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Part I: Primary Recipient*: Remediation Program (* required)

For Remediation documents:	For LUST documents:
Primary Program*: Property Transfer	UST Facility ID: (if applicable)
Rem ID*: 14346	Spill Case Number: (if known)

Part II: Site Information

Site Name*: Connecticut State Pier
Site Address*: State Pier Road
City/Town*: New London State: CT Zip Code: 06320

Secondary Programs (complete as many as applicable for this document):

Program: Select Secondary Program	Project ID:
Program: Select Secondary Program	Project ID:
Program: Select Secondary Program	Project ID:
Program: Select Secondary Program	Project ID:

Provide Project ID for each secondary program if it is known.
Each program has a unique ID (i.e. Rem ID, Spill Case #, UST Facility ID, etc.)

Part III: Document Information (document type required for appropriate program[s] only)

Remediation*: Remedial Action Plan (RAP)
LUST*:
Date of Document*: 12/21/2020 Version: Final

Part IV: Submitter Information

Name*: Douglas A. Martin, LEP, CHMM
E-mail*: dmartin@trccompanies.com
Name of company/business this document is being submitted on behalf of: *
Connecticut Department of Transportation

Remedial Action Plan Transmittal Form

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
BUREAU OF WATER PROTECTION AND LAND REUSE
REMEDIATION DIVISION www.ct.gov/deep/remediation

Date Stamp
(DEEP Use Only)

This form is a cover document to transmit a Remedial Action Plan. When the use of this transmittal form is required or requested by the Commissioner, a Remedial Action Plan approved in writing by the LEP, a copy of public notification of remediation, as well as all other documentation that demonstrates all applicable laws and regulations have been complied with, is to be attached to this transmittal form to document that remediation of the establishment has been initiated.

Part I of this form must be completed and signed by the Party responsible to submit a Remedial Action Plan for the remediation of the parcel in accordance with the remediation standards. Part II of this form is to be completed and signed and sealed by a licensed environmental professional (LEP).

All sections of this form must be filled out, as applicable.

PART I: GENERAL INFORMATION

Remediation ID No. (Rem#): 14346

Site Identification

Establishment Name (as on Form III): Connecticut State Pier

Establishment Address: State Pier Road

City/Town: New London State: CT Zip Code: 06320

Description in Property Deed:

Recorded on page 6 of volume 2336 of the Town of New London

land records, as lot 004 block 0245 on map G10 in the Tax Assessor's Office.

Check the box indicating under which program this documentation is being submitted:

☒ Connecticut General Statutes (CGS) section 22a-134a(a)-(e), Property Transfer filing

☐ CGS section 22a-133x, Voluntary Remediation

☐ Other (specify)

Submit this completed form to:

REMEDIATION DIVISION
BUREAU OF WATER PROTECTION AND LAND REUSE
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET, 2ND FLOOR
HARTFORD, CT 06106 - 5127

PART I: GENERAL INFORMATION (continued)

The following documentation must be attached to this form. Check boxes, as applicable, to verify that the documentation has been submitted with this form.

☒ **REMEDIAL ACTION PLAN** - in accordance with CGS Section 22a-134a(g)(1)

Dated: 12/20 Prepared by: TRC

☒ **PUBLIC NOTICE OF REMEDIATION** - in accordance with CGS Section 22a-134a(i)

☒ copy of published notice in newspaper

☒ copy of notice to local Director of Health

Check the applicable box if additional public notice requirements were implemented and provide documentation.

☒ sign erected on establishment

☐ copies of the notice of remediation mailed to abutting property owners

Note: Certifying Party must provide copies of any written public comments and responses.

List all applicable documentation and attach to this form.

DOCUMENT	DATED	PREPARED BY
Remedial Action Plan	12/20	TRC
Legal Public Notice	10/10/20	TRC

Certifying Party Certification

"I submit this form and attached remedial action plan approved by a licensed environmental professional. I shall apply for all permits and approvals that are necessary to carry out the remedial actions, and I shall ensure that any necessary permit applications are complete and that the issuance of any such permit and/or approval will be diligently pursued."

Garrett Eucalitto — Printed Name of Authorized Signatory

Deputy Commissioner — Title

Garrett Eucalitto — Signature of Authorized Signatory

Digitally signed by Garrett Eucalitto
Date: 2020.10.21 17:50:38 -04'00'

12/21/2020 — Date

Representing (Name of Company): Connecticut Department of Transportation

Address: P.O. Box 317546

City/Town: Newington State: CT Zip Code: 06131

Phone: 860-594-3050

Email: garrett.eucalitto@ct.gov

PART II: REMEDIAL ACTION PLAN SUMMARY

To be completed by the LEP

Groundwater Class: GB

Soil: Concentrations of Pollutants in Excess of RSR Criteria:

Criterion Exceeded	Remedial Measure	COC
☒ PMC	☒ In-situ	☐ Non-chlorinated VOCs
☐ GA	☒ Excavation / on-site re-use	☐ Chlorinated VOCs
☒ GB	☒ Excavation & removal	☒ Metals
	☐ Engineered Control	☒ PAHs
☒ DEC	Date of Commissioner Approval:	☐ SVOCs
☒ Res	☒ ELUR	☐ PCBs
☒ I / C	☐ RSR exemption	☒ ETPH
	☐ RSR Alternative Criteria	☒ Pesticides
	Date of Commissioner Approval:	☐ Other (specify):
	☐ Other (specify):	

Groundwater: Concentrations of Pollutants in Excess of RSR Criteria:

Criterion Exceeded	Remedial Measure	COC
	☐ Pump & Treat	☐ Non-chlorinated VOCs
☐ GWPC	☐ Air Sparging / Vapor extraction	☐ Chlorinated VOCs
☐ Volatilization	☐ Dual-Phase	☒ Metals
☒ SWPC	☒ Monitored natural attenuation	☐ PAHs
	☐ ELUR	☒ SVOCs
	☐ RSR exemption	☐ PCBs
	☐ RSR Alternative Criteria	☒ ETPH
	Date of Commissioner Approval:	☐ Pesticides
	☒ Other (specify): In-situ bio	☐ Other (specify):

PART II: REMEDIAL ACTION PLAN SUMMARY (continued)

Vapor Intrusion:

Remedial Measure

- ☐ sub-slab depressurization
- ☐ vapor barrier
- ☐ indoor-air monitoring

Date of DPH Commissioner Approval of such plan:

NAPL present: ☒ Overburden ☐ Bedrock ☐☐ None

Other (specify):

LEP Approval

"I have personally examined and am familiar with the information in the remedial action plan summary of this transmittal form, and I approve the attached remedial action plan. My professional services have been rendered in accordance with the 'Rules of Professional Conduct' (Section 22a-133v-6 of the Regulations of Connecticut State Agencies)."

Douglas A. Martin
Printed Name of LEP

431
License Number

Douglas A Martin Digitally signed by Douglas A. Martin DN: cn=Douglas A. Martin, o=TRC, ou=ECR, email=dmartin@trccompanies.com, c=US Date: 2020.12.21 12:54:17 -05'00'
Signature of LEP

12/21/20
Date

Company: TRC Environmental Corporation

Address: 21 Griffin Road North

City/Town: Windsor State: CT Zip Code: 06095

Phone: 860-298-9692

Email: dmartin@trccompanies.com

Affix Seal Here

REMEDIAL ACTION PLAN
Connecticut State Pier
State Pier Road
New London, Connecticut

Prepared for

State of Connecticut
Department of Transportation
2800 Berlin Turnpike
P.O. Box 317546
Newington, Connecticut

Prepared by

TRC Environmental Corporation
Windsor, Connecticut

December 2020

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1.0 INTRODUCTION

TRC Environmental Corporation (TRC) was retained by the Connecticut Department of Transportation (ConnDOT) to prepare this Remedial Action Plan (RAP) for the property identified as the Connecticut State Pier, located along State Pier Road in New London, Connecticut (the "Site"). Location of the Site is provided in Figure 1. This RAP has been developed to address Site soil and groundwater impacts associated with former on-site operations. Based on information obtained during previous site investigations, it has been determined that concentrations of volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), extractable total petroleum hydrocarbons (ETPH), total and leachable metals, and pesticides are present in soils and/or groundwater across the Site at concentrations that exceed the Connecticut Department of Energy and Environmental Protection (CTDEEP) Remediation Standard Regulations (RSRs) clean-up criteria.

The 30+-acre State Pier facility, owned by The Connecticut Port Authority (CPA), is the designated future location of the "Offshore Wind" Project under a private/public partnership with Eversource and Ørsted, a Danish wind turbine company. The Site is being redeveloped to accommodate the wind project and also to increase the long-term viability of the Site for future intermodal terminal capabilities. The Central Wharf is to be constructed between the two existing pier structures. This RAP describes the remedial measures that will be an integral part of the Site redevelopment, addresses documented Site contamination, and presents procedures for potential reuse of excavated soils, where appropriate. In addition, this Plan includes general procedures for the management and potential reuse of sediments that will be generated during planned dredging in the adjacent Thames River as part of the broader Site redevelopment program.

1.1 OBJECTIVES

This RAP has been prepared to address the impacted soil and groundwater that has been documented to be present at the Site. Specific objectives of the planned remedial activities include:

- To mitigate impacts to the environment from the areas of impacted soil located on the Site from both a direct exposure and pollutant mobility standpoint;
- To implement appropriate means to remediate impacted groundwater to minimize future impacts to Site workers and the local environment;

- To achieve compliance with the Connecticut RSRs and enable final Site verification;
- To protect the health of future Site workers that may come into contact with subsurface soil or groundwater at the Site;
- To create no adverse impacts to the environment during remedial activities; and
- To meet the overall requirements established under the Connecticut Transfer Act for the Site.

To meet these objectives, the following information is presented in this RAP:

- Detailed description and evaluation as to the nature and extent of regulated substances at the Site, as determined through historical and recent Site investigations;
- Summary of Remedial Areas (RAs) at the Site that have been identified to be impacted with regulated substances at levels requiring remediation;
- Evaluation of the technical and economic feasibility of implementing various alternative remediation strategies and identification of the best-suited options to address the contamination at each of the RAs in the context of the overall Site redevelopment plan;
- The regulatory criteria used to evaluate impacted soils requiring remediation;
- Presentation of procedures for preparation and performance of activities for the selected remedial actions; and
- Details regarding other related activities relating to Project documentation and final reporting.

1.2 DESCRIPTION OF SITE REDEVELOPMENT PROJECT

The planned redevelopment of the State Pier facility is intended to optimize Site conditions to enable the receipt, preparation, and shipment of components for off-shore construction of wind turbines. Key features of the planned Site improvements include:

- Construction of the Central Wharf to provide approximately 300,000 square feet of additional material/component storage and lay-down area for wind turbine generator pre-assembly and staging, and other related operations;
- Modifications and reinforcement of the central portion of the existing East Pier for heavy-lift crane loading/unloading operations;
- Dredging of sediments in the Thames River adjacent to and east/northeast of the East Pier, including a new turning basin to enable movement and docking of equipment barges;

- Excavation of substantial portions of the upland areas to ensure that the final grades are consistent with the redevelopment plan and final construction of the State Pier property; and

- Remediation of 20 Remedial Areas identified at the Site that have documented environmental impacts associated with historical Site activities.

1.3 REGULATORY CONTEXT

The redevelopment of the State Pier for planned wind power and other future commercial operations involves a complex mix of technical, legal, regulatory, and commercial factors. The primary purpose of this Plan is to document the remedial strategies and decision-making processes associated with areas of concern (AOC's) and RAs that have been identified at the Site, as well as to secure regulatory concurrence from the CTDEEP regarding the planned remediation. This concurrence is not only required for purposes of pre-construction permit approvals, but also to facilitate future regulatory "closure" with regard to the Site's status under the Connecticut Property Transfer Act. Specifically, the State Pier was determined to meet the definition of an "Establishment" under the Transfer Act and is therefore subject to that Statute when final transfer of ownership from ConnDOT to the CPA occurred. The Site was entered into the Connecticut Property Transfer Act program with the filing of an *Environmental Conditions Assessment Form* (ECAF) and accompanying Form III on March 18, 2020. As the designated "Certifying Party," ConnDOT has the ultimate responsibility for investigating and remediating the Site. CTDEEP subsequently delegated oversight of that process to a Connecticut Licensed Environmental Professional (LEP) on behalf of ConnDOT. Final documentation of the completed remediation that is fully compliant with applicable regulations (i.e., CT RSRs) will be provided in the Final Verification Report. Thus, to ensure final regulatory acceptance of post-redevelopment Site conditions at the time of Site Verification it is critical to secure documented endorsement from CTDEEP's Remediation Division before finalization of the Site redevelopment design.

This document is intended to provide: (1) specific guidance with respect to the planned Site remedial activities, (2) an established decision-making process to reuse excavated soils and river sediments on-site where prudent and to dispose of unsuitable material in an appropriate manner, (3) a detailed description of the documented Site AOC's and final defined RAs, (4) description of appropriate, compliant remedial options for each of those RAs, and (5) the

associated processes and supporting documentation required in accordance with Sections 22a-134 through 22a-134e of the Connecticut General Statutes (CGS).

2.0 SITE DESCRIPTION AND BACKGROUND

The following section presents a brief description of the Site's physical features and history of former Site operations.

2.1 SITE SETTING AND HISTORY

The Site physical setting and operational history are described and discussed below for each of the three primary physical portions of the present-day configuration: (1) land-based portion referred to herein as the Upland Area; (2) the East Pier, formally referred to as the "State Pier," and (3) the West Pier, formally referred to as the Central Vermont Rail Road Pier (CVRR). Primary Site features are depicted in Figure 2.

2.1.1 Upland Area

The Upland Area is located along the northern portion of the Site and is comprised of a bluff in the northeastern portion of the Site. Historically, this area was primarily utilized for residential housing and offices. More recently, this area has been utilized to store large stockpiles of road salt, however at the time of preparation of this Plan, much of that material has been relocated to other areas of the Site. The northeastern portion of this area is located approximately 20 to 30 feet higher in elevation than the remainder of the property. Below the bluff, an administration building and parking area were built for on-site staff in the early 1980s. The northwestern portion of the Upland Area is comprised of two warehouse buildings, two garage buildings, former railroad lines, and a former oil and gas storage facility. Currently, Warehouse 1 is undergoing demolition for the purpose of State Pier redevelopment. Warehouse 2 will remain in-place as-is.

2.1.2 East Pier

The land on which the East Pier is located was originally used as a ferry crossing in the late 1800s, prior to the construction of the East Pier between 1914 and 1916. The East Pier was originally constructed on a central stone crib supported by wooden pilings. Railroad sidings were constructed on the Pier and extended to the southern end of the Pier into a large wooden storage structure. The United States Navy took control of the Pier during both World War I and World

War II. The majority of the cargo moving through the Pier at the time consisted of wood pulp and intercoastal cargo.

In 1951, the United States Navy entered into a 90-year lease to reserve the northeastern side of the Pier for Navy vessels. A squadron was stationed at the Pier and active duty submarines and a submarine tender, the U.S.S. Fulton, were stationed along the eastern side of the Pier. The Navy's lease ended in 1991, when the submarine squadron was decommissioned.

In 1969, the Bureau of Waterways, a division of ConnDOT, took over management of the Eastern Pier and in 1978, improvements were made to the Eastern Pier's decking and pilings to improve its strength. In 1993, the Pier was closed due to deteriorating structural conditions. Subsequently, both sides of the East Pier were reconstructed and sediments along the eastern portion of the Pier were reprofiled and relocated to allow for the berthing of ships. Since that time, various cruise and cargo ships have made port-calls to the State Pier.

2.1.3 West Pier

The West Pier was constructed between 1874 and 1876 and extends approximately 1,100-feet into New London Harbor. The West Pier was a major facility of the Central Vermont Railroad. The Pier was constructed of masonry perimeter walls built from large granite blocks resting on timber-pile foundations with an earthen interior. The granite stonework was reinforced with iron rods and straps, rising about three feet above the high-water mark. This construction was partially replaced, under an emergency declaration, subsequent to the failure of the steel strapping. Mooring cleats and bollards of various ages are spaced along the periphery of the Pier. The construction of the West Pier involved substantial excavation and fill, and the harbor and slips immediately adjacent to the West Pier were repeatedly dredged to maintain a usable depth.

One of the West Pier's primary functions was the transfer of coal from Reading Railroad freighters onto rail cars. The Pier could process more than 100-tons of coal per hour. In 1904, the CVRR reconfigured the Pier in conjunction with a new freight service to and from New York Harbor. During the mid- to late 1990s and 2000s, the Pier's primary use was for the importation of commodities, primarily lumber. Other commodities such as copper have also been off-loaded, stored, and shipped via rail or truck from the State Pier property.

2.2 SITE GEOLOGY AND HYDROGEOLOGY

The Site is located within the Avalonian portion of the Eastern Uplands of Connecticut. Information obtained from both the Bedrock Geological Map of Connecticut (Rodgers, 1985) and the Surficial Materials Map of Connecticut (Stone, 1992) provides a generalized view of geological conditions local to the Site. According to these sources, the bedrock underlying the Site has been characterized/identified as the Mamacoke Formation which is comprised of interlayered light- to dark-gray, medium grained gneiss. A band of the Hope Valley Alaskite Gneiss, which is comprised of light-pink to gray, medium- to coarse-grained granitic gneiss, is mapped across the center of the Site running southeast to northwest.

According to the CTDEEP Surficial Materials mapping of New London, the majority of the Site is underlain with artificial fill with the exception of the northeastern portion of the Site which is comprised of thin till. During subsurface investigations that have been conducted at the Site, subsurface soils have been generally characterized as consisting of varying amounts of sand, silt and gravel as well as some urban fill including anthropogenic materials such as concrete, brick and coal.

Groundwater quality in the vicinity of the site is classified by the CTDEEP as GB. The GB classification indicates that: (1) the groundwater is within a highly urbanized area or area of intense industrial activity, and (2) it is an area where public water supply service is available. The groundwater may not be suitable for direct human consumption because of waste discharges, spills or leaks of chemicals, or land-use effects. Depth to groundwater varies across the Site but has generally encountered at depths ranging between four to nine feet below grade (fbg) in the lower elevation portions of the Site, and from approximately 12 to 27 fbg in the higher upland portion. A shallow groundwater contour figure, prepared by AECOM as part of their Phase III report, is provided with other report attachments in Appendix A.

The surface water quality in the section of the Thames River near the State Pier is classified by the CTDEEP as SC/SB. This designation indicates that the water does not meet water quality criteria for one or more of the designated uses. The State's goal is class SB, which designates the waters for marine fish, shellfish, and wildlife habitats, recreation, industrial supply, and other legitimate uses, including navigation.

A bathymetric survey of the State Pier was completed by Nautilus Consulting and Marine Construction, Inc. of Ansonia, CT in May 2007. The depth soundings were recorded to the nearest 0.1 foot below local (New London) mean low water. Mean low water at the State Pier is 0.9-feet below the National Geodetic Vertical Datum (NGVD29). Depth to bottom measurements recorded in the proposed dredging areas along the West Pier ranged from 5.0 to 15.0 feet below mean low water. Depth to bottom measurements recorded in the proposed dredging areas along the East Pier ranged from 24.4 to 38.0 feet below mean low water. During the recent sediment sampling conducted by Haley & Aldrich in April 2020, sediments in the vicinity of the Site were characterized as generally consisting of organic and glaciofluvial deposits. The organic deposits were identified at depths between 3.5 and 37 feet below top of sediment and were comprised of very soft, organic silt with varying amounts of sand and shells. The glaciofluvial deposits were encountered at depths between 2 and 15.7 feet below top of sediment and consisted of dark gray-brown silty sand with varying amounts of gravel and interbedded layers of silt, with varying amounts of sand. It should be noted that dredging of sediments in the vicinity of the East Pier is planned as part of the Site redevelopment project to enable boat/barge access, not specifically as part of the remedial activities described in this RAP.

A recent tidal study was performed at the site over a 48-hour period from September 16 through September 18, 2020. Ten of the total 23 monitoring wells on-site were studied using water-level logging transducers. The water table at the site is affected by the tidal influence of the Thames River to different degrees in different regions of the site. For example, the greatest change in water level in a single monitoring well over the 48-hour study period was 0.88 feet. The smallest change in a single well was 0.35 feet. Monitoring wells in the central portion of the site, in the upland portion of the site were observed to have the smallest change in water level over 12-hour period (two consecutive tides). Additionally, wells in close proximity to the western and eastern bulkheads on the site generally had greater changes in water level over 12-hour periods. Description of the tidal study can be found in Appendix E.

3.0 SUMMARY OF ENVIRONMENTAL INVESTIGATIONS

The subject Site has been the focus of numerous environmental investigations over its operational history, the majority of those studies having been conducted in the past 20 years. The scopes of the recent Phase II and III Environmental Site Investigations, performed by AECOM, have been based upon appropriate due diligence, including a recent Phase I Environmental Site Assessment (ESA) which included an evaluation of the available previous investigations. A preliminary Conceptual Site Model (CSM) was developed for the Site following completion of the Phase I ESA, to guide the development of subsequent field studies. The CSM is an iterative Site characterization tool that is updated as new Site information becomes available. This section of the report presents the relevant findings associated with the recent Phase I, II and III assessments/investigations as well as a description of the CSM that has been modified on the basis of the most-recent Site information. The CSM includes a summary of the Qualitative Exposure Assessment used to guide the development of the appropriate remedial measures taken to mitigate contamination in the confirmed release areas.

A range of environmental investigations have been performed at the Site over the course of the past several decades, including Phase I, Phase II, and Phase III environmental site investigations, a number of focused investigations in support of infrastructure improvements (e.g., underground storage tanks (USTs), above-ground storage tanks (ASTs), and transformer removals), as well as several sediment studies. The following is a summary of the known, documented investigations that have been conducted on-site:

- *Phase I Environmental Site Assessment, State Pier, New London, Connecticut*, prepared by Metcalf & Eddy, Inc., July 1992;

- *Bulk Sample Inspection Report, State Pier Buildings, New London, Connecticut*, prepared by EnviroMed Services, Inc., November 1992;

- *Draft Focused Site Investigation Report for State Pier, New London, Connecticut*, prepared by EA Engineering, Science and Technology, May 1994;

- *Task 210 Surficial Site Investigation, Preconstruction Environmental Investigation, State Pier Parcel 1 North, New London, Connecticut*, prepared by Atlantic Environmental Services, Inc., December 1994;

- *Task 220 Exploratory Site Investigation, Reconstruction Pier Apron – East Side, Connecticut State Pier, New London, Connecticut*, prepared by Atlantic Environmental Services, Inc., May 1995;

- *Task 120 Preliminary Site Evaluation, Central Vermont Railroad Pier, New London, Connecticut*, prepared by Maguire Group Inc., September 2000;

- *Task 210 Surficial Site Investigation, Central Vermont Railroad Pier, State Pier Road, New London, Connecticut*, prepared by Maguire Group Inc., September 2000;

- *Investigative Survey for Asbestos Containing Materials (ACM) Department of Transportation State Pier Administration Building, New London, Connecticut*, prepared by TRC Environmental Corporation, January 2001;

- *Investigative Survey for Asbestos Containing Materials and Lead Based Paint, Former CVRR Building and Fuel Tank at the State Pier, New London, Connecticut*, prepared by TRC Environmental Corporation, December 2001;

- *Task 220 Sediment Sampling Investigation, State Pier West Side Dredging Program, New London, Connecticut*, prepared by GEI Consultants Inc., May 2002;

- *Phase IA Archeological Assessment Survey, Central Vermont Railroad Pier, New London, Connecticut*, prepared by Public Archeology Survey Team Inc., September 2002;

- *Task 210 Subsurface Site Investigation, Proposed Connecticut State Pier Dredging Areas, New London, Connecticut*, prepared by TRC Environmental Corporation, July 2009;

- *Phase I Environmental Site Assessment, Admiral Harold E. Shear State Pier Assets, State Pier Road, New London, Connecticut*, prepared by Tetra Tech, Inc., for EnStructure LLC, February 2019;

- *Geotechnical Data Report, State Pier Infrastructure Improvements, State Pier Complex, New London Connecticut*, prepared by Haley & Aldrich, Inc. for Moffatt & Nichol, November 2019;

- *Draft Phase I Environmental Site Assessment of State Pier Facility, State Pier Road, New London Connecticut*, prepared by AECOM, March 2020;

- *Phase II Environmental Site Assessment of State Pier Facility, State Pier Road, New London, Connecticut*, prepared by AECOM, June 2020; and

- *Phase III Environmental Site Assessment of State Pier Facility, State Pier Road, New London, Connecticut*, prepared by AECOM, July 2020.

In past years, results of these investigations have identified a number of areas on-site that were of environmental concern. Prior to the most recent environmental investigations conducted by AECOM, areas that were investigated and found to have environmental impacts were typically remediated at the time that they were identified (i.e., UST and AST removals, soil excavations, transformer removals, etc.). More recently, AECOM conducted a Phase I Environmental Site Assessment in March 2020 and Phase II and III Investigations in June, July, and August 2020, respectively. These investigations have been based on a comprehensive evaluation of historical Site operations and the scope and results of prior investigations and remedial activities, and thus are the basis for the scope of remedial actions proposed in this RAP. Brief summaries of these most-recent, comprehensive investigations are provided below.

3.1 PHASE I ENVIRONMENTAL SITE ASSESSMENT

As part of the scope of work performed for CPA, AECOM conducted a comprehensive Phase I ESA for the Site in March 2020. The ESA was conducted in accordance with the ASTM E1527E *Standard Practice for Environmental Site Assessments*. As a result of this assessment, AECOM identified a total of 25 AOCs that warranted further investigation; these were:

- **AOC-1: Former Oil Storage** – This area is located in the northeastern corner of the Site and formerly housed the Dahl Oil Company tank farm which was present in this area from the early 1900s through the 1960s.

- **AOC-2: Fork-lift Maintenance Area** – This area is located in the southern portion of Warehouse 1. During the Phase I ESA, significant oil staining was observed on the warehouse floor where a forklift was observed to be undergoing repairs.

- **AOC-3: Oil Spill** – This area was identified on the western portion of the Site and was considered to be an area in which a potential release had occurred.

- **AOC-4: Former Waste Oil UST** – This UST was located on the western portion of the Site in the area behind the former repair building.

