information					Deliverables						Billing Information			
TEL: 508-698-9220	TEL: 508-822-9300	Project Name: Port chester					NJ Full ( Reduced						Same as Client Info			
FAX: 508-898-9193	FAX: 508-822-3288	Project Location: 12) Pear 1 Street Part Chester Wy					EQuIS (1 File) EQuIS (4 File)						ile)	The state of the s		
Client Information		Project# 3014 48						Other						PO# 169099		
Client: AEI		(Use Project name as Project #)						Regulatory Requirement						Site Information		
Address: 20165	on Place	Project Manager: Jul May Mull						SRS Residential/Non Residential						Is this site impacted by		
Freehold IV i		ALPHAQuote #:						SRS Impact to Groundwater						Petroleum? Yes		
Phone: 7 (4-414-1) 20		Turn-Around Time						NJ Ground Water Quality Standards						Petroleum Product:		
Fax:		Standard Due Date:						NJ IGW SPLP Leachate Criteria								
Email:		Rush (only if pre approved) # of Days:					Other									
These samples have be	een previously analyze	ed by Alpha					ANALYSIS						Sample Filtration			
For EPH, selection is REQUIRED:  Category 1 Category 2	For VOC, selection is REQUIRED:  1,4-Dioxane 8011	Other project specific requirements/comments: Please specify Metals or TAL.						-51 VOL -51 B/N					Done Lab to do Preservation Lab to do  (Please Specify below)			
ALPHA Lab ID	Sar	Col	lection	Sample	Sampler's	CP	٥									
(Lab Use Only)	Sample ID		Date	Time	Matrix	Initials	0	7	7					Sample Specific Comments		
31817 - 01	) B-1		8/14	0900	5.6	31	X	X								
-02	5 B-7			1000	50	70	H	H						Huld		
-03	5B-3			1100	50	5~	X	X								
-04	74-7		V	1200	MA	77	X	λ								
	Container Code P = Plastic	Westboro: Certification No: MA935  Mansfield: Certification No: MA015  Container Type					V	A	+	-			-	Please print clearly, legibly		
B = HCI	A = Amber Glass							74						and completely. Samples can		
D = H <sub>2</sub> SO <sub>4</sub> E ≈ NaOH	V = Vial G = Glass B = Bacteria Cup	71			Preservative		B/A	A						not be logged in and turnaround time clock will not start until any ambiguities are		
50 S 1 S 1 S 1 S 1 S 1 S 1 S 1 S 1 S 1 S	C = Cube O = Other		Relinquished By: Date/T						Received By:			Time		resolved. BY EXECUTING		
$H = Na_2S_2O_3$	E = Encore	& AEI 1300			8/14	Lux AAL			8	8 14 18 1633 8/14/18 1810 8/14/18 245			THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS,			
K/E = Zn Ac/NaOH O = Other	D = BOD Bottle	.D-Santos	Sperial 8/14/18					antes AAC								
Form No: 01-14 HC (rev. 30-	-Sept-2013)		- 3	7/1/10	- 15					10/1	1110	2010		(See reverse side.)		