- **AOC-5: Former Gasoline USTs and Dispensers** – This area is located along the western portion of the Site to the north of the former repair garage.

- **AOC-6: Urban Fill** – Urban fill has been observed in borings located in the Upland Area of the Site.

- **AOC-7: Possible Polluted Groundwater** – Groundwater beneath the Site has the potential to have been impacted by former Site operations.

- **AOC-8: Hydraulic Oil Release** – In November 2018, a hydraulic oil release was documented to have occurred on the railroad line.

- **AOC-9: Fuel Oil UST (1)** – The 1994 EA environmental report indicates that a 200-gallon diesel fuel UST was present along the northeastern portion of the East Pier.

- **AOC-10: Former Drum Storage** – During the Maguire 2000 Site Assessment, drums containing oil, discarded fuel tanks, bags of chemicals, and stained soil were observed on the northwestern portion of the East Pier.

- **AOC-11: Diesel AST** – A 1,000-gallon diesel fuel AST, associated with a Lessee's road salt business, is located in the northeastern portion of the Upland Area.

- **AOC-12: Former Electrical Equipment Enclosure** – An enclosure reported to formerly contain electrical equipment was located to the north of the Administration building in a fenced area.

- **AOC-13: Railroad Line** – The current railroad line is located in the central portion of the Site. These tracks are often sources for oil, coal, and metals releases from train engines and/or cars, and railroad ties.

- **AOC-14: Former Oil AST** – A large 200,000-gallon oil AST was formerly located on the western portion of the Site.

- **AOC-15: Former Railroad Yard** – The southwest portion of the Site was historically used as a railroad yard for the Central Vermont Railroad.

- **AOC-16: Former Railroad Line** – A railroad line was historically present in the southeastern portion of the Site. As mentioned previously, railroad lines are potential sources for oil, coal and metals releases.

- **AOC-17: Vehicle Repair Area** – This building is located on the western portion of the Site and was historically used as a vehicle and forklift repair shop.

- **AOC-18: Diesel ASTs** – Two diesel fuel ASTs are located to the north of the repair garage building in the western portion of the Site.

- **AOC-19: Used Oil AST** – An approximate 1,000-gallon used oil AST is located along the southern end of the repair garage. Although the tank is in secondary containment, the containment appeared to be damaged and contains standing water.

- **AOC-20: Former Residential Buildings** – A number of residential dwellings and other small Navy buildings were formerly located on the northern portion of the Upland Area. This area was subsequently utilized for the storage of road salt.

- **AOC-21: Former Debris Pile** – During the Maguire assessment conducted in 2000, a large debris pile was observed to the east of the former 200,000-gallon fuel oil AST. The debris pile was reported to contain creosote-treated wood, tires, railroad ties, and empty cans of driveway sealant.

- **AOC-22: Dredge Material** – The Maguire assessment conducted in 2000 references the deposition of dredged sediments in the area of the former 200,000-gallon AST.

- **AOC-23: Suspected Buried Fuel Oil Tank** – A 1997 emergency incident report from CTDEEP describes a report of a suspected buried 275-gallon fuel oil tank to the north of the former 200,000-gallon AST.

- **AOC-24: Former US Navy Hazardous Waste Accumulation Area** – The US Navy stored hazardous waste along the northeastern portion of the East Pier.

- **AOC-25: Flammable Materials Storage Cabinet** – A flammable materials storage cabinet was formerly located in the area to the northwest of the two diesel ASTs that are currently located to the north of the repair building. The cage-like cabinet was constructed on top of a small concrete base.

Subsequent to the completion of the Phase I ESA, AECOM added three additional AOCs to the CSM as areas requiring further investigation:

- **AOC-26: Former Waste Oil AST** – A 275-gallon waste oil AST was formerly located in the northwestern corner of the northern repair garage building. Previous reports documented stained soils, oil filters and oil-soaked absorbent material in this location.

- **AOC-27: Former Fuel Oil UST (2)** – A 550-gallon fuel oil UST was formerly located adjacent to the retaining wall located between State Pier Road and the western railroad line.

- **AOC-28: Former Fuel Oil UST (3)** – A 275-gallon fuel oil UST was formerly located in a pump-house associated with the water tower that was located on the northern end of the East Pier. A 1992 Metcalf & Eddy report indicated that the UST had leaked. Later, a 1,000-gallon AST was installed in the area.

The results of the Phase I ESA, and subsequent due diligence that identified the additional AOCs listed above, were used to develop the scope of work that directed subsequent Phase II and Phase III investigations at the Site. These are discussed in the following Section 3.2.

3.2 PHASE II AND III FIELD INVESTIGATIONS

Phase II investigations are typically designed to evaluate the potential presence or absence of environmental impacts associated with individual AOCs. Where impacts are confirmed during the initial Phase II investigation, Phase III investigations are typically focused on filling identified data gaps to delineate and further characterize the nature and extent of those impacts. Between March and September 2020, AECOM conducted several phases of field investigations comprised of both Phase II and III investigations to identify and delineate environmental impacts on-site. Due to the iterative and inter-related nature of these investigations, the results of both are summarized together in this section. Copies of both Phase II and Phase III Investigation report figures, tables, and boring logs associated with these reports are provided in Appendices A, B, and C, respectively.

3.2.1 Phase II Investigation

In March 2020, AECOM mobilized to the Site to perform the initial Phase II environmental investigation. During this investigation, soil borings were advanced in each of the above-listed AOCs. A total of 67 borings were advanced on-site, and eight groundwater monitoring wells were installed. Representative soil samples were submitted to the laboratory for analysis for a broad range of parameters including: VOCs, PAHs, ETPH, RSR 15 metals, polychlorinated biphenyls (PCBs), pesticides and herbicides. One round of groundwater samples was also collected as part of the Phase II investigation and were analyzed for a similar list of parameters. Results of the Phase II investigation indicated that soils collected in 13 of the investigated AOCs listed above exhibited contaminants of concern (COCs) at concentrations that exceeded applicable RSR criteria. The nature of the confirmed impacts in each of the confirmed AOCs is briefly summarized below:

AOC-1: Former Oil Storage - This AOC is located along the northeastern portion of the State Pier property and was formerly occupied by the Dahl Oil Company. During the Phase II investigation, soils collected within the Former Oil Storage Area exhibited concentrations of PAHs within the 0-4 feet below grade (fbg) interval that exceed the Residential Direct

Exposure Criteria (RDEC). In addition, deeper soils collected from the 8-15 fbg interval exhibited metals, ETPH and PAHs at concentrations that exceeded the RDEC, Industrial/Commercial Direct Exposure Criteria (I/C DEC), and the GB Pollutant Mobility Criteria (GBPMC). Groundwater sampled from monitoring well MW-1 in this AOC exhibited an ETPH concentration above the Surface Water Protection Criteria (SWPC), as well as physical indications of petroleum odor at the water table.

AOC-2: Forklift Maintenance Area - This AOC is located in the southeastern portion of "Warehouse 1" (former World Cargo Building) and was an area identified as having significant oil staining on the concrete floor. During the Phase II investigation, soils collected from this area exhibited PAHs and ETPH at concentrations above the RDEC, I/C DEC and the GBPMC in the 10-15 fbg interval. Groundwater sampled from monitoring well MW-3 in this AOC exhibited a substantially elevated ETPH, above the SWPC, as well as physical indications of sheens and petroleum odor.

AOC-3: Oil Spill – This AOC is located in the southwestern portion of the Site, just to the north of the West Pier. During the Phase I ESA, there was surficial evidence of a spill having occurred in this area. Shallow soils collected from the 0-3 fbg interval in this AOC exhibited ETPH concentrations that exceeded the RDEC and I/C DEC. In addition, PAHs were reported at concentrations exceeding the RDEC and the GBPMC.

AOC-4: Former Waste Oil AST – This AOC is located along the western portion of the Site to the west of the former repair garage. During the Phase II investigation, a total of four soil borings were advanced in this area to a depths of up to 8 fbg. The laboratory results exhibited the presence of several metals in soils collected from this AOC, however, at concentrations that did not exceed the applicable RSR criteria. This AOC was not investigated further during the Phase III investigation activities.

AOC-5: Former Gasoline USTs and Dispensers – This AOC is located along the western portion of the Site to the north of the former repair garage. During the Phase II investigation, a total of two soil borings were advanced in this area to a depths of up to 8 fbg. The laboratory results exhibited the presence of ETPH and several metals in soils collected from this AOC, however, at concentrations that did not exceed the applicable RSR criteria. This AOC was not investigated further during the Phase III investigation activities.

AOC-6: Urban Fill - Urban fill has been observed in numerous locations across the Site, primarily in the northern portion of the property where roadways and residential dwellings were historically present. ETPH was detected in this area at a concentration that exceeded the RDEC in the 29-31 fbg interval.

AOC-7: Possible Polluted Groundwater – A total of 17 monitoring wells were sampled across the Site as a part of the Phase II/III investigation. Laboratory results indicated that ETPH, SVOCs and metals were detected in groundwater at concentrations that exceeded the SWPC. Groundwater concentrations are expected to decrease upon removal on impacted soils during Site remediation.

AOC-8: Hydraulic Oil Release – This AOC is located to the east of Warehouse 1. During the Phase II investigation, two soil borings were advanced in this area to depths of up to 8 fbg. The laboratory results indicated that concentrations of metals were detected in soils collected from AOC-8, however, none of which exceeded the applicable RSR criteria. No further investigation was completed in the area during the Phase III investigation.

AOC-9: Fuel Oil UST (1) - This area is located along the northern portion of the eastern pier. During the Phase II investigation, a total of two soil borings were advanced in this area to depths of up to 8 fbg. The laboratory results indicated that concentrations of ETPH, SVOCs and metals were present in soils collected in AOC-9, however, none of which exceeded the applicable RSR criteria. No further investigation was completed in this AOC during the Phase III investigation.

AOC-10: Former Drum Storage – This AOC is located to the north of the West Pier in the area of the former Continental Salt office. In the past, oil drums, discarded fuel tanks, bagged chemicals, and stained soils were observed in this area. During the Phase II investigation, soils collected from the 0-2 fbg interval in this AOC exhibited ETPH at concentrations that exceeded the RDEC and PAH concentrations that exceeded the RDEC, the I/C DEC and the GBPMC. Groundwater sampled from monitoring well MW-8 in this AOC exhibited elevated ETPH above the SWPC.

AOC-11: Diesel AST – This AOC is located in the northern portion of the Site in the Upland Area. This Area was not sampled as part of the Phase II investigation due to access issues. Instead this AOC was investigated as part of the AOC-20 investigation. See the AOC-20 investigation for additional details about soil impacts in this area.

AOC-12: Former Electrical Equipment Enclosure – This area is located on the eastern portion of the Site to the north of the Administration Building. During the Phase II investigation, a total of two soil borings were advanced in this area to depths of up to 12 fbg. The laboratory results indicated that several metals concentrations were present n soils collected in AOC-12, however, none of which exceeded applicable RSR criteria. No further investigation of this area was completed during the Phase III investigation.

AOC-13: Railroad Line - The current railroad line is located in the central portion of the Site and runs the length of the East Pier. The railroad line is a likely source for petroleum releases, coal, and metals from train engines and/or cars. ETPH was detected in this AOC at a concentration that exceeded the RDEC in the 10-12 fbg interval.

AOC-14: Former Oil AST - This AOC is located along the western portion of the property. Historically, this area was occupied by a large 200,000-gallon AST. During the subsurface investigations, soils collected from this AOC exhibited ETPH and arsenic concentrations that exceeded the RDEC and I/CDEC in the 2-6 fbg interval. In addition, lead was reported at a concertation that exceeded the GB PMC in the 4-6 fbg interval. Groundwater sampled from monitoring well MW-14 in this AOC exhibited elevated ETPH above the SWPC.

AOC-15: Former Railroad Yard (SW Spur) - The southwestern portion of the Site was historically used as a railroad yard and is a likely source of releases of oil, coal and metals from train cars and engines. Soils collected from the 0-2 fbg interval in this AOC exhibited PAHs and metals concentrations that exceeded the RDEC and/or the I/CDEC.

AOC-16: Former Railroad Line - A railroad line historically ran along the southeastern portion of the Site that was historically used as a railroad yard and is a likely source of environmental releases. During the Phase II investigation, soils collected from the 0-2 fbg interval in this AOC exhibited metals concentrations that exceeded the RDEC and the I/CDEC.

AOC-17: Vehicle Repair Area - A vehicle maintenance shop is located on the western portion of the Site and was historically used for maintenance of on-site equipment such as forklifts. Various petroleum products or other maintenance fluids may have been released in this area. Soils collected from the 0-4 fbg interval in this AOC exhibited ETPH concentrations that exceeded the RDEC.

AOC-18: Diesel ASTs – This AOC is located along the western portion of the Site to the north of the repair garage. During the Phase II investigation, a total of two soil borings were advanced in this area to depths of up to 5 fbg. The laboratory results indicate that concentrations of SVOCs and metals were present in soils in this area, however, at concentrations that did not exceed the applicable RSR criteria. No further investigation of this area was completed during the Phase III investigation.

AOC-19: Used Oil AST – This AOC is located along the western portion of the Site to the south of the repair garage. During the Phase II investigation, a total of four soil borings were advanced in this area to depths of up to 12 fbg. The results indicate that several metals were present in soils collected from this area, however, at concentrations that did not exceed the applicable RSR criteria. No further investigation of this area was completed during the Phase III investigation.

AOC-20: Former Residential Buildings - This area is located in the northern portion of the Site and was historically occupied by residential dwellings. Until very recently much of this area is occupied by a large (approx. 90,000-ton) salt pile. Soils collected in this AOC exhibited ETPH, PAHs and metals concentrations that exceeded the RDEC, I/C DEC and/or the GB PMC within the 2-17 fbg interval.

AOC-21: Former Debris Pile – This area is located on the southwestern portion of the Site. During the Phase II investigation, one soil boring was advanced to a depth of 2 fbg. The results indicate that several metals were present in soils collected from this AOC, however, at concentrations that did not exceed applicable RSR criteria. No further investigation of this area was completed during the Phase III investigation.

AOC-22: Dredge Area – This AOC is located on the western portion of the Site, in the area of the former 200,000-gallon AST. Previous reports indicate that historically, material dredged from the river was placed in this area. During the Phase II investigation, soils collected from the 2-10 fbg interval in this AOC exhibited metals concentrations that exceeded the RDEC and

the I/C DEC. Groundwater sampled from monitoring well MW-7 in this AOC exhibited a low ETPH concentration, below RSR criteria.

AOC-23: Possible Buried Fuel Tank – This area is located in the southwestern portion of the Site. During the Phase II investigation, one soil boring was advanced in this area to a depth of 10 fbg. Laboratory results indicate that several metals were present in soils collected from this AOC, however, at concentrations that did not exceed the applicable RSR criteria. No further investigation of this AOC was completed during the Phase III investigation.

AOC-24: Former US Navy Hazardous Waste Accumulation Area – This AOC is located along the northern portion of the eastern pier. During the Phase II investigation, a total of three soil borings were advanced in this area to depths of up to 6 fbg. The laboratory results indicated that several metals were present in soils collected from this area, however, at concentrations that did not exceed the applicable RSR criteria. No further investigation of this AOC was completed during the Phase III investigation.

AOC-25: Former Flammable Materials Storage – This area is located along the southern portion of the former repair garage. During the Phase II investigation, one soil boring was advanced in this area to a depth of 7 fbg. The laboratory results indicate that ETPH as well as several metals were present in soils collected from this area, however, at concentrations that did not exceed the applicable RSR criteria. No further investigation of this area was completed during the Phase III investigation.

AOC-26: Former Waste Oil AST – This AOC is located on the western portion of the Site, to the west of the former repair garage. During the Phase II investigation, one soil boring was advanced in this area to a depth of 7 fbg. The laboratory results indicate that ETPH as well as several metals were present in soils collected from this area, however, at concentrations that did not exceed the applicable RSR criteria. No further investigation of this area was completed during the Phase III investigation.

AOC-27: Former Fuel Oil UST (2) – This area is located adjacent to the retaining wall located between State Pier Road and the western railroad line. During the Phase II investigation, three soil borings were advanced in this area to depths of up to 4 fbg. The laboratory results indicate that SVOCs as well as several metals were present in soils collected from this area, however, at concentrations that did not exceed the applicable RSR criteria. No further investigation of this area was completed during the Phase III investigation.

AOC-28: Former Fuel Oil AST (3) – This AOC is located in the area of the former pump-house associated with the water tower that was located on the northern end of the East Pier. During the Phase II investigation, two soil borings were advanced in this area to depths of up to 9 fbg. The laboratory results indicate that SVOCs as well as several metals were present in soils collected from this area, however, at concentrations that did not exceed the applicable RSR criteria. No further investigation of this area was completed during the Phase III investigation.

3.2.2 Phase III Investigation

Between June and August 2020, AECOM completed the planned Phase III field program to investigate several newly-identified AOCs and to further delineate and characterize the 13 above-listed AOCs that had been previously confirmed to exhibit the presence of regulated substances at concentrations above the applicable RSR criteria. Scope of the supplemental investigations consisted of 80 new soil borings, installation of two additional groundwater monitoring wells, and collection and analysis of 289 soil samples and 23 groundwater samples. Phase III Figures are provided in Appendix A, data tables are provided in Appendix B, boring logs associated with the Phase III report are provided in Appendix C, and Low-Flow Groundwater Logs are provided in Appendix D.

With a focus on those AOCs confirmed to have contaminant impacts at levels above RSR criteria, the Phase III investigation further defined contaminant impacts in the following key AOCs:

AOC-1: Former Oil Area – During the Phase III investigation, 12 additional soil borings were advanced in this area. In addition, three monitoring wells were installed in this AOC. The results indicated that ETPH was present in soils at concentrations exceeding the I/C DEC and GBPMC at depths of up to 29 fbg. In addition, PAHs were identified to be present in soils at depths of up to 12 fbg, at concentrations that exceeded the I/C DEC and GBPMC.

AOC-2: Forklift Maintenance Area – A total of four additional soil borings were completed in this area as part of the Phase III investigation. Soil borings were advanced to depths up to 14 fbg. The results indicated that ETPH was present at depths of up to 14 fbg at concentrations that exceeded both the RDEC and I/C DEC. PAHs were present in soils at concentrations that exceeded one or more of the RSR criteria at intervals ranging between 2 and 14 fbg.

AOC-3: Oil Spill – This area was sampled as part of the Phase II investigation. Soil boring AOC3-B1 exhibited an ETPH concentration that exceeded the I/C DEC in the 0-2 fbg interval. This boring was delineated to the south by sample AOC14-B11 which did not exhibit ETPH concentrations above laboratory reporting limits.

AOC-6: Urban Fill – ETPH was detected in this area during the Phase II investigation in boring AOC6-B3 (29-37) at a concentration that exceeded the RDEC. Due to the depth and minimal indications of contamination, this area was not further delineated during the Phase III investigation.

AOC-10: Former Drum Storage – As mentioned previously, four soil borings were completed in this area during the Phase II investigation. ETPH was detected in the 0-2 fbg interval at a concentration that exceeded the RDEC. PAHs were also detected at concentrations that exceed the RDEC, I/C DEC and GBPMC in the 0-2 fbg interval. This area was delineated

as part of the grid system of borings that was laid out across the southwestern "spur". The results indicate that this area has not yet been fully delineated.

AOC-13: Railroad Line – Two additional soil borings were completed, both to depths of 12 fbg, to delineate the ETPH impacts encountered during the Phase II, however none of the samples yielded detectable ETPH.

AOC-14: Former Oil AST – A total of 24 soil borings were completed in AOC-14 during the Phase III investigation. All of the collected soil samples were analyzed for PAHs, ETPH, and metals. The results indicated that PAHs were present at concentrations that exceed both the RDEC and GBPMC in two soil samples collected from the 0-2 fbg interval. ETPH was detected in boring AOC14-B13 at concentrations that exceeded the RDEC between 0-10 fbg, however ETPH exceedances greater than the I/C DEC were only present in the 4-6 fbg interval. Arsenic was detected in this area at concentrations that exceeded the I/C DEC at intervals ranging between 0-10 fbg.

AOC-15: Former Railroad Yard (SW Spur) – As mentioned previously, soils in this area exhibited PAHs and metals concentrations that exceeded the RDEC. In addition, arsenic was detected at concentrations that exceed both the RDEC and I/C DEC in the 0-2 fbg interval.

3.3 CONCEPTUAL SITE MODEL

The scope of the recent Phase II and Phase III investigations were guided based on a CSM to develop a thorough understanding of the environmental conditions and processes at the Site, and as the basis for the subsequent site characterization process. The key elements used in the development of the CSM have been the environmental setting of the site, site history and operations, and the physical observations made during multiple site inspections and phases of field investigation. The CSM was developed initially by AECOM during performance of the Phase I ESA, and periodically updated as more site-specific information became available, most notably during subsequent field investigations. At the completion of the Phase I and II assessments, and prior to the initiation of the Phase III investigation, the CSM was reassessed to identify any evident data gaps and to refine the final list of AOCs that warranted investigation to confirm/refute, and where confirmed, delineate impacts.

Site soil characterization information was reviewed to determine the general physical properties of the unconsolidated materials in both the unsaturated and saturated zones, with particular emphasis on the characteristics of those materials that could affect contaminant migration pathways and transport mechanisms. Site groundwater characterization information was reviewed to define shallow groundwater location and flow across the site, to better understand

the hydrogeologic characteristics/flow regime and thus potential contaminant fate and transport pathways and mechanisms.

Final delineation of contamination during the Phase III was based on the confirmed location/depth of confirmed contaminant impacts in each of the suspect AOCs, the nature of those contaminants, the magnitude of those impacts (i.e., concentrations relative to the applicable RSR clean-up criteria), and the mechanisms for potential migration on- and off-site. The completion of the Phase III was also a dynamic process, providing for real-time assessment of field results to assess whether additional field sampling was needed to further refine/delineate each specific AOC. The completed Phase II/III field program assessed the horizontal and vertical distribution of the confirmed contaminants in the confirmed AOC/release areas, while providing sufficient information to enable the evaluation of suitable remedial measures.

The nature of the contaminants in each AOC was characterized by analyzing soil samples for the range of potential COCs based on historical Site facilities and operations within each AOC. It should be noted that a broad spectrum of lab analyses was initially requested for the majority of field samples due to the long, varied history of Site operations. The results of the analyses from the initial (e.g., Phase II) sampling were used to refine the analytical regimen for subsequent delineation sampling within each confirmed release area. Field screening methods, including use of a photoionization detector (PID), were utilized to aid in the selection of soil sample depths and analyses.

After the completion of the Phase III investigation, a final review was conducted relative to the following project objectives:

- Characterize the distribution of the contaminants in Site soils and groundwater;
- Identify the locations that constitute existing sources of contaminants;
- Evaluate the fate and transport mechanisms that may affect potential movement of contamination through the various environmental media; and
- Determine appropriate courses of action for remediation of each confirmed release area.

The review of the final data set also included an evaluation of release mechanisms. A contaminant release mechanism is defined as an event or process that results in the migration of

contamination from its source into the immediate environment. This identification of release mechanisms was also used in the selection of remedial technologies. Most of the primary release mechanisms for the AOCs on the Site have been attributed to spills or leaks of unknown origin. However, when a COC reaches the environment through the initial release mechanism, the COC may be subject to a subsequent (secondary) release mechanism(s) that has the potential to expand the extent of contamination. In some cases, groundwater may assist in the migration of the contaminants vertically and laterally by advection, dispersion, or diffusion.

Collective results of the CSM process described above, as defined through the results of previous Site investigations, are presented in subsequent sections of this Plan. Detailed discussion of the confirmed, delineated AOCs requiring remedial mitigation is provided below, however a CSM summary identifying the impacted environmental media, identified COCs, potential migration pathways, potential exposure pathways (human as well as environmental), potential mitigation strategies, and the selected remedial options to mitigate those pathways, is presented in Table 1.

4.0 REMEDIAL ALTERNATIVES ANALYSIS

This section of the RAP describes the environmental media that must be remediated or otherwise mitigated in accordance with the RSRs, as the Site is under the auspices of the Connecticut Property Transfer Act. The following is a discussion of the range of environmental media documented to reside on-site, the regulatory framework that applies to the requisite Site clean-up, and a discussion of the specific regulatory clean-up criteria that will guide the Site remediation program.

4.1 APPLICABLE REGULATORY CRITERIA

The Site was determined to meet the criteria as an "Establishment" as defined by the Connecticut General Statutes 22a-134. The Site was entered into the Connecticut Property Transfer Program with the filing of an ECAF and Form III in March 2020. The Phase II and Phase III environmental investigations at the Site were conducted in accordance with the CTDEEP *Site Characterization Guidance Document* (SCGD). As such, the analytical results obtained during the investigation of this Site have been compared to the Connecticut RSRs numerical criteria, which define remediation endpoints for confirmed release areas. As such, comparisons of investigation results to the RSR criteria have been used in this Plan to determine the relative magnitude of the confirmed release areas, in accordance with the SCGD.

The CT RSRs specify numerical criteria that apply to contaminant concentrations in soil and groundwater. Based on the GB groundwater classification for the Site, the RSR criteria that applies to detected constituents at the Site are described below, by environmental medium.

4.1.1 Soil Clean-up Criteria

The RSRs define two types of clean-up criteria that apply to soil to account for their potential to adversely impact human health (the direct exposure criteria or DEC), and their propensity to yield leachable contaminants that may degrade groundwater quality (the Pollutant Mobility Criteria or PMC). Given the location of the Site and the requirements of the RSRs, as dictated by the Site's regulatory status under the Property Transfer Act, Site soils are subject to several regulatory criteria, as follows:

- Residential Direct Exposure Criteria (RDEC);
- Industrial/Commercial Direct Exposure Criteria (I/C DEC); and
- GB Pollutant Mobility Criteria (GB PMC).

The DEC defines the level of contaminants allowable for direct human exposure, based on a one-in-one million cancer risk. The DEC is further divided into separate numerical criteria for Residential (R) and Industrial/Commercial (I/C) site uses. The RDEC is more stringent and considered the "default" criteria, regardless of the current site use. Compliance with the I/C DEC is only allowed at properties zoned as industrial/commercial and requires the recording of an Environmental Land Use Restriction (ELUR) on the municipal Land Use Records. The ELUR is an amendment to the Site deed that documents the presence of contamination and sets restrictions on activities allowed in the area of contamination. The DEC generally applies to soils extending from ground surface to a depth of 15 fbg, regardless of the depth of the water table.

Under one RSR DEC exception, impacted soil located beneath at least four feet of clean soil/fill, a minimum of two feet in combination with a three-inch pavement surface, or an existing building or other permanent structure approved by the CTDEEP Commissioner, may be considered to be "inaccessible" with the institution of an ELUR. Under the current Site redevelopment design, planned final surface restoration across the entire Site will consist of a minimum two-foot layer of compacted dense aggregate. During recent discussions between ConnDOT and CTDEEP (i.e., Project conference call on 9/21/20), the planned two-foot aggregate cap, in combination with a suitable geotextile "warning layer," was verbally approved by CTDEEP as an acceptable alternative for rendering such polluted soil inaccessible.

The PMC sets the level of contaminants that can remain in soil without posing a threat to groundwater quality. The PMC is established for both GA and GB groundwater classification areas. GA areas largely represent non-impacted groundwater and GB areas represent potential degraded groundwater quality. The PMC in GA areas are more stringent than for GB areas. The PMC applies to soil above the seasonal low water table in GA areas; and it applies to soil above seasonal high groundwater in GB areas. For purposes of the subject Site and this project, the GBPMC apply (and thus apply to the seasonal high-water level) since the Site is located within a designated GB groundwater classification area.

4.1.2 Groundwater Clean-up Criteria

Numerical cleanup criteria established under the RSRs for contaminants in groundwater are the Groundwater Protection Criteria (GWPC), the Surface Water Protection Criteria (SWPC), and the Volatilization Criteria (VC). The GWPC establishes allowable criteria for compounds in groundwater that could be considered a drinking water resource. The clean-up goal may be local Site "background" in Class GA/GAA areas, if municipal water is available for all area residents. Compliance with the GWPC is generally **not required** in GB areas, which is the case for the State Pier Site.

The SWPC applies to contaminated groundwater discharging or potentially discharging to surface water. The criteria specify allowable compound concentrations in groundwater prior to discharging into a surface water body.

The GWVC establishes VOC concentrations allowed in groundwater less than 15 fbg. CTDEEP has proposed GWVC revisions regulating groundwater less than 30-feet fbg (2003). The GWVC is divided into numerical criteria for residential and industrial/commercial sites (i.e., RES GWVC and I/C GWVC, respectively). If VOCs in groundwater exceed the GWVC, the potential exists for vapor exposure in buildings and adverse health effects. Cleanup to the I/C GWVC requires an ELUR and is only allowed at industrial/commercial sites.

4.1.3 Sediment Screening Criteria

As stated previously, sediment dredging is proposed as part of the overall Site redevelopment project to facilitate water-borne access to/from the Site, not as a specific part of the proposed Site remediation. Assessment of sediments during recent investigations was intended to pre-characterize the geotechnical and chemical quality of those materials that would be removed during planned dredging operations, in order to determine appropriate final material reuse or disposal options. The most recent sediment sampling was conducted by Haley & Aldrich in April 2020. This sampling program consisted of the collection of 27 sediment samples along the eastern side of the East Pier, within the Thames River. As indicated in Section 2.2, sediments were characterized to generally consist of organic and glaciofluvial deposits. The collected analytical sediment samples were submitted to the laboratory for a comprehensive suite of analyses including VOCs, PAHs, PAHs, ETPH, PCBs, total Priority Pollutant metals, pesticides, herbicides,

radionuclides and Total Organic Carbon (TOC). Subsequently, the samples were also requested to be analyzed for leachable metals.

While the Connecticut RSRs do not technically apply to sediments, for purposes of determining appropriate reuse and/or disposal options, including potential reuse within the Central Wharf (as a permanent component of the renovated Site), the sediment analytical results were initially compared to the RDEC, I/CDEC, and GBPMC. In only a few instances did samples yield concentrations of organic COCs above these criteria, limited to several samples exhibiting detectable concentrations above the RDEC and I/CDEC.

Preliminary comparison of the total metal concentrations to the GBPMC using the 20 times "rule-of-thumb" dilution factor indicated exceedance of the GBPMC for several metals, however, the samples were subsequently analyzed for leachable metals via the Synthetic Precipitation Leaching Procedure (SPLP) as a more appropriate means to assess leaching potential. The SPLP method was developed to simulate conditions where a material, typically soil, is subject to acidic precipitation to determine the mobility of the contaminants present that may then migrate into groundwater. Based on the SPLP results, **none of the samples** yielded leachable COC concentrations above the GBPMC. Therefore, based on the full sediment dataset, it has been determined that the dredged sediments will not pose a future leaching issue if relocated into the Central Wharf.

4.2 SUMMARY OF SITE ENVIRONMENTAL MEDIA

The following section presents a brief discussion of the nature of the various earthen materials that will require management during: (1) Site remedial activities, or (2) as a part of other non-remedial redevelopment construction activities. While the physical nature (e.g., geotechnical properties) of these materials may play a role, the chemical quality of that material will be the primary determinant in the selection of their appropriate final management/disposition. Specifically, the range of Site materials that may be managed during implementation of this RAP include the following categories:

1. **Clean Soil** – This category refers to Site soils that contain only COCs consistent with local background, which are not indicative of a release. Due to the long industrial history of the Site, including extensive modifications, construction, and filling, limited areas meeting this category are anticipated. Such material, where present on-site, does not require

remediation but may be excavated during redevelopment activities. It may be considered suitable for reuse on-site where geotechnically suitable, or off-site with no restrictions.

2. **Polluted Soil** – This category refers to soil materials (excluding pavement, subbase, structures or utilities) that contain detectable concentrations of regulated substances at concentrations below RSR criteria (i.e., RDEC, I/C DEC and GBPMC) but above what can be attributed to background conditions. This material may be left in-place (i.e., does not require remediation), reused on-site without restrictions, or disposed off-site (with documentation of final disposition)**.**

3. **Soil Containing COCs >RDEC –** This category of material may be left in-place if an Environmental Land Use Restriction (ELUR) is instituted, excavated and reused on-site (e.g., within the Central Wharf) with an ELUR, or disposed off-site.

4. **Soils Containing COCs >I/C DEC –** This category of material may be left in-place or excavated and reused, if it is rendered "inaccessible," along with institution of an ELUR, or disposed off-site.

5. **Soil Containing COCs >GBPMC –** This category of material may be left in-place if rendered "environmentally isolated," along with institution of an ELUR, excavated/reused on-site as environmentally isolated (with an ELUR), or disposed off-site. Theoretically, this material could also be treated to reduce leachability of contaminants, for reuse without an ELUR. Note that material exhibiting both GBPMC and DEC exceedances (discussed above) would need to be managed to render both environmentally isolated and inaccessible if left in-place or reused on-site, along with the institution of an ELUR.

6. **Other Contaminated Materials –** This category of materials refers to contaminated media that contain higher concentrations of contaminants that would render them subject to more-stringent regulations, including Resource Conservation and Recovery Act (RCRA) Subtitle C (for hazardous waste) and Toxic Substances Control Act (TSCA) (for PCB Waste). No media exhibiting this level of contamination was encountered during the Phase II/III investigations. Other non-hazardous "source material" such as free petroleum product, if encountered during remediation, will likely require off-site disposal at a licensed facility.

7. **Contaminated Groundwater** – Groundwater impacted with Site contaminants has been detected in several locations on-site, including three AOCs exhibiting petroleum contamination. As a result, contaminated groundwater may be encountered during: (a) excavation of impacted soils during Site remediation activities; and (b) potentially during other Site redevelopment activities. Presence of free-phase petroleum may also be encountered during excavation/dewatering that will need to be properly managed and disposed. Impacted groundwater generated during excavation dewatering activities will require either collection and off-site treatment/disposal at a licensed facility or treatment/discharge on-site under a CTDEEP discharge permit. In addition, AOCs exhibiting groundwater contamination that cannot be effectively remediated through removal of impacted soil, may require supplemental treatment of residing groundwater through other means (e.g., *in-situ* amendments, gross product removal, etc.).

8. **Sediments** – This category of material refers to the dredge material that will be generated during dredging of defined areas of the Thames River abutting the eastern side of the East Pier as part of the planned redevelopment improvements. Although not technically considered "remediation" under the Site redevelopment project, the planned dredging will remove/manage material has been documented to contain low levels of regulated substances. It should be noted that in addition to analysis for total concentrations, SPLP analysis of sediments indicated no leachable concentrations above the GBPMC in any sample. While a range of potential disposal options may exist for this material, the dredged sediments are currently slated to be reused as a primary source of backfill within the designated Central Wharf unless they are otherwise deemed unsuitable due to their chemical quality or geotechnical properties.

4.3 REMEDIAL ALTERNATIVES ANALYSIS

The following section presents a discussion of the potential remedial options that may be suitable to address the documented, characterized AOCs on the subject site. As indicated above, the remedial evaluation is focused on two primary environmental media:

- Soils containing regulated substances above the DEC and/or GBPMC
- Contaminated Groundwater

Given the nature and extent of environmental impacts identified at the Site that have been determined to require some form of active remediation to achieve compliance with the RSRs, as well as the considerable physical and schedule stipulations of the Site redevelopment program, this analysis is focused on simple, effective remedial strategies that can effectively achieve compliance with applicable regulations, are compatible with the planned Site redevelopment, are cost-effective, and permanent (i.e., require no further monitoring or maintenance) where practicable. This evaluation of remedial strategies includes potential integration of other regulatory and institutional mechanisms (e.g., deed restrictions, ELUR, and other institutional controls) that will facilitate expeditious, cost-effective, project-consistent remediation while ensuring long-term protection of human health and the environment.

While a range of regulatory options exist that could potentially reduce the physical extent of remediation, the time and effort required to secure such accommodations could potentially delay the remediation phase of the redevelopment project. Therefore, only self-implementing options (e.g., use of the I/C DEC) have been considered in this evaluation and selection of appropriate remedial options. However, in the event further evaluation indicates that significant advantage

may be gained through implementation of other regulatory mechanisms for a specific AOC, they may be further evaluated.

4.3.1 Excavation

In general, excavation involves the physical removal of soil/fill material that exceeds the applicable RSR criteria. The excavated material may be direct-loaded into waiting vehicles/containers for off-site shipment (if suitable disposal arrangements are in-place) for reuse or disposal, transfer to another temporary management area on-site pending final disposition, or directly transferred to a pre-determined location on-site for reuse as fill. Unless sufficient delineation sampling has been performed prior to construction, collection of post-excavation sidewall and bottom samples will be required to confirm achievement of compliance in that location prior to restoration of the excavated area, except in certain locations where surface grades are to be lowered (e.g., the Upland area). In locations where final grade is to be retained, restoration of the excavation would require backfilling with suitable backfill that meets both the project design specifications and the applicable RSR criteria. In addition, an ELUR will be required to be instituted for areas where impacted material exceeding the RDEC will remain in-place (i.e., if the actual removal is based on compliance with the I/C DEC). General advantages/disadvantages of this remedial option include:

Advantages	Disadvantages
• Permanent removal of impacted material thereby eliminating associated risks	• Cost may be higher than other options, if material requires off-site disposal
• Potentially simpler/more expeditious to complete than other alternatives (e.g., capping)	• Requires confirmation sampling/ analysis to determine compliant limits of excavation
• No long-term maintenance requirements	• May require shoring/other engineering controls to maintain excavation stability
• May not affect final grades/uses of area when restored	

Depending upon the nature of the excavated material, potential reuse on-site in other areas, most nobly the Central Wharf, could provide an economical, readily-available source of backfill if compliant with the final project design and regulatory requirements (e.g., RSRs, CTDEEP approval, etc.)

4.3.2 Capping

Capping refers to a range of remedial methods that involve installation of a physical barrier over the target contaminated media to mitigate physical exposure to potential receptors and/or to preclude infiltration of precipitation that may mobilize contaminants contained in that media. Depending upon the nature of the contaminants, remedial objectives, and the physical Site configuration and uses, caps may be of permeable or impermeable/low permeability designs. Typical capping designs with applicability to the Site include soil or other natural materials, asphalt and concrete, and where needed to impart impermeability, may include natural (e.g., clay) or synthetic materials (synthetic membranes). Under the RSRs, capping to address direct exposure issues from impacted soils may consist of: (1) a minimum of four feet of clean soil/fill, (2) a combination of minimum of two feet of clean soil/fill overlain by 3+ inches of bituminous concrete or other suitable impervious material, or (3) other effective combination approved by CTDEEP. As indicated above, for this Project CTDEEP recently approved the designed two-foot compacted dense aggregate cap as a suitable alternative to render underlying material exceeding the DEC inaccessible.

Capping to address GBPMC issues requires an engineered control that provides for reliable, long-term mitigation of infiltration; such engineered controls require approval by the CTDEEP. While no confirmation sampling is typically required in areas remediated via capping, adequate characterization of the release area is necessary to ensure adequate coverage of the impacted area. In all cases, an ELUR is required to identify and protect areas where remedial capping has been instituted. General advantages/disadvantages of the capping remedial option include:

Advantages	Disadvantages
• May provide lower cost than other options depending on type and size of cap area	• Does not provide a permanent solution by removing the contaminated material
• Does not require confirmation sampling/ analysis	• Requires long-term O&M, including inspection regarding cap integrity
• May be able to be designed as an integral part of Site redevelopment	• Cap design must be integrated into final Site grading plan, and will require additional excavation for installation, including a warning layer
• Planned installation of designed compacted aggregate across Site can render DEC exceedances "inaccessible" consistent with RSRs	• Engineered controls to address PMC compliance requires CTDEEP approval
	• Capping may not be possible in some areas prior to Site redevelopment construction

4.3.3 Stabilization/Solidification

Stabilization/solidification refers to a range of remedial technologies for contaminated environmental media that effectively reduce the mobility and, in some cases the toxicity, of the contaminants. During this treatment process (also called immobilization, fixation, or encapsulation), contaminants may be chemically bound or encapsulated into the treated matrix. This treatment may be used to reduce contaminant solubility by modifying the chemical nature of the contaminants in order to reduce potential leaching.

Stabilization is the general term for a process that transforms contaminants into a less mobile or less toxic form, while solidification is a more specific process that treats material to increase its solidity and structural integrity. Solidification does not remove nor reduce COCs but mitigates their movement by eliminating or significantly reducing their mobility. *Ex-situ* solidification involves excavation, treatment and backfilling of the contaminated material, while

In-situ processes require installation/integration of stabilizing amendments into the target soil. *Ex-situ* treatment requires additional handling, with reinstallation, reuse elsewhere on-site, or off-site for disposal. Typical solidification agents include Portland cement, lime, fly-ash, and organic binders such as asphalt. Stabilization/solidification is best suited for soils contaminated with metals, radionuclides, other inorganic compounds, and non- or semi- volatile organic compounds. General advantages/disadvantages of the Stabilization/solidification remedial option include:

Advantages	Disadvantages
• Reduces leachability of contaminants to address COCs >PMC	• Contaminants remain in the soil, therefore COCs >DEC are not addressed
• Relatively low cost - reagents and equipment are widely available and generally economical	• Implementation requires treatability study and CTDEEP approval process
• Technology can be used on a large variety of COCs	• Potential increase in volume of treated material
• Technology is suitable for a range of soil types	• VOCs and some particulates may be emitted during treatment
• Potentially rapid treatment process	• Long-term effectiveness may be uncertain
	• *Ex-situ* treated material requires additional handling/disposition

4.3.4 No Action

This alternative essentially precludes implementation of specific physical processes/actions to directly reduce, remove or otherwise mitigate Site contamination. However, at a minimum, other associated institutional, legal or other available mechanisms may be sufficient to secure final regulatory compliance of documented contamination with the RSRs. For example, implementation of an ELUR to restrict future Site use to non-residential could be implemented in areas where the characterization data indicates that contaminant levels associated with an AOC are below the respective I/C DEC. The No-Action alternative will be considered in the evaluation of

all of the AOCs found to encompass one or more regulated substances above applicable RSR criteria, however any AOC exhibiting contaminant levels above the I/C DEC and/or GB PMC will warrant remediation through some active means, as described above. While not directly comparable to the other types of remedial options discussed above, the "No Action" alternative yields several advantages/disadvantages that require consideration when evaluating the various remedial options for each remediation area:

Advantages	Disadvantages
• May provide a "least-cost" alternative for certain select AOCs	• Approach will require other institutional or other mechanisms to achieve compliance
• Potential reduction in timeframe to achieve regulatory compliance for suitable AOCs	• Option will not permanently mitigate specific contaminant issues associated with an AOC

4.4 SELECTION OF REMEDIAL OPTIONS FOR DESIGNATED REMEDIAL AREAS

As clearly indicated in previous sections, a large number of AOCs were identified and investigated during the recent Phase II and III investigations. AOCs were originally based on specific historical operations, Site features/structures, or physical field observations that made them suspect and warrant field investigation. As such, a large number of the AOCs have become inter-related through overlapping areas. Therefore, for purposes of clarity, the final list of AOCs that exhibited evidence of contamination at levels warranting remediation was reviewed and recategorized into "Remedial Areas" that are the focus of this RAP. As a result, a total of 20 Remedial Areas have been defined and will have to be addressed during the Site remediation. The Remedial Areas are briefly described below, along with the proposed remedial options(s) to address each and are depicted on Figures 4 and 5. A summary of the proposed remedial actions within each RA is provided in Table 2.

4.4.1 Remedial Area 1 (RA-1)

Remedial Area 1 is located along the southwestern portion of the Site in AOC-14 and is based on soil boring AOC14-B4, completed during the Phase II investigation. This boring exhibited ETPH concentrations that exceeded the RDEC, I/C DEC and the GBPMC to depths of up to six fbg. Due to GBPMC exceedances, these soils are not suitable for reuse on-site. During remedial operations, soils in this area will be excavated down to the groundwater table (Elevation -0.5 ft.) and placed in the appropriate waste stockpile area (WSA) for characterization for off-site disposal. The pre-defined RA-1 depicted in Figure 4 is approximately 400-square feet in size.

4.4.2 Remedial Area 2 (RA-2)

Remedial Area 2 is also located along the southwestern portion of the Site. It is comprised of samples collected in AOCs 14 and 22. The soils located in this area were determined to contain ETPH, PAHs and arsenic at concentrations that exceed the DEC to depths of up to six fbg. The remedial strategy for this RA is excavation. Soils will be excavated to a depth of up to three fbg (elevation 3.5) and backfilled with clean fill as well as two feet of compacted aggregate. This will render the remaining impacted soils above DEC criteria inaccessible. Soils excavated from this area are suitable for reuse either within the Central Wharf or elsewhere on-site if rendered inaccessible. The pre-defined RA-2 depicted in Figure 4 is approximately 13,400-square feet in size.

4.4.3 Remedial Area 3 (RA-3)

Remedial Area 3 is located in the southwestern portion of the Site and within the footprint of RA-2. During the Phase III investigation, one soil boring (AOC14-B14) yielded ETPH concentrations that exceeded the GBPMC. Soils were also identified to contain arsenic concentrations that exceeded the DEC. The selected remedial strategy for this area is excavation. Soils will be excavated to the water table (elevation approximately of 1.5), backfilled with clean fill, and capped with two feet of compacted aggregate. Soils exceeding the GBPMC will be transported off-site for disposal as they are not suitable for reuse on-site. The pre-defined RA-3 depicted in Figure 4 is approximately 400-square feet in size.

4.4.4 Remedial Area 4 (RA-4)

Remedial Area 4 is located along the southern portion of the Upland Area just to the south of the former repair garages. This area is based on soil samples collected from AOC-3, AOC-10, AOC-14, AOC-15, AOC-16 and AOC-21. This area exhibited ETPH, PAH and/or arsenic that exceeded both the DEC and GBPMC. This RA is proposed to be excavated to a final elevation of 2.0, backfilled with clean fill and capped with two feet of compacted aggregate. Soils excavated from this area will require off-site disposal as materials with concentrations above the GBPMC are not suitable for reuse on-site. The pre-defined RA-4 depicted in Figure 4 is approximately 12,800-square feet in size.

4.4.5 Remedial Area 5 (RA-5)

Remedial Area 5 is located on the southern portion of the Site along the northwestern portion of the Western Pier. This area is based on soil boring AOC14-B9, which was completed during the Phase III investigation. Soils collected from this boring exhibited lead concentrations above the GBPMC and arsenic concentrations above DEC at depths of up to six fbg. The selected remedial strategy for this RA is excavation to the water table (elevation of approximately -1.0). The area will be backfilled with clean fill and capped with two feet of compacted aggregate. Soils removed from this area will have to be disposed off-site due to GBPMC exceedances. The pre-defined RA-5 depicted in Figure 4 is approximately 400-square feet in size.

4.4.6 Remedial Area 6 (RA-6)

Remedial Area 6 is located along the southern portion of the Upland Area in an area between the Eastern and Western Piers. This area is based on soil borings AOC10-B4 and AOC14-B10, both of which exhibited PAH concentrations that exceed GBPMC to depths of up to two fbg. These soils will be excavated to elevation 4.0. The excavation will be backfilled with clean fill and capped with two feet of compacted aggregate. Due to GBPMC exceedances, these soils are not suitable for reuse at the Site and will need to be transported off-site for disposal. The pre-defined RA-6 depicted in Figure 4 is approximately 1,300-square feet in size.

4.4.7 Remedial Area 7 (RA-7)

Remedial Area 7 is comprised of one soil boring, AOC14-B24, which was advanced during the Phase III investigation. Soil collected from this boring exhibited leachable lead concentrations that exceeded the GBPMC. Soils in this area will be excavated to elevation 5.0 to remove soils that exceed the GBPMC and will require off-site disposal. If confirmation samples indicate that a clean bottom sample has not been obtained, the area will either be further excavated or the implementation of an Engineered Control may be put in place to render soils inaccessible. The excavation area will be backfilled with clean fill and capped with two feet of compacted aggregate. The pre-defined RA-7 depicted in Figure 4 is approximately 400-square feet in size.

4.4.8 Remedial Area 8 (RA-8)

Remedial Area 8 is located in the Upland Area to the west of the former repair garages. This area is based on soil samples collected from AOC-17 that exhibited ETPH concentrations that exceeded the RDEC. The selected remedial strategy in this area is excavation. Soils in RA-8 will be excavated to elevation 2.5. As these soils only exhibit ETPH concentrations exceeding the RDEC, these soils are considered to be suitable for reuse within the Central Wharf or elsewhere on-site. The pre-defined RA-8 depicted in Figure 4 is approximately 1,000-square feet in size.

4.4.9 Remedial Area 9 (RA-9)

Remedial Area 9 is located in the southern portion of Warehouse 1 and is comprised of soil samples collected from AOC-2. During the Phase II and III investigations, these soils exhibited ETPH and PAH concentrations that exceeded both the DEC and GBPMC to depths of up to 14 fbg. During remedial activities, RA-9 will be excavated to the water table (elevation of approximately -0.5) and transported off-site for disposal. This area will be backfilled with clean fill and two feet of compacted aggregate. This will render remaining soils inaccessible. The pre-defined RA-9 depicted in Figure 4 is approximately 2,600-square feet in size.

4.4.10 Remedial Area 10 (RA-10)

Remedial Area 10 is centrally located along the Eastern Pier. During the Phase II investigation, soil boring AOC13-B3 was advanced in this area, with samples exhibiting ETPH concentrations that exceeded the RDEC. Based on the concentration and depth at which this

exceedance was identified, no active remedial action is warranted in this area, however, the placement of an ELUR will restrict the Site use to industrial/commercial and also ensure that these soils remain inaccessible. The pre-defined RA-10 depicted in Figure 4 is approximately 400-square feet in size.

4.4.11 Remedial Area 11 (RA-11)

Remedial Area RA-11 is located in the Upland Area, just to the west of the former Administration Building. This area is based on soil sampling within AOC-20. RA-11 is based on soil boring AOC20-B5/10, which exhibited concentrations of leachable lead and/or pesticides that exceeded the GBPMC to depths of up to 30 fbg. Soils located in RA-11 will be excavated to the water table (elevation of approximately -2.5) and transported off-site for disposal. The pre-defined RA-11 depicted in Figure 4 is approximately 400-square feet in size.

4.4.12 Remedial Area 12 (RA-12)

Remedial Area 12 is located in the Upland Area along the southeastern portion of the former salt pile area. This RA is based on soil samples collected from soil boring AOC20-B11, which exhibited PAH concentrations above the GBPMC. During remediation, these soils will be excavated to elevation 10.5 and transported off-site for disposal. If confirmation samples indicate that a clean bottom sample has not been obtained, the area will either be further excavated or the implementation of an Engineered Control may be put in place to render soils environmentally isolated. The pre-defined RA-12 depicted in Figure 4 is approximately 400-square feet in size.

4.4.13 Remedial Area 13 (RA-13)

Remedial Area 13 is located in the Upland Area along the southeastern portion of the former salt pile area. This area is based on soil samples collected from borings in AOC-20 that exhibited PAHs (boring A20-B1) or leachable lead (borings AOC20-B17 and AOC20-B18) concentrations that exceeded the GBPMC. During remediation, these soils will be excavated, consisting of the top two feet around soil borings AOC20-B17/B18 and to elevation 10.5 for off-site disposal. If confirmation samples indicate that a clean bottom sample has not been obtained, the area will either be further excavated or the implementation of an Engineered Control may be put in place to render soils environmentally isolated. The pre-defined RA-13 depicted in Figure 4 is approximately 1,800-square feet in size.

4.4.14 Remedial Area 14 (RA-14)

Remedial Area 14 is also located in the Upland Area in the vicinity of the former salt stockpile. This RA is based on soil samples collected from boring AOC20-20, which exhibited an arsenic concentration in the 0.5-2.0 fbg interval that exceeded the RDEC criterion. Therefore, excavated soils from this area are suitable for reuse within the Central Wharf or elsewhere on-site. The pre-defined RA-14 depicted in Figure 4 is approximately 400-square feet in size.

4.4.15 Remedial Area 15 (RA-15)

Remedial Area 15 is located in the Upland Area along the northwestern portion of the former salt stockpile area. During the Phase II investigation, soil boring AOC20-B6 exhibited ETPH concentrations that exceeded the RDEC to a depth of elevation 13.5. However, excavated soils from this area are suitable for reuse within the Central Wharf or elsewhere on-site. The pre-defined RA-15 depicted in Figure 4 is approximately 400-square feet in size.

4.4.16 Remedial Area 16 (RA-16)

Remedial Area 16 is located in the Upland Area along the northwestern portion of the former salt stockpile area. During the Phase III investigation, soil boring AOC20-B14 exhibited ETPH and/or PAH concentrations that exceeded the DEC or GBPMC to a depth of 7 fbg. Therefore, during remediation these soils will be excavated to elevation 19.0 and transported off-site for disposal. The pre-defined RA-16 depicted in Figure 4 is approximately 400-square feet in size.

4.4.17 Remedial Area 17 (RA-17)

Remedial Area 17 is located in the Upland Area along the northwestern portion of the former salt stockpile area. During the Phase III investigation, soil boring AOC20-B23 exhibited PAH concentrations that exceeded the DEC or GBPMC to a depth of two fbg. Therefore, during remediation these shallow soils will be excavated to elevation 24.0 and transported off-site for disposal. The pre-defined RA-17 depicted in Figure 4 is approximately 400-square feet in size.

4.4.18 Remedial Area 18 (RA-18)

Remedial Area 18 is located in the Upland Area along the western portion of the former salt stockpile area. During the Phase III investigation, soil boring AOC20-B21 exhibited PAHs, lead and/or pesticide concentrations that exceeded the DEC and/or GBPMC to a depth of seven fbg. Therefore, during remediation these shallow soils will be excavated to elevation 19.0 and transported off-site for disposal. The pre-defined RA-18 depicted in Figure 4 is approximately 400-square feet in size.

4.4.19 Remedial Area 19 (RA-19)

Remedial Area 19 is located to the west of Warehouse 2. During the Phase III investigation, soil boring TRC-B10 was advanced in this area, with soil samples exhibiting ETPH concentrations that exceeded the RDEC. Based on the concentration and depth at which this exceedance was identified, no active remedial action is warranted in this area, however, the placement of an ELUR will ensure that these soils remain inaccessible. The pre-defined RA-19 depicted in Figure 4 is approximately 400-square feet in size.

4.4.20 Remedial Area 20 (RA-20)

Remedial Area 20 is located in the northeastern corner of the Site. RA-20 is depicted on Figure 5. This area was originally investigated as AOC-1 and covers an approximate one-acre area. A total of 18 soil borings and four monitoring wells were installed in this area during the Phase II/III investigations. For purposes of remedial planning, seven sub-areas (RA-20A through G) have been designated based on the nature of the contamination and planned remediation for each. Soils within this RA were found to be impacted by a range of constituents of concern, predominantly ETPH and PAHs, that exceeded the RDEC, I/C DEC and GBPMC in several locations (i.e., RA-20D and RA-20F). Further south, soils in RA-20A yielded leachable lead at concentrations exceeding the GBPMC. In addition, groundwater throughout the area exhibited ETPH impacts exceeding the SWPC; samples from monitoring well MW-15 also exceeded the SWPC for several SVOC compounds. Planned remediation will consist of a combination of soil excavation, dewatering/product removal in those excavations extending to/below the water table, and in several of the heavily-impacted areas, adjunct *in-situ* treatment to address shallow groundwater impacts. In Remedial Areas RA-20A, RA-20D, RA-20F and RA-20G, planned

excavation will extend four feet below the water table to remove heavily-impacted source material, with the goal to improve future groundwater quality in this area. In all but one of the sub-areas, excavated soils will not be suitable for reuse on-site due to the PMC exceedances and will therefore require off-site disposal. Supplemental *in-situ* treatments may be instituted to address residual groundwater impacts through installation/mixing of bulk amendments (e.g., Regenesis ORC-A) in the open excavations. Details regarding each of the seven sub-areas are provided below.

RA-20A: Lead was detected in soils exceeding the GBPMC extending to the water table (elevation 1.75). Groundwater in monitoring well MW-16 was impacted by ETPH and PAHs (but not lead) above the SWPC. Excavate soils to four feet below the water table (approximate elevation -2.5) and dispose of off-site. Remove impacted groundwater from excavation and install ORC or other bio-amendment in excavation to treat shallow groundwater. This pre-defined sub-area depicted in Figure 5 is approximately 1,500-square feet in size.

RA-20B: PAHs were detected in soils exceeding the RDEC, I/CDEC and GBPMC in soils from elevation 6.5 to 4.5. Excavate soils to elevation 4.5 for off-site disposal. This pre-defined sub-area depicted in Figure 5 is approximately 1,300-square feet in size.

RA-20C: PAHs were detected in soils exceeding the RDEC from elevation 6.5 to 4.5. Excavate shallow soils to base grade (elevation 7.0); material is suitable for reuse. If confirmation samples indicate that a clean bottom sample has not been obtained, the area will either be further excavated or the implementation of an Engineered Control may be put in place to render soils inaccessible. Soils to be reused will be properly managed to ensure that they are properly covered with the appropriate amount of clean fill material or placed within the Central Wharf. This pre-defined sub-area depicted in Figure 5 is approximately 2,000-square feet in size.

RA-20D: ETPH and/or PAHs were detected in soils exceeding the RDEC, I/CDEC and GBPMC from elevation 7.0 to the water table, where petroleum staining and odor were noted. Excavate soils to four feet below the water table (elevation -2.5) for off-site disposal. Remove impacted groundwater from excavation and install ORC or other bio-

amendment in excavation to treat shallow groundwater. This pre-defined sub-area depicted in Figure 5 is approximately 1,600-square feet in size.

RA-20E: PAHs were detected in shallow soils (elevation 9.0 to 8.0) exceeding the RDEC, I/CDEC and GBPMC. Remove soils as part of Site regrading plan. Note that this shallow material is not suitable for reuse and will require off-site disposal. This pre-defined sub-area depicted in Figure 5 is approximately 4,000 -square feet in size.

RA-20F: PAHs were detected in soils exceeding the RDEC, I/CDEC and GBPMC from ground surface to the water table at elevation -3.5. Further determination of the vertical extent of these impacts may be warranted before remediation. Sheens were noted at the water table, and groundwater in monitoring well MW-14 was impacted by ETPH and PAHs above the SWPC. Excavate soils to four feet below the water table to remove heavily-impacted material (approximate elevation -3.5) for off-site disposal. Remove impacted groundwater from the excavation and install ORC or other bio-amendment in excavation to treat shallow groundwater. This pre-defined sub-area depicted in Figure 5 is approximately 2,100-square feet in size.

RA-20G: Soils extending to the water table at elevation 1.0 appear to be compliant with the RSRs. Sheens and petroleum odor were noted at the water table. Groundwater in monitoring well MW-15 was impacted by ETPH and PAHs above the SWPC. While excavated shallow soils extending to the water table are considered suitable for reuse, heavily-impacted soil appear to reside at/below the water table, which present an ongoing source for groundwater impacts in the vicinity. Implementation of *in-situ* treatment alone is not expected to effectively remediate shallow groundwater in this area. Therefore, deeper removal of impacted soils to four feet below the water table (approximate elevation -3.0) to remove heavily-impacted material, combined with dewatering and supplemental *in-situ* treatment, is planned. This pre-defined sub-area depicted in Figure 5 is approximately 2,000-square feet in size.

4.5 REMEDIAL OPTION SELECTION RATIONALE

As indicated in Section 4.4, the planned remedial program at the Site involves a combination of active remedial measures combined with future institutional controls, to achieve regulatory compliance, as follows:

- Plan to remediate the Site to meet the GBPMC and I/CDEC, with institution of an ELUR to restrict future Site use to non-residential;

- Excavation of soils to meet the GBPMC, and DEC exceedances where necessary to ensure remaining non-compliant soils are rendered inaccessible, to provide a permanent remedial solution;

- Disposal of excavated soils that exceed GBPMC, but reuse of other Site-derived materials, including soils that exceed only DEC, for on-site restoration particularly within the planned Central Wharf;

- Allowing soils only exceeding the RDEC to remain in-place where practicable, assuming implementation of the ELUR;

- In areas where contaminated soils are excavated to the water table, implementation of gross contamination removal followed by application of suitable *in-situ* amendments to enhance natural biodegradation of contaminants, or if appropriate, institute more aggressive degradation using chemical oxidation reagents;

- Post-remedial groundwater monitoring to evaluate the efficacy of the soil remedial measures and monitor anticipated improvements in Site groundwater quality over time.

The planned remedial strategy has numerous benefits for the Project, given the other Site redevelopment construction and schedule issues, by:

- Utilizing less-restrictive I/CDEC clean-up criteria with institution of an ELUR, as allowed under the RSRs, thereby reducing remediation costs;

- Performing permanent mitigation of impacted soils that require remediation, alleviating the need for future inspection/reporting for those areas;

- Completing remedial excavation work that is compatible with other planned Site redevelopment activities, which also involves large-scale excavation/grade reductions;

- Reusing excavated Site soils on-site whenever possible, reducing potential disposal costs associated with that material, as well as avoided costs for imported backfill; and

- Utilizing the deeper excavations where shallow groundwater impacts have been documented to enable removal of gross contamination and facilitate application of *in-situ* remedial measures.

It should be noted that excavation has been proposed as the primary means to address PMC as well as DEC issues at the Site. The GBPMC applies to soils extending from surface grade to the seasonal high-water elevation. In most instances, the planned excavation in the defined Remedial Areas exhibiting PMC issues is relatively limited vertically, however in one or more areas (e.g., Remedial Area RA-20F), full extent of the area requiring PMC mitigation has not been fully established. Should any of these PMC areas warrant evaluation of an alternative remedial strategy, potential installation of an Engineered Control will be evaluated. For example, in the event the GBPMC cannot be reasonably achieved through excavation due to physical constraints or factors (e.g. excessive size area and/or depth requiring excavation, etc.), which makes excavation financially or otherwise undesirable to project stakeholders, a capping approach could be utilized. Such an approach would include the installation of an impermeable barrier as an Engineered Control above the contaminated area to inhibit the infiltration of precipitation though the contaminated media. Depending on the size and location of the cap, it is likely that the capping profile would include a sand (or otherwise suitable material) bedding layer, an HDPE liner, and a geo-composite or sand drainage layer above the liner. The HDPE liner would likely be 60-mils in thickness to meet the Project loading requirements and be equivalent to SOLMAX HDPE series, 60 mils. The geo-composite would likely be a bi-planar geonet heat-laminated on one side (top) with a nonwoven needle-punched geotextile equivalent to SOLMAX FabriNet 225 mil Geo-composite. Additionally, depending on the permeability of the overlying materials, the depth of liner installation, and the size of the area to be addressed, appurtenant drainage features such as interceptor drainage piping may be required. Further design of such an impermeable cap would be based on additional site-specific factors depending on the location, requisite size to address the full extent of the impacted area, as well as other final Site redevelopment considerations (e.g., infrastructure).

5.0 REMEDIAL CONSTRUCTION PLANNING

The following section describes the proposed procedures to be implemented in the planning, performance, and documentation associated with completion of the remedial measures described in Section 4. The unique nature of the overall Site redevelopment program includes a number of key factors that may impact the performance of the planned remedial measures in each Remedial Area location, including:

- The nature/magnitude of each planned remedial strategy for each Remedial Area;
- Designated Site location for each RA (i.e., proximity to the waterfront and surface grade relative to final design grade);
- Status of other Site redevelopment activities/improvements (e.g., demolition of existing, structures, including phasing of construction such as bulkhead restoration and new utility installations);
- Specific requirements for additional pre-remedial delineation, where necessary;
- Availability of reuse areas for suitable Site-derived materials, particularly the planned Central Wharf.

It is important to note that the actual scheduling/phasing of remedial construction at each of the designated RAs must be determined in consideration of these factors and through discussion/negotiation with the other key project stakeholders prior to mobilization. Ultimately, it is anticipated that for one or more of the issues described above the entire remedial program described in this Plan may need to be completed over several phases, potentially prior to and/or during the broader Site redevelopment program.

5.1 REMEDIAL PROGRAM CONSIDERATIONS

While this Plan has been developed to provide both the specific basis and guidance for the planned Site remediation activities, given the unique issues described above, sufficient flexibility must be afforded in the Plan. Therefore, it is essential that the following conditions be noted by the Contractor prior to actual pre-mobilization planning of the remedial activities:

1. The RAP presents preliminary design limits for each of the 20 designated RAs, however, the actual limits may be subject to revision/modification based on the adequacy of the existing Site characterization dataset. The Contractor should be alerted to the fact that in

some instances, if possible, additional delineation of a designated RA by the Engineer may be prudent to facilitate and/or expedite the actual remedial construction work. In such instances, collection of sufficient supplemental delineation samples may eliminate the need for iterative collection of post-excavation confirmatory sampling, substantially expediting completion of the remedial measures in that location. Thus, in some areas, the final limits of remediation may differ from those presented in Figures 4 and 5 of this Plan.

2. Due to the unique Site redevelopment plan, which involves substantial reduction of grades in the northern/central portion of the Site, as well as the planned reuse of large quantities of Site-derived earthen materials (i.e., excavated soils and dredged sediment) on-site, material management and reuse/disposal is likely to be a significant consideration in performance of the remedial measures.

3. Excavated/dredged materials generated as a result of remediation may be considered for reuse/backfill elsewhere on-site if deemed to be suitable from a geotechnical as well as chemical quality standpoint. In accordance with applicable environmental regulations, and as previously approved in concept by CTDEEP, in general, non-hazardous materials that exhibit constituent concentrations that exceed only the DEC but not the GBPMC, may be considered for reuse. Material only exceeding the RDEC can be reused on-site without additional restriction (i.e., with institution of an ELUR), however material exceeding the I/CDEC will require additional controls (capping) to render that material inaccessible. Materials excavated to address contaminants exceeding the PMC will not be considered for reuse but will be managed for ultimate off-site disposal at a ConnDOT-approved, licensed facility.

4. Material excavated to address contaminants exceeding only direct exposure criteria will also require tracking to document where/how that material is reused. However, if deemed otherwise unsuitable or surplus, it will require off-site disposal.

5. For excavated materials suitable for reuse on-site (i.e., only DEC exceedances), sequencing of Remedial Area excavations may be guided by availability of reuse areas, or stockpile space. On-site stockpile facilities will be necessary to accommodate temporary storage of unsuitable or surplus material pending characterization for off-site disposal.

6. Provisions for dewatering will be required for several Remedial Areas at a minimum (e.g., Remedial Areas RA-2, RA-9 and RA-20) with either on-site treatment/discharge under a CTDEEP-approved permit or off-site disposal.

As discussed in previous sections, the designated Remedial Areas have been defined based upon soil and groundwater sampling across the Site during two extensive phases of investigation. In the majority of instances, excavation has been selected as the most effective remedial option to permanently mitigate the contamination associated with those areas. The Remedial Area delineations presented in Figures 4 and 5 plans have been based on the available Phase II/III datasets, however the final limits of each excavation will still require the collection and laboratory analysis of additional soil samples (i.e., confirmatory samples) to confirm that the full limits of each Remedial Area have been achieved. Collection of additional soil samples before initiation of the planned excavation activities can facilitate the remedial construction process by: (1) enabling better definition of the proposed excavation limits to avoid construction delays for collection, analysis, and interpretation of confirmatory samples where additional excavation may be required to achieve complaint endpoints; and (2) generating compliant endpoint samples which can be used as *de facto* confirmatory samples to verify compliance. Thus, such an approach has the potential to expedite the actual construction process for a Remedial Area and, potentially, to reduce costs associated with over-excavation and disposal of soils.

At the time of the development of this RAP, it is unknown what the final Project schedule will be and when the actual remediation work may be performed. In the event that sufficient time is available before mobilization, it would be beneficial to perform a focused pre-remedial investigation to better define/characterize the planned areas of remedial excavation. The program would be designed to address significant data gaps where the magnitude of the planned remediation warrants. The investigation scope of work would identify specific step-out/step-in sample locations, the planned sample interval depths in each location, and the analytical regimen for those samples. Where appropriate, those specifications would be detailed with the intent to define the extent of remediation and to generate, where possible, properly qualified confirmation sample results that can be used in the final Site verification report.

5.2 PRE-MOBILIZATION PLANNING ACTIVITIES

The following activities will be initiated in preparation for mobilization to the Site for performance of the planned remediation.

5.2.1 Permitting/Approvals

The following permits, reviews, and approvals from public agencies (e.g., CTDEEP) are anticipated for Site remediation (as appropriate) and will require completion of associated applications prior to mobilization:

- CTDEEP review of this RAP, to secure concurrence of the planned remediation strategies prior to final redevelopment of the Site, for ultimate verification in accordance with the Connecticut Property Transfer Act;
- CTDEEP *General Permit for Discharge of Groundwater Remediation Wastewater Directly to Surface Water;*
- CTDEEP *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities;*
- *In-Situ Groundwater Remediation: Enhanced Aerobic Biodegradation* (DEP-REM-GP-001) in the event Regenesis Oxygen Releasing Compound (ORC) or similar amendment to treat shallow groundwater is selected based on final evaluation of Remedial Areas (e.g., RA-20);
- *In-Situ* Remediation: Chemical Oxidation (DEP-REM-GP-002) in the event installation of chemical oxidation to treat shallow groundwater is selected based on final evaluation of Remedial Areas; and
- CTDEEP *General Permit for Contaminated Soil and/or Sediment Management (Staging and Transfer).* This general permit expired in fall of 2018 and it is unknown when a new permit may be authorized. Further, the actual quantities of the materials that may require on-site management at any given time is not presently known. However, during the remediation program, all temporary soil and sediment stockpiling activities will be conducted in general accordance with the requirements set out in this permit to ensure implementation of best management practices for these materials prior to off-site shipment for disposal, or on-site reuse.

5.2.2 Contractor Submittals

The selected Remedial Contractor will be required to provide submittals prior to initiating remedial work at the Site. These submittals will be reviewed by TRC and ConnDOT for completeness prior to approval. The Remedial Contractor will also be responsible for preparing

applications and securing any permits from local and state agencies as required for the performance of the work. The Contractor will be required to submit copies of the authorized permits to ConnDOT prior to initiating Site work.

5.2.3 Public Notification

Notification of the intent to remediate was be made in accordance with the CGS Section 22a-134a(g)(1). Copies of the notifications are be attached to the *Remedial Action Plan Transmittal Form* that accompanies will accompany the Final Remedial Action Plan submittal to CTDEEP upon the close of the required 45-day Public Notice Period. TRC received Public Comments from one party via email on November 8, 2020 and by Priority Mail on November 10, 2020. These comments have been addressed and are attached in Appendix F.

5.2.4 Health and Safety Planning

A site-specific Health and Safety Plan (HASP) for the remediation activities at the various areas covered by this RAP will be developed by the Contractor. A copy of the HASP will be provided to the subcontractors hired to complete the remediation activities. Prior to the commencement of any work activities, the Engineer will review the HASP to ensure that it is generally adequate to address the potential hazards associated with the planned scope of work.

5.2.5 Dust Control/Air Monitoring

Need for dust monitoring for total particulate emissions and fugitive dust within work areas will be assessed prior to intrusive remedial activities to reduce potential exposures to on- and off-site receptors during remediation. In the event remedial construction will occur as part of the larger Site redevelopment construction program, dust control measures will be conducted in accordance with those Project plans. If warranted, such as in the event sustained visible dust is observed during intrusive work within an RA, monitoring may be conducted continuously using real-time measurement equipment. The Remedial Contractor will be required to develop an Air Monitoring and Dust Control Plan that will include provisions to:

- Limit dust exposures for site workers; and
- Limit potential exposures to off-site receptors.

The air monitoring plan will include action levels at which the Remedial Contractor will be required to implement or to increase dust control measures. Site contaminant concentrations in air will be calculated using documented soil concentrations. If monitoring is conducted, results for the dust monitoring will be reviewed regularly by the Engineer and the Remedial Contractor to evaluate the effectiveness of the dust control measures employed. At a minimum, when needed, dust controls will include the use of polyethylene sheeting to cover temporary stockpiles, and active dust controls, such as wet spraying, to minimize fugitive dust emissions.

5.2.6 Site Mark-out/Utility Clearance

Prior to work beginning in a Remedial Area, TRC will oversee survey and mark-out of the planned RA(s) by a Connecticut-licensed Surveyor. It should be noted that given the potential phased nature of these areas, the survey/mark-out step may require multiple iterations due to anticipated interference/disturbance by other Site activities. Following the survey/mark-out, available utility maps will be reviewed with facility personnel, and then the subject RAs will be further evaluated for presence/location of utilities by a private utility location subcontractor. All detected subsurface utilities/structures will be documented. *Call Before You Dig* (CBYD) will then be notified at least 72-hours prior to the initiation of any excavation activities.

6.0 PLANNED CONSTRUCTION ACTIVITIES

This section describes the specific activities that will be implemented on-site during performance of the planned remediation at each of the designated RAs upon mobilization to the Site. In general, work at each RA will involve: (1) clear mark-out of the planned excavation with explicit guidance for the planned depth of excavation (note that in several Remedial Areas there are more than one target depths that are specified within the defined limits of excavation); (2) temporary stockpiling or direct hauling of excavated material to a pre-designated Site reuse area; (3) collection/analysis of confirmatory soil samples; (4) additional excavation if warranted to achieve regulatory endpoints; and (5) institution of additional treatment (e.g., amendments) where designated. Backfilling may be performed as a temporary measure, if required, in anticipation of final backfill/compaction as part of the Site redevelopment restoration. It should be noted that, at the time of the preparation of this RAP, it is understood that the final backfill/compaction of excavated Remedial Areas will be conducted under direction of the Site redevelopment Contractor. Details regarding each of these key construction steps are presented below.

6.1 PRELIMINARY REMEDIAL AREA DEMARCATION

Prior to work at a designated RA, the areal limits of that planned excavation will be clearly marked on the ground surface with survey stakes. All active and inactive utilities in the vicinity of the area will also be clearly marked to alert the Contractor as to their location, depth (if known), and orientation relative to the planned excavation. All mark-out shall be performed by a Connecticut-licensed surveyor under direction of the Engineer. Due to the significant extent of planned excavation and demolition across the Site there is a potential to lose visual reference points during the remediation project, therefore each defined/marked area will also be clearly labelled with a fixed sign and/or ground markings. Clear limits of the final excavation(s) shall be maintained until all remedial work has been completed, the area restored in accordance with this Plan, and said completion has been documented and indicated to the designated Site redevelopment coordinator.

6.2 EROSION AND SEDIMENTATION CONTROLS

Prior to initiating soil excavation or other intrusive work, erosion and sedimentation controls will be installed around the designated work area in accordance with Project permits and

standard practices, including the *Connecticut Guidelines for Erosion and Sediment Control*. The controls will also be inspected and maintained throughout construction and removed following final restoration of the disturbed surfaces and demobilization of equipment from that area.

Active catch basins in the vicinity of the planned excavation will be protected with hay bale dikes or filter fabric material which will be installed beneath the grate to prevent run-off of excavated materials into the stormwater drainage system. Silt fences and/or staked hay bales will be installed at the edges of planned areas to be disturbed during remediation, as necessary, to prevent soil movement from within the work area. In the case that active excavations will extend deeper than four feet below grade for longer than one day, temporary fencing and/or barricades will be placed around open excavations to prevent unauthorized access.

6.3 EXCAVATION AND MATERIAL MANAGEMENT

In general, excavated soil will be either direct-loaded to waiting vehicles for transport to the designated WSA, or relocation to the selected reuse location on-site (for suitable reuse material). In the event a suitable reuse location is not immediately available, another acceptable pre-prepared laydown area (see below) may be established, pending approval by the Project Engineer for temporary stockpiling until the reuse area becomes available. Due to the breadth of the remediation activities and the likely presence of other Site construction activities and/or specific regulatory requirements associated with the remediation, it is imperative that all soil movement to/from the appropriate WSA, other temporary stockpile area(s), and final reuse areas is thoroughly documented to ensure that tracking of all material excavated from each RA can be verified at a later time.

Soils will be removed to the specified depth limits established in this Plan and as designated in the construction drawings that will be prepared for the RAs. Heavy equipment that can effectively access the planned limits of excavation will be used. In most cases it is expected that the work can be completed using excavators and/or front-end loaders, however the selected equipment is expected to be suitably sized to efficiently excavate the defined material without causing substantial over-excavation. It should be noted that additional excavation may be required within a defined Remedial Area to establish a “clean corridor” for subsequent installation of new utility/infrastructure by the redevelopment Contractor. Detailed design plans (e.g., cross-sections)

will be prepared for those RAs where such supplemental excavation for new utilities will be necessary.

In RAs where sufficient pre-remedial sampling has established final confirmatory vertical and horizontal limits, the excavation will be resurveyed to confirm its completion prior to backfilling. In other instances, confirmatory soil sampling will be required to verify the excavation has achieved the requisite regulatory endpoints. In these cases, the Engineer shall collect the necessary samples for submission to the selected analytical laboratory for analysis. Once the sample results are received from the lab and reviewed by the Engineer, a determination will be made as to whether additional excavation is required. This confirmation sampling process may require several iterations, and during that time, the excavation shall remain open. Appropriate safeguards, described above, shall be installed to preclude unauthorized personnel from entering the excavation during that time.

6.4 CONFIRMATORY SAMPLING

Each RA must be fully remediated to meet the requirements of the CT RSRs, in accordance with the Connecticut Property Transfer Act and, ultimately, to support the final Site Verification. Therefore, the establishment of an adequate confirmatory sample dataset for each area is necessary. Depending on the adequacy of the Phase II/III dataset and time allowances prior to construction, certain RAs may be further delineated/characterized to facilitate remediation. If additional delineation cannot be completed to fully define the limits of excavation prior to redevelopment activities, collection of confirmatory samples will be required during remediation, which may require periodic cessation of excavation pending collection of samples/receipt of lab results to confirm attainment of compliant samples. Proposed procedures for confirmation sampling in these situations are described in more detail below.

6.4.1 Remedial Areas Outside of Upland Area (RA-1 through 10, and RA-20)

The majority of designated RAs will require confirmatory sampling through either defined end-points determined during pre-remedial characterization (described in Section 5.1) or standard post-excavation confirmatory sampling. The following confirmation sampling procedures apply for all of the Remedial Areas except RAs 11 through 18, which are located within the Upland Area and will be subject to significant grade reductions.

Confirmation samples will be collected by the Engineer and submitted to a Connecticut-certified laboratory for analysis. The results of the confirmation sampling will indicate whether additional soil removal is required or if excavation is complete, thereby allowing restoration of that RA. Confirmation sampling will involve sampling of the excavation sidewalls at a defined frequency to ensure that the lateral extent of the impacts have been removed. In some cases, the sampling will also involve sampling of the base of the excavation, when necessary, to ensure that the lower limits of impacts have been reached. However, in most cases, bottom sampling will not be required, particularly for those excavations that are designated to extend to the water table and where vertical limits have been defined.

In general, large areas (i.e., greater than 400-square feet) that require bottom sampling will be demarcated in a grid prior to sampling and collected from the base of the excavation at a frequency of one sample per 200-square feet, where required. For sidewall sampling, confirmation samples will be collected at a frequency of one sample per 50 linear feet of excavation. Typical sample intervals will be two-foot, collected at depths that reflect those impacted depth intervals that were the basis for remediation in that Remedial Area. All samples will be located using a Global Positioning System (GPS) having sub-meter accuracy. Samples will be analyzed only for those COCs that exceeded applicable criteria in that RA.

Confirmation samples will be compared to the I/CDEC and GBPMC. Where appropriate, total analyte concentrations will be compared to the I/CDEC to determine compliance with direct exposure criteria. For soils to be evaluated for compliance with the GBPMC, preliminary evaluation may be made for metals and PAHs to determine if the concentration exceeds 20 times the GBPMC. If appropriate, SPLP PAH concentrations may be compared to ten times the GWPC.

Where one or more constituent exceeds its respective RSR criterion in a confirmatory sample, the Engineer will direct further excavation of the target sidewall and/or bottom. The extent of each excavation "step-out" is not specified in this Plan and will be determined by the Engineer based upon various factors and available information at the time of the work.

6.4.2 Remedial Areas Within Upland Area (RA-11 through RA-18)

Remedial Areas RA-11 though RA-18 are located in the Upland Area, which will be subjected to substantial grade reductions during Site redevelopment. For practical reasons, it is

anticipated that these areas will need to be excavated during, and as part of, the overall Site redevelopment construction in this portion of the Site. Thus, traditional confirmatory sampling of these areas may provide little benefit for purposes of regulatory closure (i.e., all of the surrounding soils will be removed regardless), and further, could likely delay construction in that area. Within RAs that involve only shallow excavation to achieve RSR compliance, excavation and confirmatory sampling may be performed as described above. In instances where deeper remedial excavation is dictated (i.e., RA-13), remediation will likely require multiple phases of excavation/sampling as the entire Upland Area is lowered. Given the uncertainties regarding the timing/sequencing of the remediation program versus other Site construction, an alternative sampling strategy to evaluate the materials surrounding the individual RA limits is proposed, which will confirm that the limits of the excavation have been effectively achieved, as well as determine if the surrounding material is suitable for reuse on-site (i.e., does not exceed the GBPMC). In these instances, materials excavated immediately outside of the defined limits of the RA may be temporarily stockpiled and sampled for those COCs that exceeded applicable criteria in the subject RA. Sample frequency would be dictated by the quantity of stockpiled material, but a frequency of one sample for every 500 cubic yards of material is envisioned. Sample data interpretation will be as described in Section 6.4.1.

6.5 *IN-SITU* GROUNDWATER TREATMENT

As indicated in Section 4.4, several of the documented RAs exhibited the presence of groundwater impacts within their defined limits. These impacts consisted of physical evidence of contamination (e.g., staining, odors, sheens, and/or elevated PID measurements), as well as analytical data confirming groundwater impacts above applicable RSR criteria. Groundwater impacts, where encountered, appeared to be primarily petroleum-related (ETPH and/or PAHs), particularly in RA-20 (Sub-areas RA-20A, D, F, and G). It is expected that removal of heavily-impacted soils in such areas may improve groundwater quality in their vicinity. However, additional measures involving proven *in-situ* treatment should assist in further improving groundwater quality both in the vicinity of those RAs as well as downgradient. Therefore, focused application of suitable *in-situ* amendments, designed to target organic contaminants, is potentially planned in these RAs.

Final selection of the appropriate treatment amendments will be based on communications with several treatment vendors, including Regenesis, a proprietary distributor of Oxidation Reduction Compounds (ORC) and other related formulations that produce oxygen to enhance aerobic bio-degradation of organic contaminants, and PeroxyChem which distributes *in-situ* chemical oxidation (ISCO) amendments. Selection of the best-suited amendment will be based on a number of factors, including:

- Proven effectiveness for treating petroleum/PAH contamination;
- Dosage required to effectively treat the defined area and contaminant levels;
- Availability of a suitable general permit to secure rapid CTDEEP approval for treatment; and
- Ease of installation in both open excavations (bulk application) and injection from the ground surface, if conditions warrant.

In those areas where soils are to be excavated to the depth of or below the water table to address soil GBPMC exceedances (and if groundwater is encountered during excavation) limited dewatering will first be performed to remove any grossly-impacted standing water in the excavation. Removal of any residual floating product, sheens, and dissolved-phase contaminants is expected to improve conditions prior to installation of the treatment medium, by reducing the contaminant loading that will ultimately require degradation. Accumulated wastewater will be either transported off-site in bulk to a licensed treatment facility or treated on-site under a CTDEEP discharge permit.

Following excavation and dewatering activities (where applicable), the remedial contractor will be directed to install the bulk reagent at the dosage specified by the reagent vendor, using excavation equipment to emplace and mix the reagent into the saturated soils across the entire bottom of the excavation. Upon completion of the installation, restoration can commence as appropriate, as in other RAs.

6.6 EXCAVATION BACKFILLING/RESTORATION

Upon completion of all necessary excavation and confirmatory sampling, the Engineer shall so document to the Contractor in writing, that the excavation can be backfilled or otherwise restored as indicated in the Plan. Given the rigorous structural/loading requirements of the final Project design it is anticipated that final backfilling/restoration may be conducted by the Site redevelopment Contractor. Backfilling and regrading will be done with either (1) suitable soil/fill

from on-site sources, or in the event sufficient suitable material cannot be obtained on-site at the time of restoration, (2) from ConnDOT-approved off-site borrow sources. A suitable geotextile warning layer will be installed prior to backfilling in those RAs that rely on the overlying fill/compacted aggregate to achieve compliance with the RSRs (i.e., rendering soils inaccessible). High-visibility synthetic material (e.g., polyethylene snow fencing or other suitable material) shall be installed to alert any future excavation of the presence of potentially contaminated soils beneath. Unless otherwise indicated by the Engineer, RA backfill shall not contain polluting substances at concentrations that exceed I/CDEC or the GBPMC. Backfilling and compaction shall be conducted in accordance with the Site preparation specifications established under the Site redevelopment project. Given the final design specifications for a two-foot compacted aggregate layer across the entire Site, the final compacted backfill elevation will be made consistent with the Site's final grade at each specific RA, with appropriate surface restoration to minimize fugitive dust emissions or erosion pending final Site restoration.

The final lateral and vertical extent of the soil excavations shall be surveyed prior to backfilling. Final surface grades will be surveyed following the completion of restoration at each Remedial Area to ensure it meets the design requirements for final Site restoration. All survey work will be performed by a Connecticut-Licensed Land Surveyor and shall comply with A-2 standards.

6.7 SOIL MANAGEMENT

As indicated in previous sections, a variety of earthen materials will ultimately be generated during redevelopment of the Site, including that generated during remedial/ reconstruction excavation activities, including:

- Excavated soil from Remedial Areas due to exceedances of the I/C DEC;
- Excavated soil from RAs due to exceedances of the GBPMC;
- Other polluted soils with exceedances of the RDEC;
- Surplus soils of unknown quality excavated outside of the RAs; and/or
- Dredge sediments containing low levels of regulated substances.

The planned Site remediation scope of work comprises a small component of the overall Site redevelopment project, which involves large-scale excavation/grade reduction of the Upland portion of the Site to establish an essentially consistent grade at between elevation 7.5 to 9.0 feet. In addition, construction of the new Central Wharf will require a large quantity of fill material (roughly 400,000-cubic yards) for its construction. Therefore, management of translocated soils and sediments constitutes a key component of the overall project, both in terms of physical construction as well as associated costs. Thus, the management of soils generated as a result of the planned remedial activities are another aspect that can impact both the performance of the redevelopment project as well as the costs. To reduce material disposal costs and provide acceptable material for reuse on-site in lieu of off-site borrow material, soil management will be evaluated for each RA at the time of their execution. Where appropriate, the excavated material will be assessed to determine if: (1) it is of suitable quality for reuse on-site, and (2) a suitable place to reuse that material exists at that time. It has already been established that, in general, any material determined to contain COCs exceeding the GBPMC is considered to be unsuitable for reuse on-site and shall be disposed at an off-site licensed facility. However, material that contains COCs at concentrations above the I/C DEC may still be considered for reuse on-site as long as it is ultimately rendered inaccessible. Timing of the remediation and the geotechnical properties of that material may dictate whether the material can be reused. Any materials that are not suitable for on-site reuse will be disposed at an off-site facility, similar to other unsuitable material. Regardless of the material classification, all materials excavated from the RAs must be accurately documented and tracked as to their origin, quantity, and final disposition, on- or off-site.

6.8 WASTE CHARACTERIZATION

Under the Site redevelopment program, waste soils generated from RAs due to the PMC exceedances are considered unsuitable for reuse on-site and will require off-site disposal following adequate characterization. In addition, surplus materials shall also be managed for off-site disposal. Final disposal locations will be determined based upon the nature of the material, and the availability of suitable disposal facilities and their capacities. If the material can be pre-characterized in-place (i.e., within the RA prior to excavation) and pre-acceptance secured by the designated disposal facility, that material can be direct-loaded from the excavation to the transport vehicle, for immediate shipment to the facility. In all other instances, the excavated material will

be transferred to the designated temporary WSA for characterization and preparation of associated paperwork (i.e., waste profile, shipping papers, etc.) before it can be loaded and shipped to the disposal facility.

Excavated soils will be characterized to the satisfaction of the Engineer and the selected disposal facility using either existing analytical data, additional *in-situ* sample results, or samples of the stockpiled materials, prior to removal from the Site. Sampling frequency and the analytical regimen for stockpile characterization samples will be based on the specific requirements provided by the selected facility. The characterization data will be provided to the Contractor for preparation of requisite waste profile documentation, for submission to the selected facility. A ConnDOT representative (or other ConnDOT authorized designee) will sign as Generator on the profile documentation as well as all shipping papers (manifests, bills of lading, etc.). Once the necessary acceptance by the facility is received, arrangements for shipment of the soils may proceed. The treatment/disposal facility must provide documentation of receipt and treatment or disposal of the waste materials to ConnDOT.

6.9 EQUIPMENT DECONTAMINATION

Decontamination areas will be constructed in proximity to each excavation location or in a centralized area for adjacent RAs. All equipment that comes into contact with contaminated soils or sediments will be decontaminated prior to leaving the Site using a steam cleaner, power washer, or other effective means. Dry decontamination of affected areas should be performed between the excavation of RAs to remove gross soil impacts, if present. Decontamination wastewater will be containerized in drums or other suitable bulk containment for accumulation, pending off-site disposal. Containerized wastewater must be protected from freezing in colder weather by removal when full (drums) or through installation of heat trace or immersion heating systems.

6.10 POST-REMEDIATION GROUNDWATER MONITORING

Following completion of the planned remediation activities, a groundwater monitoring well network will be installed across the Site to provide for required post-remediation monitoring. It is unlikely that the majority of the current on-site monitoring wells will be suitable for future monitoring due to:

- Damage/loss sustained during construction;
- Inappropriate location to adequately assess groundwater conditions associated with former Remedial Areas; and/or
- Well construction is non-compliant with Site redevelopment requirements (e.g., surface loading).

It is understood that any remaining or newly-installed wells will need to meet specific structural requirements that are consistent with the Site redevelopment designs (i.e., designed/constructed to meet a minimum bearing capacity of 3,000 pounds per square foot). A proposed monitoring well network (as well as proposed construction details) will be submitted for review by the appropriate Project stakeholders to secure pre-approval regarding construction and location. Every effort will be made to locate wells outside of anticipated high-traffic areas. If possible, the new network will include for permanent sampling systems (e.g., dedicated bladder pumps and tubing systems) to facilitate sampling and minimize interruption of ongoing Site operations. The final monitoring plan will be provided to key Project stakeholders prior to implementation.

7.0 DOCUMENTATION AND REPORTING

7.1 FIELD NOTES

The Remediation Field Inspector will maintain a daily log of on-site activities. That log will include, but not be limited to, the following information:

- Daily health and safety meetings;
- Personnel and equipment present on-site;
- Field procedures and observations of Site activities;
- Field screening and field test kit results;
- Progress of excavation, drilling, or injection actions;
- Detailed tracking of excavated soils, including materials directed to the WSA for disposal and materials being reused on-site;
- Field sampling information, including sample locations, selection criteria, sample designations, analyses requested, and sample handling; and
- Documented communications initiated or received regarding the Project.

7.2 PHOTOGRAPHS

Photographs will be taken of representative activities, such as excavation, soil sampling, well drilling and construction, and material stockpiling. The final extent of each completed Remedial Area excavation will also be photo-documented. Copies of selected photographs will be included in the final Remedial Action Report (RAR).

7.3 SURVEY

The location/extent of all excavation and confirmation sample locations, *in-situ* treatment areas, and installed monitoring well locations will be documented using a GPS unit with sub-meter accuracy or by a licensed surveyor. Excavation and trenching depths will be determined by measuring from the ground surface to the base of the excavation using a commercial measuring device (tape or survey rod), to confirm the Contractor's surveyed measurements. The final report will include documentation of the extent and depth of the excavations and well locations. The top

of the casing for recovery or monitoring wells will be determined by surveying versus an established Site benchmark for future reference.

7.4 Quality Assurance/Quality Control

Data collected during the soil and groundwater investigations are intended to evaluate the current contaminant concentrations for the purpose of creating a soil and groundwater remedial strategy. Based upon the past use of the property and historical generation of hazardous waste, the property was deemed to be an Establishment as defined in the Connecticut Transfer Act Section 22a-134 and thus, is subject to the requirements of the Connecticut RSRs. The overall quality assurance objective for laboratory analysis of soil samples is to provide a laboratory Quality Assurance/Quality Control (QA/QC) program that is sufficient to ensure that requisite data quality objectives are achieved. The data collected from the Site remedial program will be subjected to the Reasonable Confidence Protocols (RCP) (CTDEEP, 2010b) as well as additional data quality assessment and data usability evaluations conducted in accordance with the CTDEEP's *Laboratory Quality Assurance and Quality Control Data Quality Assessment (DQA) and Data Usability Evaluation (DUE)* (CTDEEP, 2010c). QA/QC procedures for the remediation program are described below.

7.4.1 Measurement Quality Objectives

Precision is the agreement among a set of replicate measurements without consideration of the "true" or accurate value (i.e., variability between measurements of the same material for the same analyte). Precision is measured in a variety of ways including statistically, such as calculating variance or standard deviation. Field work and laboratory precision will follow the precision guidelines laid out in the CTDEEP *Laboratory Quality Assurance and Quality Control Guidance Reasonable Confidence Protocols (RCP) Guidance Document,* dated November 2007 and revised December 2010 (CTDEEP, 2010b).

Field precision is assessed through the collection and measurement of field duplicates (one extra sample in addition to the original field sample). Field duplicates will be collected at a frequency of one per twenty investigative samples per analytical parameter for each environmental medium sampled. Precision will be measured through the calculation of relative percent difference (RPD). The resulting information will be used to assess sampling and analytical variability. Field

duplicate RPDs must be <30% for aqueous samples and <50% for solid samples. These criteria apply only if the sample and/or duplicate results are greater than five times the reporting limit; if both results are less than five times the reporting limit, the criterion will be doubled.

Laboratory precision will be assessed through the analysis of matrix spike/matrix spike duplicate (MS/MSD) samples and/or field duplicates. MS/MSD samples will be performed at a frequency of one per twenty investigative samples per matrix per parameter. Laboratory duplicate samples will be performed at a frequency of one per twenty investigative samples per matrix per parameter.

Accuracy is the closeness of agreement between an observed value and an accepted reference value. The difference between the observed value and the reference value includes components of both systematic error (bias) and random error. Accuracy in the field is assessed through the adherence to all field instrument calibration procedures, sample handling, preservation, and holding time requirements, through the collection of equipment blanks prior to the collection of samples for each type of equipment being used, and through the use of trip blanks with each shipment of samples for VOC analysis.

Laboratories assess the overall accuracy of their instruments and analytical methods (independent of sample or matrix effects) through the measurement of "standards," materials of accepted reference value. Accuracy will vary from analysis to analysis because of individual sample and matrix effects. In an individual analysis, accuracy will be measured in terms of method blank results, the percent recoveries (%Rs) of surrogate compounds in organic analyses, or %Rs of spiked compounds in MSs and/or MSDs and/or Laboratory Control Samples (LCSs) in all analyses. This gives an indication of expected recovery for analytes tending to behave chemically like the spiked or surrogate compounds. Upon selection of a laboratory for this project, the laboratory will be asked to provide their accuracy control limits.

Representativeness is a qualitative parameter which expresses the degree to which data accurately and precisely represent either a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition within a defined spatial and/or temporal boundary. To ensure representativeness, the sampling locations have been selected to provide coverage over a wide area and to highlight potential trends in the data. Representativeness in the field is dependent upon the proper design of the sampling program and will be satisfied by

ensuring that the sampling plan is followed, that proper sampling, sample handling, and sample preservation techniques are used, and the use of field screening to allow for the collection of more samples in a specified area. Representativeness in the laboratory is ensured by using the proper analytical procedures, appropriate methods, and meeting sample holding times.

Completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under normal conditions. "Normal conditions" are defined as the conditions expected if the sampling plan was implemented as planned. Field completeness is a measure of the amount of: (1) valid measurements obtained from all the measurements taken in the project, and (2) valid samples collected. The field completeness objective is greater than 90 percent. Laboratory completeness is a measure of the amount of valid measurements obtained from all valid samples submitted to the laboratory. The laboratory completeness objective is greater than 95 percent.

Comparability expresses the confidence with which one data set can be compared to another. Field comparability is dependent upon the proper design of the sampling program and will be satisfied by ensuring that the sampling plan is followed and that proper sampling techniques are used. Maximization of comparability with previous data sets is expected because the sampling design and field protocols are consistent with those previously used. Comparability in the laboratory is expected due to the use of recognized EPA or equivalent analytical methods and the reporting of data in standardized units.

Sensitivity is the ability of the method or the instrument to detect the contaminants of concern at the level of interest. Project reporting limits (RLs) will be based on the lowest concentration calibration standard for organic parameters and the analysis of a low-level standard for metals analyses, as required by the analytical methods. The laboratory will utilize RCP methods, which should ensure that all laboratory RLs meet the Connecticut RCP and the most stringent levels of the applicable CT RSRs. For samples analyzed for waste characterization purposes, the RLs must meet the RCRA limits for hazardous waste determination (defined at 40 CFR 261.24) as well as the designated disposal facility's requirements.

7.4.2 Field Quality Control Samples

Field QC samples will include equipment blanks, field duplicates, MS/MSDs, cooler temperature blanks, and trip blanks.

Equipment Blanks will be collected in order to determine the cleanliness of sample collection equipment. Equipment blanks will consist of pouring analyte-free water over decontaminated sampling equipment into laboratory-provided containers and will be used to check for procedural contamination at the Site that may cause sample contamination and to ensure that the decontamination procedure has been adequately carried out. Equipment blanks will be collected from equipment that is used for sample collection. One equipment blank will be collected for each type of equipment used, each day a field decontamination event is conducted. Equipment blanks will be collected at the beginning of the day's sampling event and will accompany the samples collected that day. Equipment blanks will be submitted for the same parameters as the associated sample matrix.

Field Duplicates are an additional aliquot of the same sample submitted for the same parameters as the original sample. Field duplicates will be used to assess the sampling and analytical reproducibility. The procedure for collecting field duplicate samples consists of alternating the collection of the sample between the sample collection bottle and the duplicate bottle. Field duplicates will be submitted at a frequency of one per twenty investigative samples for each sampled medium.

MS/MSDs are an additional aliquot of the same sample submitted for the same parameters as the original sample. However, the additional aliquot is spiked with the compounds of concern. Matrix spikes provide information about the effect of the sample matrix on digestion and/or measurement methodology. MS/MSDs will be submitted at a frequency of one per every twenty investigative samples per matrix for each parameter.

Temperature Blanks for sample coolers consist of a laboratory-supplied sample container filled with non-preserved water (potable or distilled) and are included in all coolers. The laboratory uses these temperature blanks to ensure that proper preservation of the samples has been maintained during sample shipment. The temperature of these blanks must be 4º Celsius ±2º to demonstrate that proper preservation has been maintained. The laboratory records the results of

the temperature blanks on the chain-of-custody immediately upon receipt of the samples at the laboratory, prior to inventory and refrigeration.

Trip Blanks are supplied by the laboratory and will consist of pre-preserved vials containing methanol. Trip blanks samples will be submitted to the laboratory with every cooler containing VOC soil samples and will only be analyzed for VOCs. Trip blanks will be used to evaluate contamination introduced during shipment.

7.5 POST-REMEDIATION REPORT

A Remedial Action Report (RAR) will be prepared by the Engineer following completion of all field work associated with the Remedial Program, other than post-remediation groundwater monitoring. The report will rely on compilation of all analytical data confirming that the removal action was complete and receipt of certifications of treatment/disposal for all materials shipped off-site for disposal. The RAR will include the following primary information:

- A description of field procedures;
- Field sample screening data;
- Verification (confirmatory) sample locations and analytical results;
- A photographic record of excavation and backfilling activities;
- A photographic record of any *in-situ* or other supplemental treatment activities.
- Figures showing the extent of the excavations, areas subjected to *in-situ* treatment, or other related remedial actions; and
- Copies of all supporting documentation.

8.0 REFERENCES

1. *Phase I Environmental Site Assessment, State Pier, New London, Connecticut*, prepared by Metcalf & Eddy, Inc., July 1992.

2. *Bulk Sample Inspection Report, State Pier Buildings, New London, Connecticut*, prepared by EnviroMed Services, Inc., November 1992.

3. *Draft Focused Site Investigation Report for State Pier, New London, Connecticut*, prepared by EA Engineering, Science and Technology, May 1994.

4. *Task 210 Surficial Site Investigation, Preconstruction Environmental Investigation, State Pier Parcel 1 North, New London, Connecticut*, prepared by Atlantic Environmental Services, Inc., December 1994.

5. *Task 220 Exploratory Site Investigation, Reconstruction Pier Apron – East Side, Connecticut State Pier, New London, Connecticut*, prepared by Atlantic Environmental Services, Inc., May 1995.

6. *Task 120 Preliminary Site Evaluation, Central Vermont Railroad Pier, New London, Connecticut*, prepared by Maguire Group Inc., September 2000.

7. *Task 210 Surficial Site Investigation, Central Vermont Railroad Pier, State Pier Road, New London, Connecticut*, prepared by Maguire Group Inc., September 2000.

8. *Investigative Survey for Asbestos Containing Materials (ACM) Department of Transportation State Pier Administration Building, New London, Connecticut*, prepared by TRC Environmental Corporation, January 2001.

9. *Investigative Survey for Asbestos Containing Materials and Lead Based Paint, Former CVRR Building and Fuel Tank at the State Pier, New London, Connecticut*, prepared by TRC Environmental Corporation, December 2001.

10. *Task 220 Sediment Sampling Investigation, State Pier West Side Dredging Program, New London, Connecticut*, prepared by GEI Consultants Inc., May 2002.

11. *Phase IA Archeological Assessment Survey, Central Vermont Railroad Pier, New London, Connecticut*, prepared by Public Archeology Survey Team Inc., September 2002.

12. *Task 210 Subsurface Site Investigation, Proposed Connecticut State Pier Dredging Areas, New London, Connecticut*, prepared by TRC Environmental Corporation, July 2009.

13. *Phase I Environmental Site Assessment, Admiral Harold E. Shear State Pier Assets, State Pier Road, New London, Connecticut*, prepared by Tetra Tech, Inc., for EnStructure LLC, February 2019.

14. *Geotechnical Data Report, State Pier Infrastructure Improvements, State Pier Complex, New London Connecticut*, prepared by Haley & Aldrich, Inc. for Moffatt & Nichol, November 2019.

15. *Draft Phase I Environmental Site Assessment of State Pier Facility, State Pier Road, New London Connecticut*, prepared by AECOM, March 2020.

16. *Draft Phase II Environmental Site Assessment of State Pier Facility, State Pier Road, New London, Connecticut*, prepared by AECOM, June 2020.

17. *Draft Phase III Environmental Site Assessment of State Pier Facility, State Pier Road, New London, Connecticut*, prepared by AECOM, July 2020.

18. *Laboratory Quality Assurance and Quality Control Data Quality Assessment (DQA) and Data Usability Evaluation (DUE)*, CTDEEP, 2010.

19. *Laboratory Quality Assurance and Quality Control Guidance Reasonable Confidence Protocols (RCP) Guidance Document*, CTDEEP, November 2007/revised December 2010.

FIGURES

NOTE:

SITE PLAN TAKEN FROM GOOGLE EARTH DATE 2020, CONNECTICUT STATE PIER, NEW LONDON, CONNECTICUT.

0 1,500' 3,000'

GRAPHIC SCALE

PROJECT:

CONNECTICUT STATE PIER
NEW LONDON, CONNECTICUT

TITLE:

SITE LOCATION

DRAWN BY:	R. ALOMA	PROJ NO.:	237612.6166.910
CHECKED BY:	M. BLUMSTEIN		
APPROVED BY:	D. MARTIN		**FIGURE 1**
DATE:	09/18/2020		

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Windsor, CT 06095
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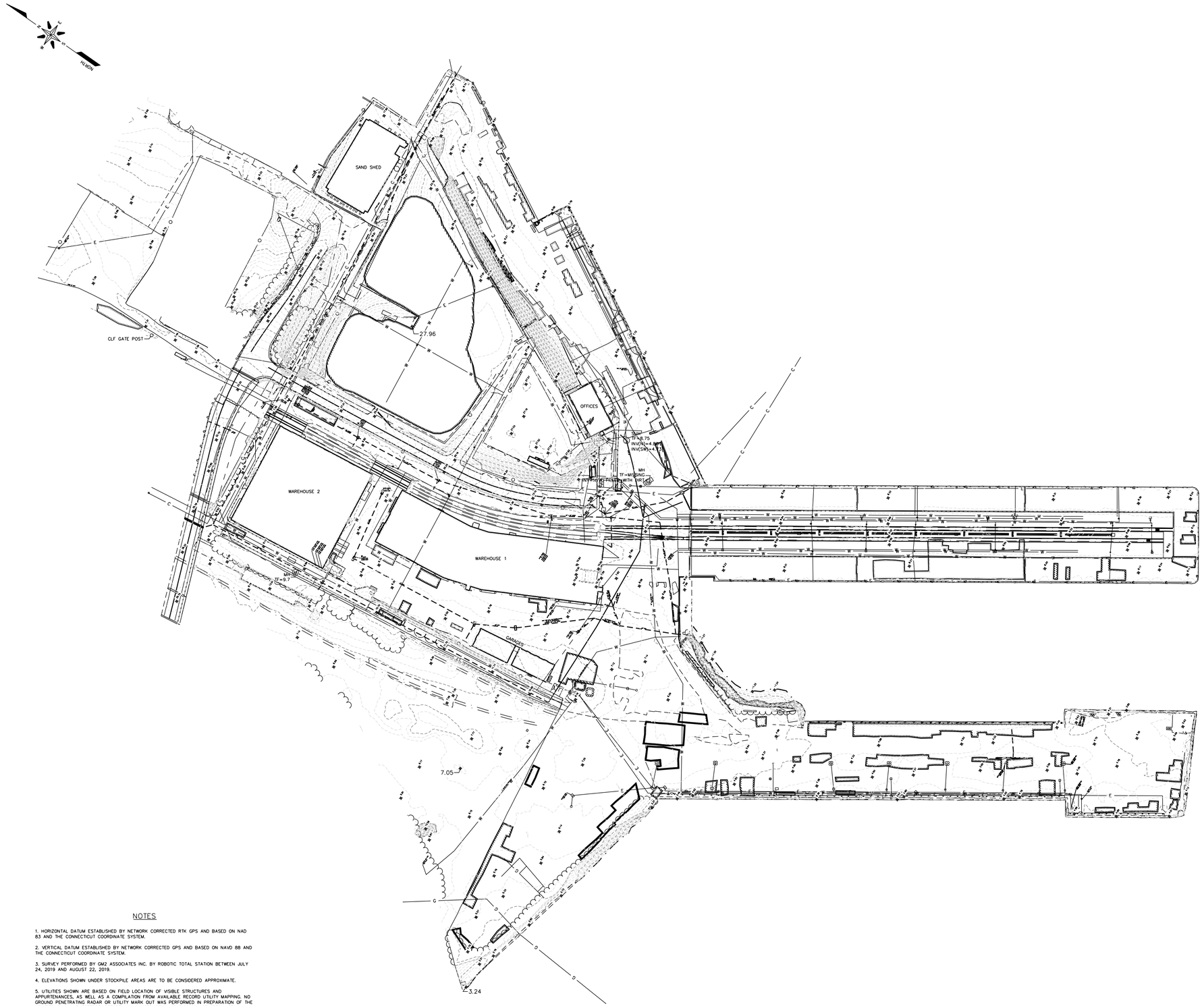
FILE NO.: Figure 1.dwg

8.5x11 -- USER:RAloma -- ATTACHED XREFS: -- ATTACHED IMAGES: Site Location-2
DRAWING NAME: J:\State Pier\ Figure 1.dwg -- PLOT DATE: September 18, 2020 - 11:38AM -- LAYOUT: FIGURE 1

Version: 2017-10-21



L E G E N D

STOCKADE FENCE	
CHAIN LINK FENCE	
STORM SEWER	
SANITARY SEWER	
CONTOUR LINE	100
BRUSH/TREE LINE	
RAIL ROAD TRACK	
RETAINING WALL	
UNDERGROUND ELECTRIC PER RECORD PLAN	E
UNDERGROUND WATER LINE PER RECORD PLAN	W
UNDERGROUND COMMUNICATIONS PER RECORD PLAN	C
UNDERGROUND GAS LINE PER RECORD PLAN	G
OVERHEAD WIRES PER PLAN	
CHAIN LINK FENCE	CLF
CONCRETE	CONC
TOP OF FRAME	TF
CATCHBASIN	CB
REINFORCED CONCRETE PIPE	RCP
POLYMERIZING VINYL CHLORIDE	PVC
DRAINAGE MANHOLE	DMH
HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE	HERCP
CAST IRON	CI
DUCTILE IRON	D.I.
CORRUGATED PLASTIC PIPE	CPP
BITUMINOUS	BIT
CURB CATCHBASIN	
UTILITY POLE WITH GUY	
GAS SHUT OFF	
WATER SHUT OFF	
HYDRANT	
SANITARY MANHOLE	S
DRAINAGE MANHOLE	D
ELECTRIC MANHOLE	E
TELEPHONE MANHOLE	T
MANHOLE	M
LIGHT STAND	
SIGN	
GATE VALVE	
BOLLARD	
BOLLARD WITH 2' DIAMETER CONCRETE BASE	
TOP OF WOODEN PILING	

NOTES

1. HORIZONTAL DATUM ESTABLISHED BY NETWORK CORRECTED RTK GPS AND BASED ON NAD 83 AND THE CONNECTICUT COORDINATE SYSTEM.

2. VERTICAL DATUM ESTABLISHED BY NETWORK CORRECTED GPS AND BASED ON NAVD 88 AND THE CONNECTICUT COORDINATE SYSTEM.

3. SURVEY PERFORMED BY GM2 ASSOCIATES INC. BY ROBOTIC TOTAL STATION BETWEEN JULY 24, 2019 AND AUGUST 22, 2019.

4. ELEVATIONS SHOWN UNDER STOCKPILE AREAS ARE TO BE CONSIDERED APPROXIMATE.

5. UTILITIES SHOWN ARE BASED ON FIELD LOCATION OF VISIBLE STRUCTURES AND APPURTENANCES, AS WELL AS A COMPILATION FROM AVAILABLE RECORD UTILITY MAPPING. NO GROUND PENETRATING RADAR OR UTILITY MARK OUT WAS PERFORMED IN PREPARATION OF THE UTILITIES SHOWN, THEREFORE, BEFORE ANY CONSTRUCTION OR DIGGING ACTIVITIES, ACTUAL SIZE, LOCATION AND TYPE OF UNDERGROUND UTILITIES SHALL BE VERIFIED BY CALL BEFORE YOU DIG.

0 100' 200'
GRAPHIC SCALE

PROJECT:
CONNECTICUT STATE PIER
NEW LONDON, CONNECTICUT

TITLE:
SITE PLAN

DRAWN BY:	R. ALOMA	PROJ. NO.:	237612.6166.910
CHECKED BY:	K. SHEFFIELD		
APPROVED BY:	D. MARTIN		**FIGURE 2**
DATE:	08/27/20		

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Windsor, CT 06095
Phone: 860.298.9692
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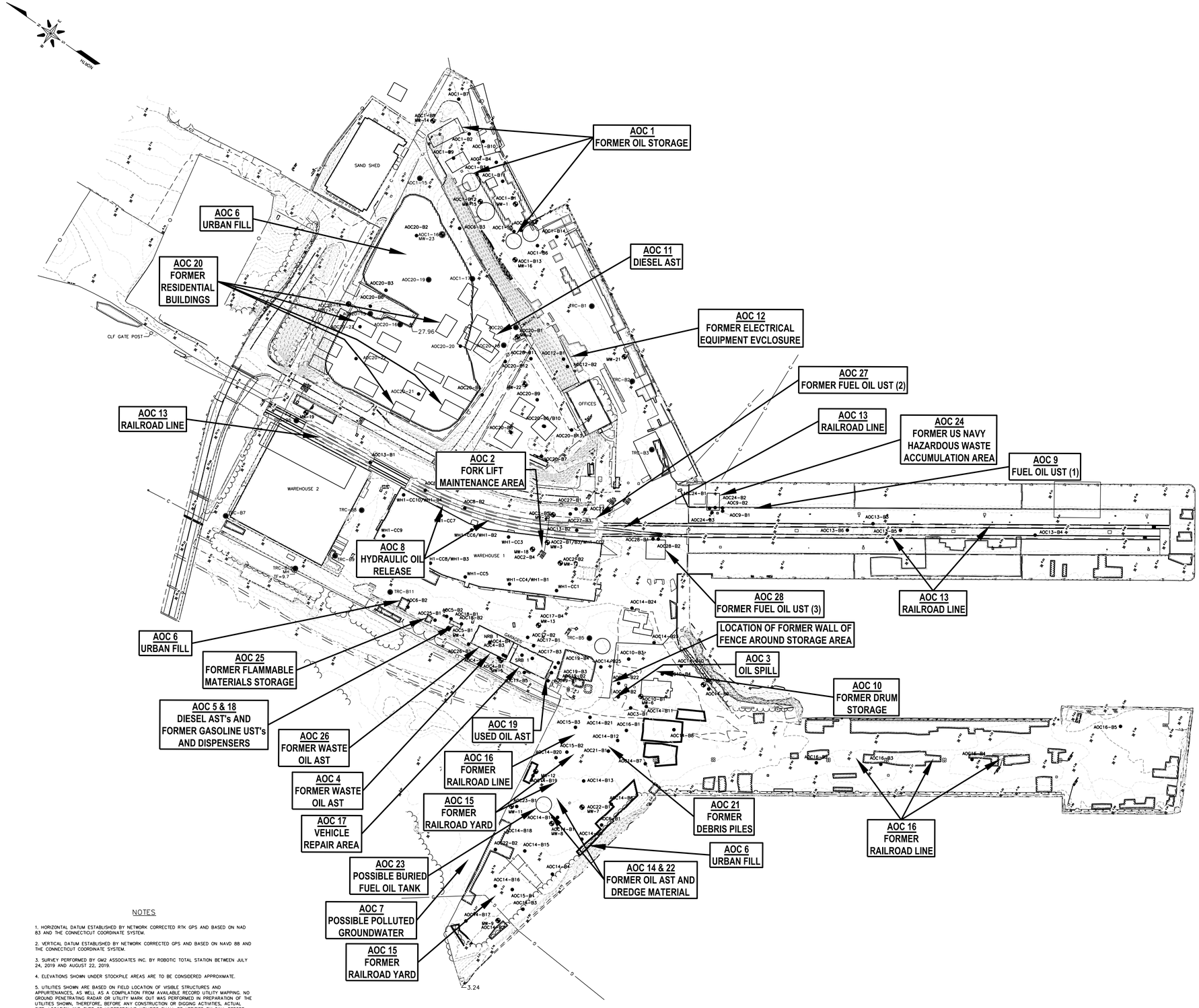
FILE NO.: PLATE-1.dwg

24x36 --- USER: RAloma --- ATTACHED XREFS: --- ATTACHED IMAGES:
DRAWING NAME: J:\State Pier\ PLATE-1.dwg --- PLOT DATE: September 21, 2020 - 8:39AM --- LAYOUT: FIGURE 2
Version: 2017.10.21



L E G E N D

STOCKADE FENCE	
CHAIN LINK FENCE	
STORM SEWER	
SANITARY SEWER	
CONTOUR LINE	100
BRUSH/TREE LINE	
RAIL ROAD TRACK	
RETAINING WALL	
UNDERGROUND ELECTRIC PER RECORD PLAN	E E
UNDERGROUND WATER LINE PER RECORD PLAN	W W
UNDERGROUND COMMUNICATIONS PER RECORD PLAN	C C
UNDERGROUND GAS LINE PER RECORD PLAN	G G
OVERHEAD WIRES PER PLAN	
CHAIN LINK FENCE	CLF
CONCRETE	CONC
TOP OF FRAME	TF
CATCHBASIN	CB
REINFORCED CONCRETE PIPE	RCP
POLYMERIZING VINYL CHLORIDE	PVC
DRAINAGE MANHOLE	DMH
HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE	HERCP
CAST IRON	CI
DUCTILE IRON	D.I.
CORRUGATED PLASTIC PIPE	CPP
BITUMINOUS	BIT
CURB CATCHBASIN	
UTILITY POLE WITH GUY	
GAS SHUT OFF	
WATER SHUT OFF	
HYDRANT	
SANITARY MANHOLE	S
DRAINAGE MANHOLE	D
ELECTRIC MANHOLE	E
TELEPHONE MANHOLE	T
MANHOLE	M
LIGHT STAND	
SIGN	
GATE VALVE	
BOLLARD	
BOLLARD WITH 2' DIAMETER CONCRETE BASE	
TOP OF WOODEN PILING	
APPROX. LOCATIONS OF HISTORIC FEATURES BUILDINGS, TANKS, WALL/FENCES	

0 100' 200'
GRAPHIC SCALE

NOTES

1. HORIZONTAL DATUM ESTABLISHED BY NETWORK CORRECTED RTK GPS AND BASED ON NAD 83 AND THE CONNECTICUT COORDINATE SYSTEM.
2. VERTICAL DATUM ESTABLISHED BY NETWORK CORRECTED GPS AND BASED ON NAVD 88 AND THE CONNECTICUT COORDINATE SYSTEM.
3. SURVEY PERFORMED BY GM2 ASSOCIATES INC. BY ROBOTIC TOTAL STATION BETWEEN JULY 24, 2019 AND AUGUST 22, 2019.
4. ELEVATIONS SHOWN UNDER STOCKPILE AREAS ARE TO BE CONSIDERED APPROXIMATE.
5. UTILITIES SHOWN ARE BASED ON FIELD LOCATION OF VISIBLE STRUCTURES AND APPURTENANCES, AS WELL AS A COMPILATION FROM AVAILABLE RECORD UTILITY MAPPING. NO GROUND PENETRATING RADAR OR UTILITY MARK OUT WAS PERFORMED IN PREPARATION OF THE UTILITIES SHOWN, THEREFORE, BEFORE ANY CONSTRUCTION OR DIGGING ACTIVITIES, ACTUAL SIZE, LOCATION AND TYPE OF UNDERGROUND UTILITIES SHALL BE VERIFIED BY CALL BEFORE YOU DIG.

PROJECT:
CONNECTICUT STATE PIER
NEW LONDON, CONNECTICUT

TITLE:
SITE PLAN AND HISTORIC FEATURES

DRAWN BY:	R. ALOMA	PROJ. NO.:	237612.6166.310
CHECKED BY:	K. SHEFFIELD		
APPROVED BY:	D. MARTIN		**FIGURE 3**
DATE:	08/27/20		

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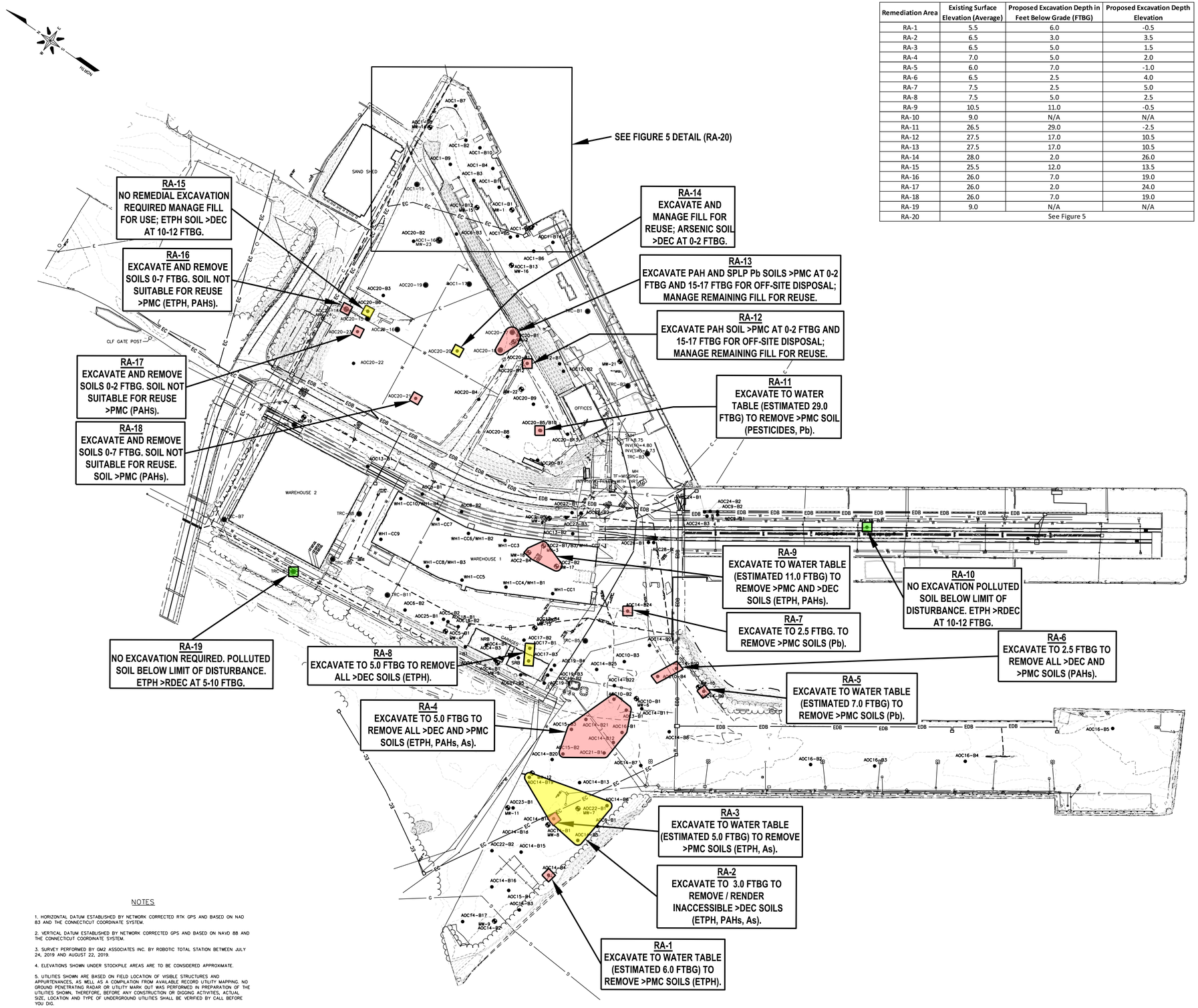
FILE NO.: PLATE-2.dwg

24x36 --- USER: RAloma --- ATTACHED XREFS: --- ATTACHED IMAGES:
DRAWING NAME: J:\State Pier\006166\003\10\ PLATE-2.dwg --- PLOT DATE: November 30, 2020 - 10:11AM --- LAYOUT: FIGURE 3-AOC
Version: 2017-10-21



Remediation Area	Existing Surface Elevation (Average)	Proposed Excavation Depth in Feet Below Grade (FTBG)	Proposed Excavation Depth Elevation
RA-1	5.5	6.0	-0.5
RA-2	6.5	3.0	3.5
RA-3	6.5	5.0	1.5
RA-4	7.0	5.0	2.0
RA-5	6.0	7.0	-1.0
RA-6	6.5	2.5	4.0
RA-7	7.5	2.5	5.0
RA-8	7.5	5.0	2.5
RA-9	10.5	11.0	-0.5
RA-10	9.0	N/A	N/A
RA-11	26.5	29.0	-2.5
RA-12	27.5	17.0	10.5
RA-13	27.5	17.0	10.5
RA-14	28.0	2.0	26.0
RA-15	25.5	12.0	13.5
RA-16	26.0	7.0	19.0
RA-17	26.0	2.0	24.0
RA-18	26.0	7.0	19.0
RA-19	9.0	N/A	N/A
RA-20	See Figure 5		

L E G E N D

STOCKADE FENCE	
CHAIN LINK FENCE	
STORM SEWER	
SANITARY SEWER	
CONTOUR LINE	100
BRUSH/TREE LINE	
RAIL ROAD TRACK	
RETAINING WALL	
UNDERGROUND ELECTRIC PER RECORD PLAN	E
UNDERGROUND WATER LINE PER RECORD PLAN	W
UNDERGROUND COMMUNICATIONS PER RECORD PLAN	C
UNDERGROUND GAS LINE PER RECORD PLAN	G
OVERHEAD WIRES PER PLAN	
CHAIN LINK FENCE	CLF
CONCRETE	CONC
TOP OF FRAME	TF
CATCHBASIN	CB
REINFORCED CONCRETE PIPE	RCP
POLYMERIZING VINYL CHLORIDE	PVC
DRAINAGE MANHOLE	DMH
HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE	HERCP
CAST IRON	CI
DUCTILE IRON	D.I.
CORRUGATED PLASTIC PIPE	CPP
BITUMINOUS	BIT
CURB CATCHBASIN	
UTILITY POLE	
GAS SHUT OFF	
WATER SHUT OFF	
HYDRANT	
SANITARY MANHOLE	S
DRAINAGE MANHOLE	D
ELECTRIC MANHOLE	E
TELEPHONE MANHOLE	T
MANHOLE	M
LIGHT STAND	
SIGN	
GATE VALVE	
BOLLARD	
BOLLARD WITH 2' DIAMETER CONCRETE BASE	
TOP OF WOODEN PILING	
ACON SOIL BORING/PHASE III SAMPLES	
TRC SOIL BORING	
FUTURE ELECTRICAL DUCT BANK	EDB
FUTURE ELECTRICAL CONDUIT	EC

- SOIL >GBPMC NOT SUITABLE FOR REUSE DISPOSE OF OFF-SITE.
- SOIL >RDEC OR I/C DEC. POTENTIALLY SUITABLE FOR REUSE ON-SITE.
- SOIL >RDEC OR I/C DEC BELOW REDEVELOPMENT BASE GRADE. WILL BE RENDERED INACCESSIBLE AFTER REDEVELOPMENT.

NOTES

1. HORIZONTAL DATUM ESTABLISHED BY NETWORK CORRECTED RTK GPS AND BASED ON NAD 83 AND THE CONNECTICUT COORDINATE SYSTEM.
2. VERTICAL DATUM ESTABLISHED BY NETWORK CORRECTED GPS AND BASED ON NAVD 88 AND THE CONNECTICUT COORDINATE SYSTEM.
3. SURVEY PERFORMED BY GM2 ASSOCIATES INC. BY ROBOTIC TOTAL STATION BETWEEN JULY 24, 2019 AND AUGUST 22, 2019.
4. ELEVATIONS SHOWN UNDER STOCKPILE AREAS ARE TO BE CONSIDERED APPROXIMATE.
5. UTILITIES SHOWN ARE BASED ON FIELD LOCATION OF VISIBLE STRUCTURES AND APPURTENANCES, AS WELL AS A COMPILATION FROM AVAILABLE RECORD UTILITY MAPPING. NO GROUND PENETRATING RADAR OR UTILITY MARK OUT WAS PERFORMED IN PREPARATION OF THE UTILITIES SHOWN, THEREFORE, BEFORE ANY CONSTRUCTION OR DIGGING ACTIVITIES, ACTUAL SIZE, LOCATION AND TYPE OF UNDERGROUND UTILITIES SHALL BE VERIFIED BY CALL BEFORE YOU DIG.
6. WATER TABLE IS ESTIMATED BASED ON OBSERVATION BY AECOM DURING SOIL INVESTIGATION. REFER TO AECOM DRAFT PHASE III ENVIRONMENTAL SITE ASSESSMENT OF STATE PIER FACILITY, APPENDIX A – SOIL BORING LOGS.
7. ADDITIONAL SOIL REMEDIATION MAY BE NECESSARY WHERE FUTURE ELECTRICAL CONDUIT (EC), ELECTRICAL DUCT BANK (EDB) CORRIDORS INTERSECT REMEDIAL AREAS RA-3, RA-6 AND RA-16 BASED ON REDEVELOPMENT SPECIFICATIONS.

PROJECT:	CONNECTICUT STATE PIER NEW LONDON, CONNECTICUT
TITLE:	REMEDIAL AREAS
DRAWN BY:	R. ALOMA
CHECKED BY:	K. SHEFFIELD
APPROVED BY:	D. MARTIN
DATE:	10/07/2020
PROJ NO.:	237612.6166.310
	FIGURE 4

TRC
21 Griffin Road North
Windsor, CT 06095
Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: PLATE-2.dwg

24x36 --- USER: RAloma --- ATTACHED XREFS: --- ATTACHED IMAGES:
DRAWING NAME: J:\State Pier\006166\00310\PLATE-2.dwg --- PLOT DATE: October 20, 2020 - 10:39AM --- LAYOUT: FIGURE 4
Version: 2017-10-21

Remediation Area	Existing Surface Elevation (Average)	Proposed Excavation Depth In Feet Below Grade (FTBG)	Proposed Excavation Depth Elevation	Depth to Water (FTBG)
RA-20A	9.5	12.0	-2.5	8.0
RA-20B	8.5	4.0	4.5	7.0
RA-20C	8.5	1.5	7.0	8.0
RA-20D	8.5	11.0	-2.5	7.0
RA-20E	10.0	2.0	8.0	7.0
RA-20F	13.5	17.0	-3.5	12.5
RA-20G	10.0	13.0	-3.0	9.0

RA-20E
EXCAVATE TO 2.0 FTBG TO REMOVE >PMC SOILS (PAHs).

RA-20F
EXCAVATE TO 4 FT BELOW WATER TABLE TO REMOVE >PMC SOILS (PAHs) AND IMPACTED GW, INSTALL ORC, OR OTHER AMENDMENT TO TREAT GW.

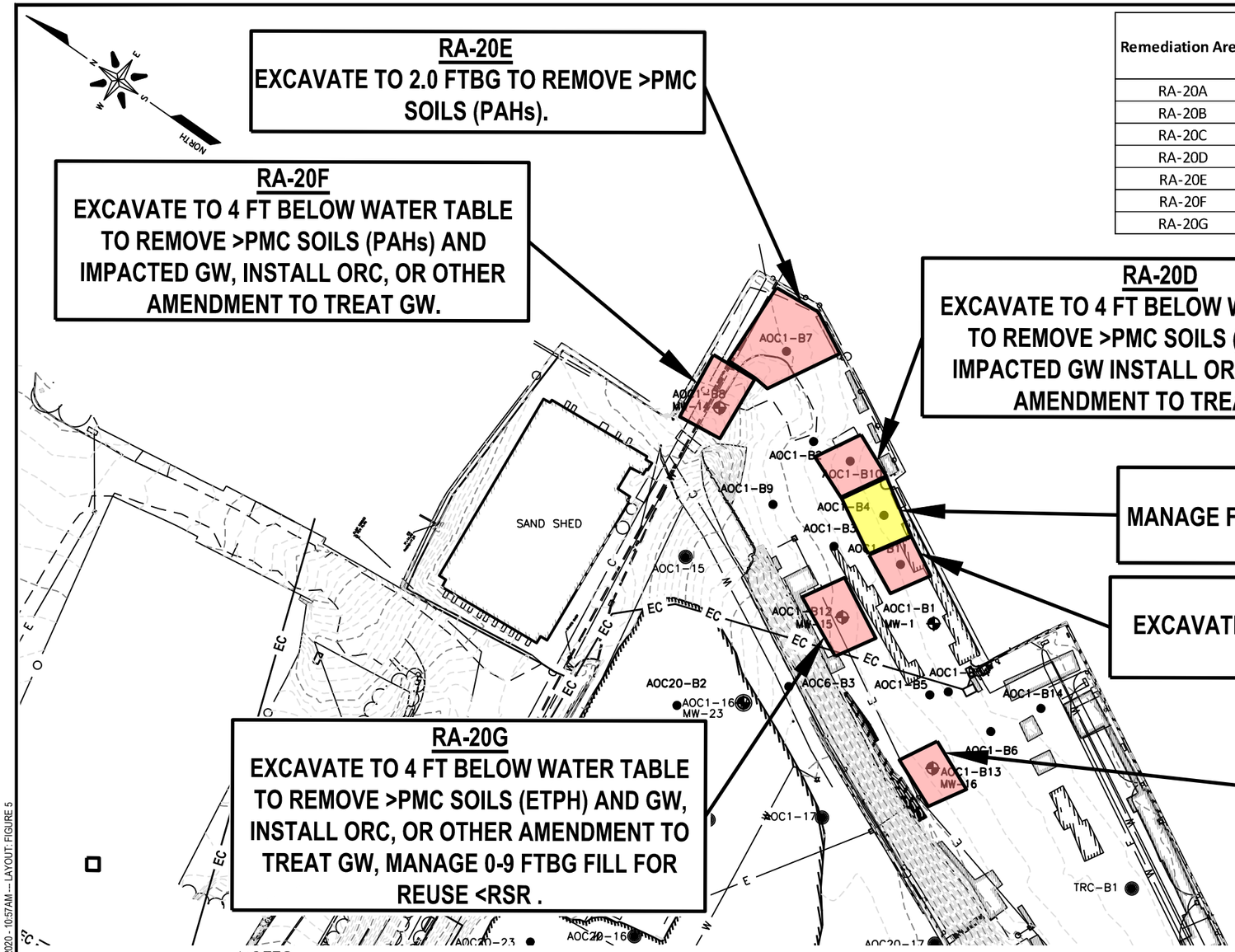
RA-20D
EXCAVATE TO 4 FT BELOW WATER TABLE TO REMOVE >PMC SOILS (PAHs) AND IMPACTED GW INSTALL ORC OR OTHER AMENDMENT TO TREAT GW.

RA-20C
MANAGE FILL FOR REUSE PAHs >DEC AT 0-1.5 FTBG.

RA-20B
EXCAVATE TO 4.0 FT TO REMOVE >PMC SOILS (PAHs).

RA-20A
EXCAVATE TO 4 FT BELOW WATER TABLE TO REMOVE >PMC SOILS (Pb) AND IMPACTED GW, INSTALL ORC, OR OTHER AMENDMENT TO TREAT GW.

RA-20G
EXCAVATE TO 4 FT BELOW WATER TABLE TO REMOVE >PMC SOILS (ETPH) AND GW, INSTALL ORC, OR OTHER AMENDMENT TO TREAT GW, MANAGE 0-9 FTBG FILL FOR REUSE <RSR .



NOTES

1. HORIZONTAL DATUM ESTABLISHED BY NETWORK CORRECTED RTK GPS AND BASED ON NAD 83 AND THE CONNECTICUT COORDINATE SYSTEM.

2. VERTICAL DATUM ESTABLISHED BY NETWORK CORRECTED GPS AND BASED ON NAVD 88 AND THE CONNECTICUT COORDINATE SYSTEM.

3. SURVEY PERFORMED BY GM2 ASSOCIATES INC. BY ROBOTIC TOTAL STATION BETWEEN JULY 24, 2019 AND AUGUST 22, 2019.

4. ELEVATIONS SHOWN UNDER STOCKPILE AREAS ARE TO BE CONSIDERED APPROXIMATE.

5. UTILITIES SHOWN ARE BASED ON FIELD LOCATION OF VISIBLE STRUCTURES AND APPURTENANCES, AS WELL AS A COMPILATION FROM AVAILABLE RECORD UTILITY MAPPING. NO GROUND PENETRATING RADAR OR UTILITY MARK OUT WAS PERFORMED IN PREPARATION OF THE UTILITIES SHOWN, THEREFORE, BEFORE ANY CONSTRUCTION OR DIGGING ACTIVITIES, ACTUAL SIZE, LOCATION AND TYPE OF UNDERGROUND UTILITIES SHALL BE VERIFIED BY CALL BEFORE YOU DIG.

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LEGEND

SOIL >GBPMC NOT SUITABLE FOR REUSE DISPOSE OF OFF-SITE.

SOIL >RDEC OR I/C DEC. POTENTIALLY SUITABLE FOR REUSE ON-SITE.

0 100' 200'

GRAPHIC SCALE

PROJECT:
CONNECTICUT STATE PIER
NEW LONDON, CONNECTICUT

TITLE:
REMEDIAL AREA RA-20

DRAWN BY:	R. ALOMA	PROJ NO.:	237612.6166.310
CHECKED BY:	M. BLUMSTEIN		
APPROVED BY:	D. MARTIN		FIGURE 5
DATE:	10/07/2020		

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FILE NO.: PLATE-2.dwg

11x17 - USER: Blums - ATTACHED XREFS: - ATTACHED IMAGES:
DRAWING NAME: J:\State Pier\006166\00310\PLATE-2.dwg - PLOT DATE: October 20, 2020 - 10:57AM - LAYOUT: FIGURE 5
Version: 2017-10-21

TABLES

TABLE 1
CONCEPTUAL SITE MODEL AND QUALITATIVE EXPOSURE ASSESSMENT SUMMARY
CONNECTICUT STATE PIER REMEDIAL ACTION PLAN
NEW LONDON, CT

Confirmed Release Area	Constituents of Concern	Impacted Media	Confirmed Release > RSR Criteria	Soil Criteria Exceeded	Depth Interval (Fbg)	Potential Future Receptors	Potential Migration Pathway(s)	Potential Exposure Pathway(S)	Potential Mitigation	Selected Remedial Option(s)
AOC-1 **Former Oil Storage**	PAHs, ETPH, Metals	Soil Groundwater NAPL	PAHs	RDEC	0-4	• Site Workers • Site Construction / Utility Workers	• Dissolution in surface infiltration and groundwater • Contaminant migration with groundwater flow • Fugitive dust emissions	• Inhalation (dust) • Dermal Contact • Ingestion	• Excavation/removal of impacted soil would address most potential exposure routes. • Capping of impacted soils with GBPMC exceedances to address leachability • Implementation of soil management plan if subsurface work is required in impacted areas (proper handling and disposal). • Restrict future site redevelopment/reuse through deed restriction/ELUR • Product recovery and/or *In-situ* treatment (AOC-1)	• ELUR • Excavation of Impacted Soils, as applicable • I*n-situ* treatment in areas exhibiting petroleum-related groundwater impacts
				RDEC, I/C DEC, GBPMC	8-15					
			ETPH	RDEC, I/C DEC, GBPMC	8-15					
			Metals	RDEC, I/C DEC, GBPMC	8-15					
AOC-2 **Fork-Lift Maintenance Area**	PAHs, ETPH	Soil	PAHs	RDEC, I/C DEC, GBPMC	10-15					• ELUR • Soil excavation
			ETPH	RDEC, I/C DEC, GBPMC	10-15					
AOC-3 **Oil Spill**	PAHs, ETPH	Soil	PAHs	RDEC and GBPMC	0-3					• ELUR • Soil excavation
			ETPH	RDEC and I/C DEC	0-3					
AOC-6 **Urban Fill**	ETPH	Soil	ETPH	RDEC	29-31					• ELUR
AOC-10 **Former Drum Storage**	PAHs, ETPH	Soil	PAHs	RDEC, I/C DEC, GBPMC	0-2					• None required
			ETPH	RDEC	0-2					

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CONNECTICUT STATE PIER REMEDIAL ACTION PLAN
NEW LONDON, CT

Confirmed Release Area	Constituents of Concern	Impacted Media	Confirmed Release > RSR Criteria	Soil Criteria Exceeded	Depth Interval (Fbg)	Potential Future Receptors	Potential Migration Pathway(s)	Potential Exposure Pathway(S)	Potential Mitigation	Selected Remedial Option(s)
AOC-13 **Railroad Line**	ETPH	Soil	ETPH	RDEC	10-12					• ELUR
AOC-14 **Former Oil AST**	ETPH, Metals	Soil	ETPH	RDEC and I/C DEC	2-6	• Site Workers • Site Construction / Utility Workers	• Dissolution in surface infiltration and ground water • Contaminant migration with groundwater flow • Fugitive dust emissions	• Inhalation (dust) • Dermal Contact • Ingestion	• Excavation/removal of impacted soil would address most potential exposure routes. • Capping of impacted soils with GBPMC exceedances to address leachability • Implementation of soil management plan if subsurface work is required in impacted areas (proper handling and disposal). • Restrict future site redevelopment/reuse through deed restriction/ELUR • Product recovery or *In-situ* treatment (AOC-1 and AOC-XX)	• ELUR • Soil excavation
			Arsenic	RDEC and I/C DEC	2-6					
			Lead	GBPMC	4-6					
AOC-15 **Former Railroad Yard**	PAHs, Metals	Soil	PAHs	RDEC	0-2					• ELUR • Soil excavation
			Metals	RDEC and I/C DEC	0-2					
AOC-16 **Former Railroad Line**	Metals	Soil	Metals	RDEC and I/C DEC	0-2					• ELUR
AOC-17 **Vehicle Repair Area**	ETPH	Soil	ETPH	RDEC	0-4					• ELUR • Soil excavation
AOC-20 **Former Residences**	PAHs, ETPH, Metals	Soil	ETPH	RDEC, I/C DEC, GBPMC	2-17					• Soil excavation
			PAHs	RDEC, I/C DEC, GBPMC	2-17					

TABLE 1
CONCEPTUAL SITE MODEL AND QUALITATIVE EXPOSURE ASSESSMENT SUMMARY
CONNECTICUT STATE PIER REMEDIAL ACTION PLAN
NEW LONDON, CT

Confirmed Release Area	Constituents of Concern	Impacted Media	Confirmed Release > RSR Criteria	Soil Criteria Exceeded	Depth Interval (Fbg)	Potential Future Receptors	Potential Migration Pathway(s)	Potential Exposure Pathway(S)	Potential Mitigation	Selected Remedial Option(s)
			Metals	RDEC, I/C DEC, GBPMC	2-17					
AOC-22 **Dredge Soils**	Metals	Soil	Metals	RDEC and I/C DEC	2-10					• ELUR • Soil excavation
AOC-7 **Possible Polluted Groundwater**		Groundwater							• Monitored Natural Attenuation (MNA) following removal of impacted soil • Implementation of a ground water management plan if subsurface work is required in areas with contaminated ground water (Worker Health and Safety Plan)	• Focused in-situ treatment in heavily-impacted areas (e.g., AOC-1) • MNA
River Sediments (Note: Not an AOC)		Sediment	N/A	N/A	N/A	• Site Construction/ Utility Workers • Recreational Users (boaters/fishermen/swimmers) • Local Wildlife	• Resuspension of fine-grained sediments • Dissolution of contaminants	• Dermal Contact • Ingestion		• Sediment dredging, with re-use in Central Wharf, if practicable

TABLE 2
SUMMARY OF REMEDIAL AREA EXCAVATION AND SOIL MANAGEMENT
CONNECTICUT STATE PIER REMEDIAL ACTION PLAN
NEW LONDON, CONNECTICUT

Remedial Area	Associated AOCs	Surface Area (SF)	Total Depth (FTBG)	Est. Volume for Disposal (CY)	Proposed Remediation
RA-1	AOC-14	400	6.0	90	Excavate to water table (estimate 6.0 fbg) to remove >PMC Soils (ETPH).
RA-2	AOC-14 AOC-22	13,400	3.0	0	Excavate to 3.0 fbg to remove/render inaccessible >DEC Soils (ETPH, PAHs, As). Reuse soils on-site if possible.
RA-3	AOC-14	400	5.0	75	Excavate to water table (estimated 5.0 fbg) to remove >PMC (ETPH, As).
RA-4	AOC-3 AOC-14 AOC-15 AOC-16 AOC-21	12,800	5.0	2,400	Excavate to 5.0 Ffbg to remove all >DEC and >PMC Soils (ETPH, PAHs, As).
RA-5	AOC-14	400	7.0	105	Excavate to water table (estimated 7.0 fbg) to remove >PMC soils (Pb).
RA-6	AOC-10 AOC-14	1,300	2.5	120	Excavate to 2.5 fbg to remove all >DEC and >PMC soils (PAHs).
RA-7	AOC-14	400	2.5	40	Excavate to 2.5 fbg to remove >PMC soils (Pb).
RA-8	AOC-17	1,000	5.0	0	Excavate to 5.0 fbg to remove all >DEC Soils (ETPH). Reuse soils on-site if possible.
RA-9	AOC-2	2,600	11.0	1,050	Excavate to water table (estimated 11.0 fbg) to remove >PMC and >DEC soils (ETPH, PAHs).
RA-10	AOC-13	400	No Excavation Required		No Excavation. Polluted soil below limit of disturbance. ETPH >RDEC at 10-12 fbg.
RA-11	AOC-20	400	29.0	300	Excavate to water table (estimate 29.0 fbg) to remove >PMC Soil (pesticides, Pb).
RA-12	AOC-20	400	17.0	430	Excavated PAH Soil >PMC at 0-2 fbg and 15-17 fbg for off-site disposal. Manage remaining fill for reuse on-site.
RA-13	AOC-20	1,800	17.0	270	Excavate PAH and SPLP Pb soils >PMC at 0-2 fbg and 15-17 fbg for off-site disposal. Manage remaining fill for reuse on-site.
RA-14	AOC-20	400	2.0	0	Excavate and manage fill for reuse. Arsenic soil >DEC at 0-2 fbg.
RA-15	AOC-20	400	12.0	0	No remedial excavation required. Manage fill for reuse; ETPH soil >DEC at 10-12 fbg.

TABLE 2
SUMMARY OF REMEDIAL AREA EXCAVATION AND SOIL MANAGEMENT
CONNECTICUT STATE PIER REMEDIAL ACTION PLAN
NEW LONDON, CONNECTICUT

RA-16		AOC-20	400	7.0	100	Excavate and remove soils 0-7 fbg. Soil not suitable for reuse >PMC (ETPH, PAHs).
RA-17		AOC-20	400	2.0	30	Excavate and remove soils 0-2 fbg. Soil not suitable for reuse >PMC (PAHs).
RA-18		AOC-20	400	7.0	105	Excavate and remove soils 0-7 fbg. Soil not suitable for reuse >PMC (PAHs).
RA-19		NA	400	No Excavation Required		No excavation required. Polluted soil below limit of disturbance. ETPH >RDEC at 5-10 FTBG.
RA-20	A	AOC-1	1500	12.0	670	Excavate to 4 feet below water table to remove >PMC soils (Pb) and impacted groundwater. Install ORC or other amendment to treat groundwater.
	B	AOC-1	1,300	4.0	200	Excavate to 4.0 fbg to remove >PMC Soils (PAHs).
	C	AOC-1	2,000	1.5	0	Manage Fill for reuse PAHs>DEC at 0-1.5 fbg.
	D	AOC-1	1,600	11.0	650	Excavate to 4 feet below water table to remove >PMC soils (PAHs) and impacted groundwater. Install ORC or other amendment to treat groundwater.
	E	AOC-1	4,000	2.0	300	Excavate to 2.0 fbg to remove >PMC Soils (PAHs).
	F	AOC-1	2,100	17.0	1,300	Excavate to 4 feet below water table to remove >PMC soils (PAHs) and impacted groundwater. Install ORC or other amendment to treat groundwater.
	G	AOC-1	2,000	13.0	300	Excavate to 4 feet below water table to remove >PMC soils (ETPH) and groundwater. Install ORC or other amendment to treat groundwater. Manage 0-9 fbg fill for reuse on-site.

APPENDICES

APPENDIX A – AECOM Phase II/III Investigation Figures

APPENDIX B – AECOM Soil/Groundwater Analytical Tables and Monitoring Well Details

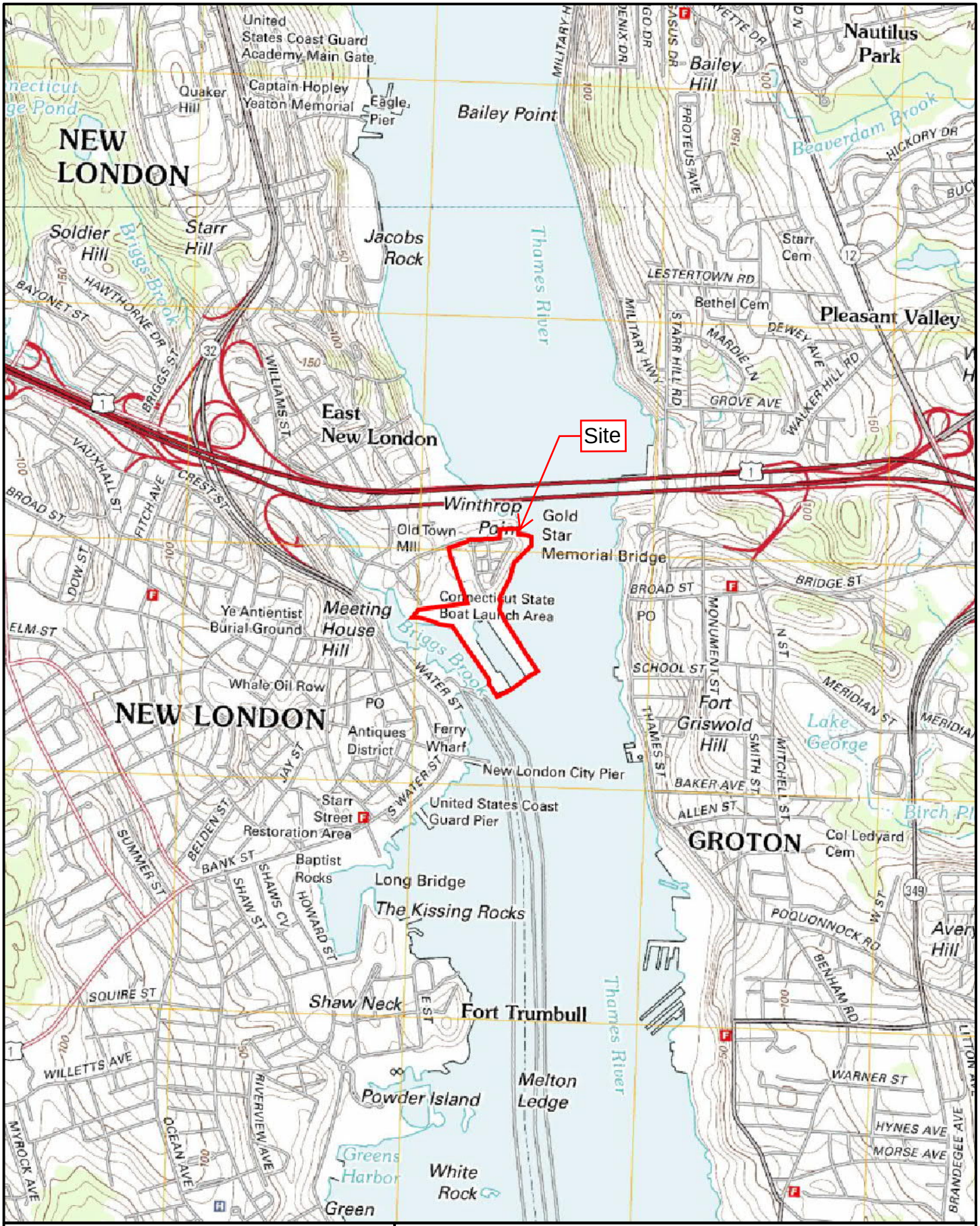
APPENDIX C – AECOM Phase II/III Investigation Boring Logs

APPENDIX D – AECOM Low-Flow Groundwater Sampling Logs

APPENDIX E – TRC Tidal Study

APPENDIX A

AECOM Phase II/III Investigation Figures



AECOM

N

Figure 1. Site Locus
State Pier
New London, Connecticut

REFERENCE: USGS 2012

SCALE: 1" = 3 miles

DATE: February 2020

PATH/FILENAME: C:\USERS\BOGUCKIA\DOCUMENTS\WORK\NEW LONDON\STATE PIER\SITEPLAN.DWG

LAST UPDATE: Monday, February 10, 2020 9:10:35 AM

PLOT DATE: Monday, February 10, 2020 9:10:53 AM

ANSI A – 5–11–06

AECOM

Figure 2. Site Plan with AOCs
State Pier, New London, CT

REFERENCE: CT ECO 2016 | SCALE: 1" = 200' | DATE: April 2020

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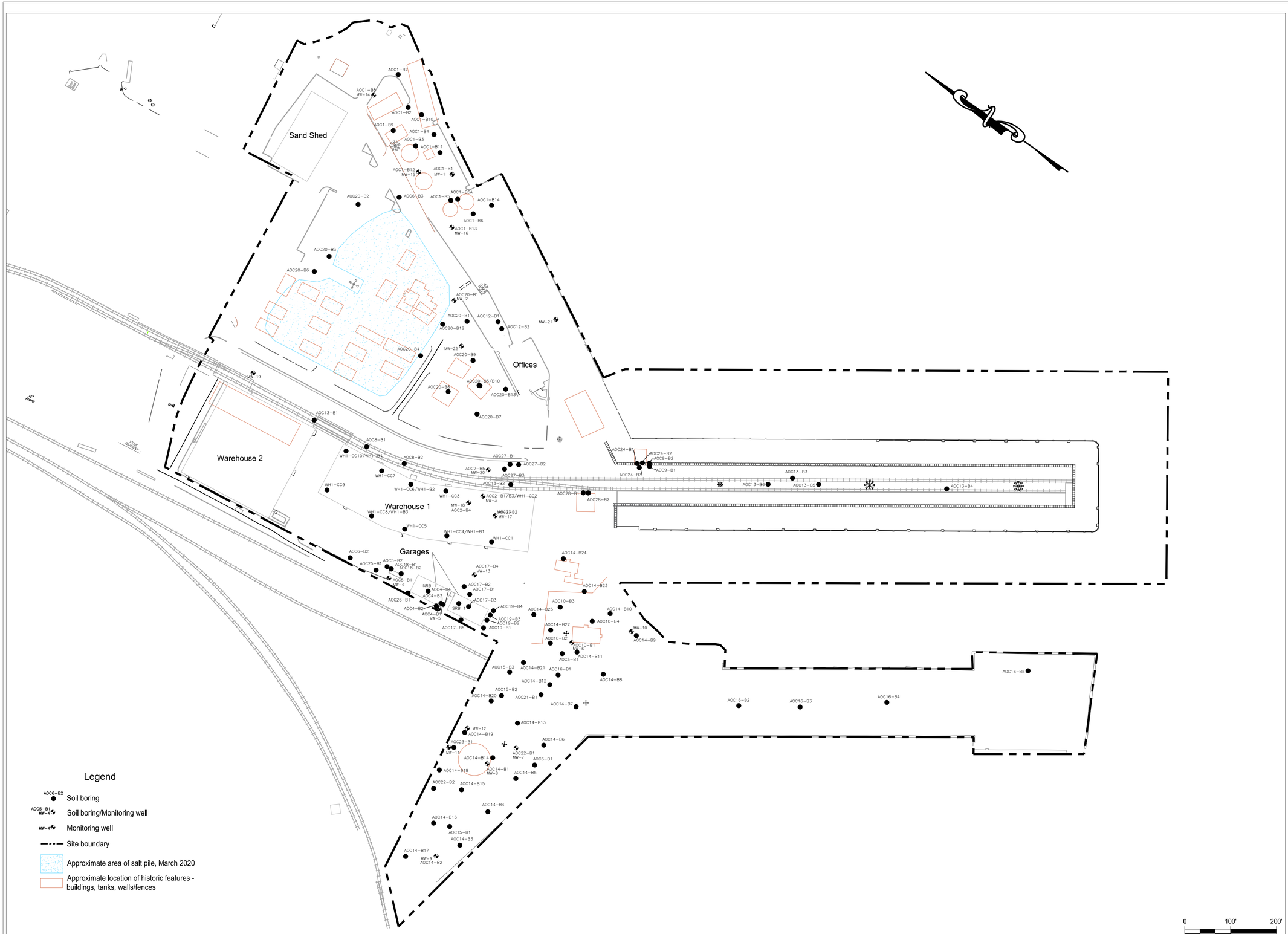
ANSI A – 5-11-06
PLOT DATE: Sunday, April 12, 2020 11:44:57 PM
LAST UPDATE: Monday, February 24, 2020 6:09:22 PM



AECOM

PROJECT

STATE PIER
NEW LONDON, CT

CLIENT

CONNECTICUT
PORT AUTHORITY
455 BOSTON POST ROAD, SUITE 204
OLD SAYBROOK, CT 06475

CONSULTANT

AECOM
500 ENTERPRISE DRIVE, SUITE 3B
ROCKY HILL, CT 06067
860.529.8882
www.aecom.com

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION

SHEET TITLE

FUGURE 3
PHASE II/III SAMPLING LOCATIONS

SHEET NUMBER

ANSI D 22" x 34"
Approved:
Checked:
Designer:
Project Management Initials:
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Filename: P:\PROJECTS\60558060 STATE PIER NEW LONDON\900-WORKING DOCS-CADD\910 CAD_BIM\02-SHEETS\SAMPLING PLAN\2020-06-23 SAMPLE LOCATIONS_PHASE III ESA.DWG

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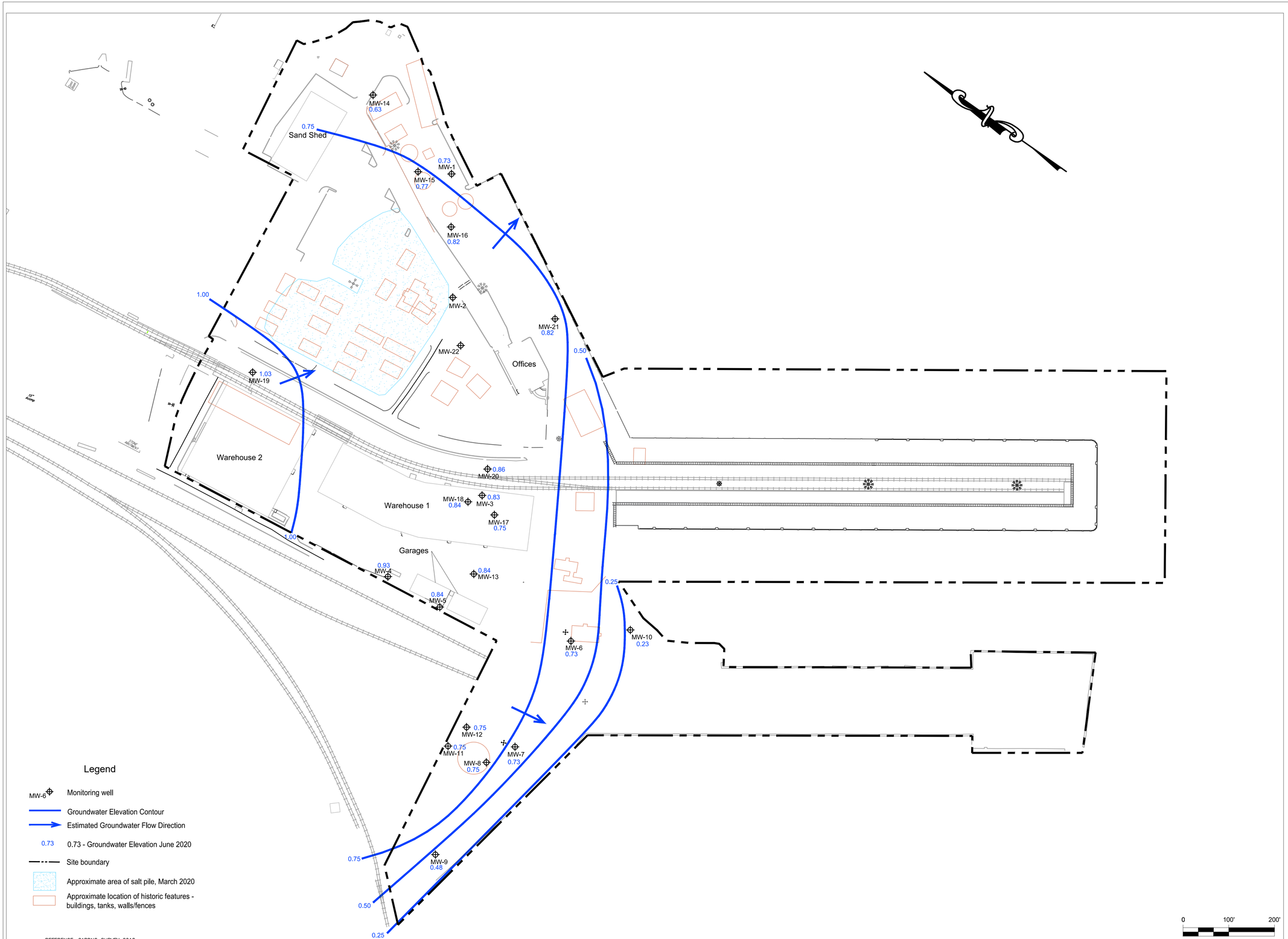

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REGISTRATION

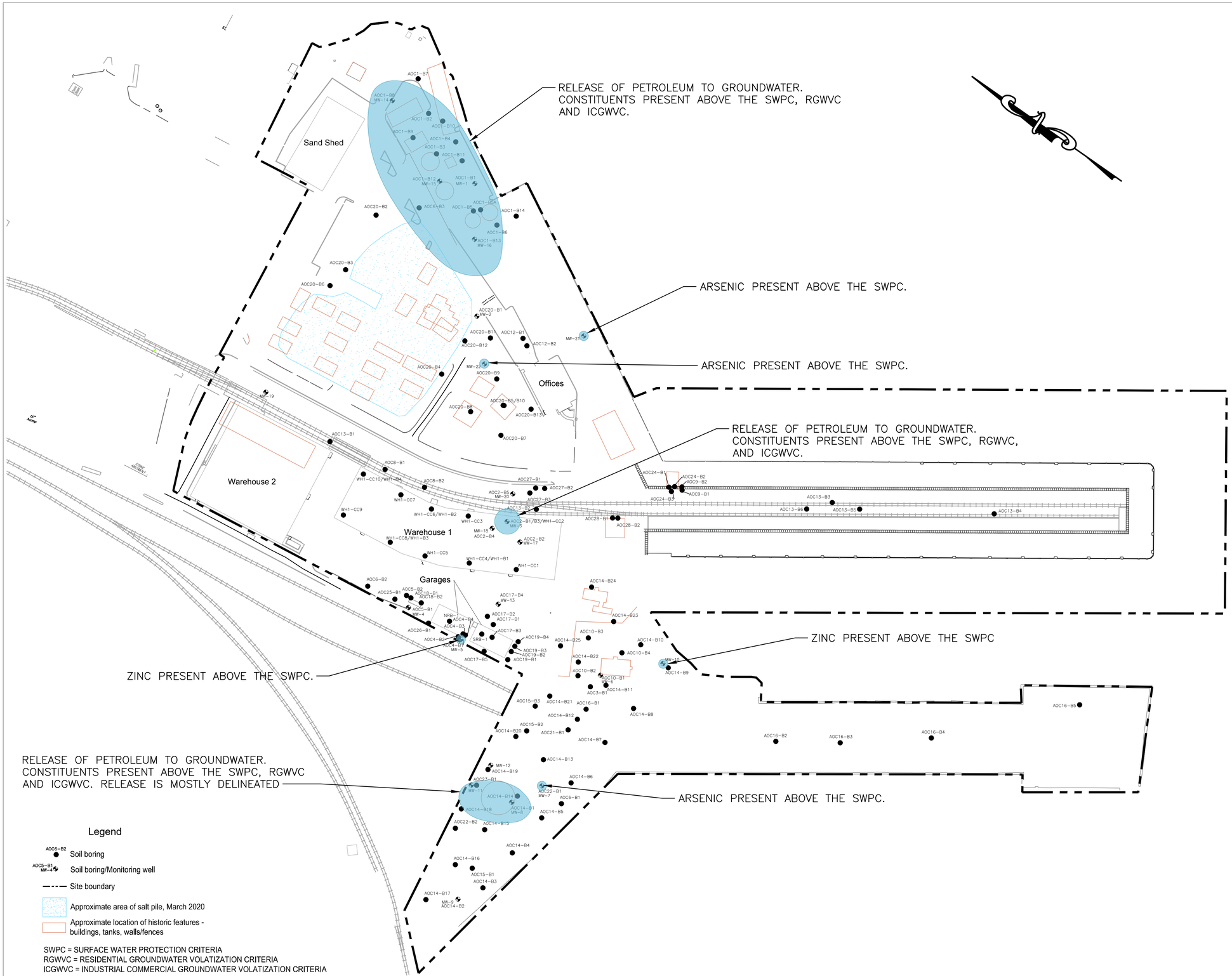
ISSUE/REVISION

I/R	DATE	DESCRIPTION

SHEET TITLE

FUGURE 4
GROUNDWATER FLOW PLAN

SHEET NUMBER



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CONSULTANT

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REGISTRATION

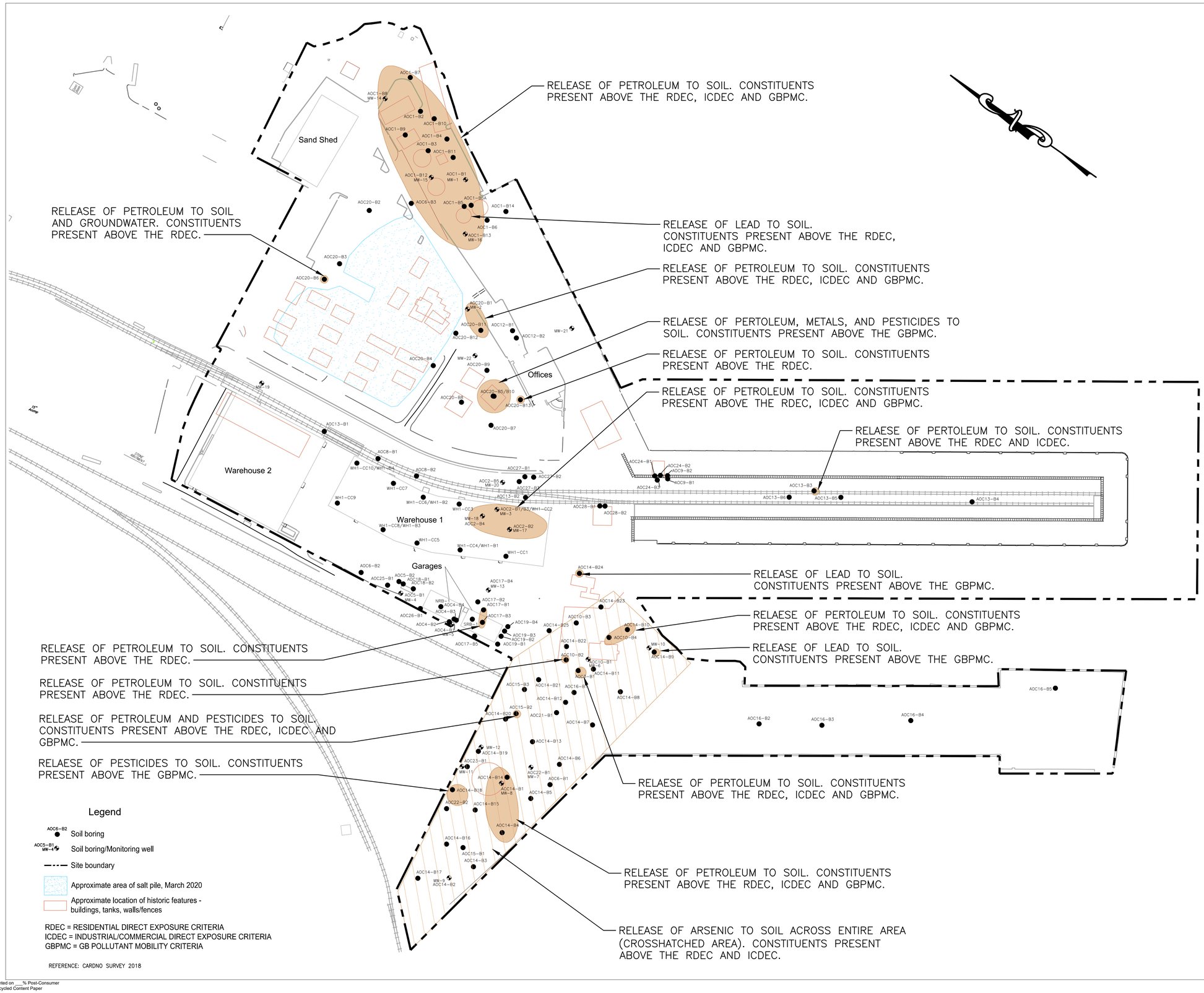
ISSUE/REVISION

I/R	DATE	DESCRIPTION

SHEET TITLE

FUGURE 5
SUMMARY OF GROUNDWATER RELEASES

SHEET NUMBER



Project Management Initials: ____ Designer: ____ Checked: ____ Approved: ____ ANSI D 22" x 34"

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REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION

SHEET TITLE

FUGURE 6
SUMMARY OF RELEASES TO SOIL

SHEET NUMBER

APPENDIX B

AECOM Soil/Groundwater Analytical Tables and Monitoring Well Details

TABLE 1

SUMMARY OF GROUNDWATER MONITORING WELL CONSTRUCTION DETAILS

STATE PIER NEW LONDON, CONNECTICUT

Well I.D.	Completion Depth (feet bgs)	Screened Interval (feet bgs)	Northing	Easting	PVC Well Casing Elevation (Mean Sea Level, NGVD 1929)	Ground Surface Elevation (Mean Sea Level, NGVD 1929)
MW-1	14	4-14	693136.18	1181167.58	8.13	8.36
MW-2	35	25-35	692974.53	1180943.96	26.64	26.91
MW-3	18	8-18	692678.26	1180630.13	10.45	10.85
MW-4	12	2-12	692743.73	1180366.02	6.24	6.41
MW-5	15	5-15	692616.48	1180374.22	6.88	7.08
MW-6	12.5	2.5-12.5	692335.76	1180479.87	6.28	6.45
MW-7	15	5-15	692303.67	1180221.34	6.12	6.60
MW-8	13	3-13	692335.68	1180157.37	6.13	6.27
MW-9	15	5-15	692311.35	1179928.28	5.02	5.17
MW-10	15	5-15	692243.26	1180574.25	5.87	6.17
MW-11	12.5	2.5-12.5	692424.85	1180138.49	6.35	6.59
MW-12	12.5	2.5-12.5	692424.96	1180227.05	6.38	6.68
MW-13	13	3-13	692594.6	1180478.84	6.59	6.77
MW-14	19	9-19	693375.76	1181210.52	13.50	13.80
MW-15	16	6-16	693198.97	1181129.7	9.49	9.90
MW-16	15	5-15	693070.37	1181072.2	9.17	9.42
MW-17	16	6-16	692631.74	1180610.56	10.54	10.81
MW-18	17.5	7.5-17.5	692695.5	1180600.88	10.57	10.84
MW-19	13	3-13	693243.45	1180562.77	6.89	7.33
MW-20	14.5	4.5-14.5	692701.48	1180684.1	6.40	6.71
MW-21	13	3-13	692768.88	1181037.87	7.64	8.09
MW-22	50	NA	692904.57	1180871.79	27.27	27.63
MW-23	33	23 - 33	NA	NA	NA	NA
MW-24	28.5	18.5 - 28.5	NA	NA	NA	NA

NA = Not Available

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TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC1-B1 2 - 4 ft 3/23/2020 AOC1-B1 2-4FT_03/23/20 0030624	AOC1-B1 8 - 10 ft 3/26/2020 AOC1 B1 8-10FT_03/26/20 0030753	AOC1-B2 2 - 4 ft 3/23/2020 AOC1-B2 2-4FT_03/23/20 0030624	AOC1-B2 13 - 15 ft 3/26/2020 AOC1 B2 13-15FT_03/26/20 0030753	AOC1-B3 2 - 4 ft 3/23/2020 AOC1-B3 2-4FT_03/23/20 0030624	AOC1-B3 13 - 15 ft 3/26/2020 AOC1 B3 13-15FT_03/26/20 0030753	AOC1-B4 2 - 4 ft 3/23/2020 AOC1-B4 2-4FT_03/23/20 0030624	AOC1-B4 8 - 10 ft 3/26/2020 AOC1 B4 8-10FT_03/26/20 0030753	AOC1-B5 2 - 4 ft 3/23/2020 AOC1-B5 2-4FT_03/23/20 0030624	AOC1-B5 8 - 10 ft 3/26/2020 AOC1 B5 8-10FT_03/26/20 0030753	AOC1-B5A 0.5 - 2 ft 6/9/2020 AOC1-B5A 0.5-2FT_06/09/20 0060304	AOC1-B5A 2 - 4 ft 6/9/2020 AOC1-B5A 2-4FT_06/09/20 0060304
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**170**	**4400**	< 54	**6700**	**66**	**540**	**160**	**270**	< 52	**1600**	NS	NS
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.5	< 93	< 7.2	**9100**	< 4.9	< 930	< 4.7	< 3.4	< 4.8	< 120	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.5	< 93	< 7.2	< 1000	< 4.9	< 930	< 4.7	< 3.4	< 4.8	< 120	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	< 9.1	< 190	< 14	< 2100	< 9.8	< 1900	< 9.4	< 6.7	< 9.6	< 240	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 9.1	< 190	< 14	< 2100	< 9.8	< 1900	< 9.4	< 6.7	< 9.6	< 240	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	< 9.1	< 190	< 14	**8800**	< 9.8	**6200**	< 9.4	< 6.7	< 9.6	< 240	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	< 4.5	**700**	< 7.2	< 1000	< 4.9	**1900**	< 4.7	< 3.4	< 4.8	< 120	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	< 4.5	**190**	< 7.2	< 1000	< 4.9	< 930	< 4.7	< 3.4	< 4.8	< 120	NS	NS
o-Xylene	ug/kg	NE	NE	NE	< 4.5	< 93	< 7.2	< 1000	< 4.9	< 930	< 4.7	< 3.4	< 4.8	< 120	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 4.5	< 93	< 7.2	**1100**	< 4.9	< 930	< 4.7	< 3.4	< 4.8	< 120	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 4.5	**300**	< 7.2	< 1000	< 4.9	< 930	< 4.7	< 3.4	< 4.8	**170**	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 320	< 360	< 320	**11000**	< 330	**9600**	< 320	< 330	< 310	< 330	NS	NS
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 320	< 360	< 320	**1400**	< 330	**2600**	< 320	< 330	< 310	< 330	NS	NS
Acenaphthylene	ug/kg	84000	1000000	2500000	< 320	< 360	< 320	< 350	< 330	**450**	**430**	< 330	< 310	< 330	NS	NS
Anthracene	ug/kg	400000	1000000	2500000	< 320	**1100**	< 320	**900**	< 330	**1400**	< 320	< 330	< 310	< 330	NS	NS
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 320	< 360	**490**	< 350	< 330	< 320	**800**	< 330	< 310	< 330	NS	NS
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	**340**	< 360	**470**	< 350	< 330	< 320	**1000**	< 330	< 310	< 330	NS	NS
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	**420**	< 360	**640**	< 350	< 330	< 320	**1100**	< 330	< 310	< 330	NS	NS
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	**560**	< 360	< 320	< 350	< 330	< 320	**940**	< 330	< 310	< 330	NS	NS
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 320	< 360	< 320	< 350	< 330	< 320	**510**	< 330	< 310	< 330	NS	NS
Chrysene	ug/kg	**1000**	**84000**	780000	< 320	< 360	**500**	< 350	< 330	< 320	**860**	< 330	< 310	< 330	NS	NS
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 320	< 360	< 320	< 350	< 330	< 320	< 320	< 330	< 310	< 330	NS	NS
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 320	< 360	**870**	< 350	< 330	< 320	**1100**	< 330	< 310	< 330	NS	NS
Fluorene	ug/kg	**56000**	1000000	2500000	< 320	< 360	< 320	**1300**	< 330	**2300**	< 320	< 330	< 310	< 330	NS	NS
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	**400**	< 360	< 320	< 350	< 330	< 320	**690**	< 330	< 310	< 330	NS	NS
Naphthalene	ug/kg	**56000**	1000000	2500000	< 320	< 360	< 320	**1500**	< 330	< 320	< 320	< 330	< 310	< 330	NS	NS
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 320	**2300**	**580**	**2900**	< 330	**5900**	**380**	< 330	< 310	< 330	NS	NS
Pyrene	ug/kg	**40000**	1000000	2500000	**350**	< 360	**700**	< 350	< 330	< 320	**1300**	< 330	< 310	< 330	NS	NS
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 320	< 360	< 320	< 350	< 330	< 320	< 320	< 330	< 310	< 330	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 320	< 360	< 320	< 350	< 330	< 320	< 320	< 330	< 310	< 330	NS	NS
Carbazole	ug/kg	1000	31000	290000	< 320	< 360	< 320	< 350	< 330	< 320	< 320	< 330	< 310	< 330	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	< 320	< 360	< 320	< 350	< 330	< 320	< 320	< 330	< 310	< 330	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 320	< 360	< 320	< 350	< 330	< 320	< 320	< 330	< 310	< 330	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 320	< 360	< 320	< 350	< 330	< 320	< 320	< 330	< 310	< 330	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	< 2.0	< 2.4	< 2.2	< 2.3	< 2.2	< 2.1	< 2.1	< 2.1	< 2.0	< 2.1	NS	NS
Arsenic	mg/kg	NE	**10**	**10**	**1.7**	**3.9**	**5.5**	< 1.2	< 1.1	< 1.0	**4.3**	< 1.1	**2.1**	**2.2**	NS	NS
Barium	mg/kg	NE	4700	140000	**53**	**19**	**37**	**12**	**23**	**23**	**89**	**14**	**41**	**100**	NS	NS
Beryllium	mg/kg	NE	2	2	< 1.0	< 1.2	< 1.1	< 1.2	< 1.1	< 1.0	< 1.1	< 1.1	< 1.0	< 1.0	NS	NS
Cadmium	mg/kg	NE	34	1000	< 0.50	< 0.59	< 0.54	< 0.58	< 0.55	< 0.52	< 0.53	< 0.53	< 0.51	< 0.51	NS	NS
Chromium (Total)	mg/kg	NE	100	100	**12**	**8.1**	**5.9**	**5.9**	**4.1**	**7.3**	**7.2**	**3.8**	**9.5**	**5.0**	NS	NS
Copper	mg/kg	NE	2500	76000	**16**	**20**	**250**	**3.9**	**17**	**8.4**	**110**	**15**	**23**	**97**	NS	NS
Lead	mg/kg	NE	400	**1000**	**90**	**36**	**100**	**3.1**	**31**	**2.8**	**190**	**11**	**64**	**3700**	**89**	**41**
Mercury	mg/kg	NE	20	610	**0.21**	**0.16**	< 0.13	**0.14**	< 0.14	< 0.14	**0.15**	< 0.13	**0.23**	**1.1**	NS	NS
Nickel	mg/kg	NE	1400	7500	**6.9**	**5.5**	**4.7**	**2.9**	**2.8**	**4.7**	**4.7**	**2.7**	**5.6**	**2.1**	NS	NS
Vanadium	mg/kg	NE	470	14000	**12**	**14**	**9.2**	**6.2**	**6.8**	**9.2**	**11**	**7.7**	**14**	**5.2**	NS	NS
Zinc	mg/kg	NE	20000	610000	**210**	**29**	**200**	**7.7**	**29**	**20**	**150**	**40**	**46**	**38**	NS	NS
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060	< 0.0060	NS	NS
Arsenic	mg/l	0.5	NE	NE	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090	< 0.0090	NS	NS
Barium	mg/l	10	NE	NE	**0.37**	**0.64**	NS	**0.39**	**0.26**	**0.31**	NS	**0.34**	**0.40**	**0.83**	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	< 0.050	NS	< 0.050	< 0.050	< 0.050	NS	< 0.050	< 0.050	< 0.050	NS	NS
Copper	mg/l	13	NE	NE	< 0.040	< 0.040	NS	< 0.040	< 0.040	< 0.040	NS	< 0.040	< 0.040	**0.071**	NS	NS
Lead	mg/l	**0.15**	NE	NE	**0.13**	**0.070**	NS	< 0.013	**0.041**	< 0.013	NS	< 0.013	0.095	**7.3**	**0.026**	**0.037**
Zinc	mg/l	50	NE	NE	**0.36**	**0.12**	NS	**0.093**	**0.055**	**0.070**	NS	**0.13**	**0.098**	**0.18**	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.11	< 0.12	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11	< 0.10	< 0.11	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**93**	**83**	**92**	**85**	**90**	**92**	**93**	**90**	**95**	**88**	**95**	**94**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC1-B5A 4 - 6 ft 6/9/2020 AOC1-B5A 4-6FT_06/09/20 0060304	AOC1-B5A 6 - 8 ft 6/11/2020 AOC1-B5A 6-8FT_06/11/20 0060414	AOC1-B5A 8 - 10 ft 6/11/2020 AOC1-B5A 8-10FT_06/11/20 0060414	AOC1-B6 2 - 4 ft 3/23/2020 AOC1-B6 2-4FT_03/23/20 0030624	AOC1-B6 7 - 9 ft 3/26/2020 AOC1 B6 7-9FT_03/26/20 0030753	AOC1-B7 1 - 2 ft 6/5/2020 AOC1-B7 1-2_06/05/20 0060230	AOC1-B7 2 - 4 ft 6/5/2020 AOC1-B7 2-4_06/05/20 0060230	AOC1-B7 4 - 6 ft 6/10/2020 AOC1-B7 4-6FT_06/10/20 0060378	AOC1-B7 6 - 8 ft 6/10/2020 AOC1-B7 6-8FT_06/10/20 0060378	AOC1-B8 0.5 - 2 ft 6/8/2020 AOC1-B8 0.5-2FT_06/08/20 0060263	AOC1-B8 2 - 4 ft 6/8/2020 AOC1-B8 2-4FT_06/08/20 0060263	AOC1-B8 4 - 6 ft 6/8/2020 AOC1-B8 4-6FT_06/08/20 0060263
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	NS	NS	NS	< 52	**110**	**200**	< 52	**69**	< 52	**400**	**160**	< 54
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	< 3.8	< 4.5	< 4.6	< 3.4	< 3.9	< 3.5	NS	NS	< 4.2	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	< 3.8	< 4.5	< 4.6	< 3.4	< 3.9	< 3.5	NS	NS	< 4.2	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	< 7.5	< 9.0	< 9.1	< 6.7	< 7.7	< 6.9	NS	NS	< 8.4	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	< 7.5	< 9.0	< 9.1	< 6.7	< 7.7	< 6.9	NS	NS	< 8.4	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	< 7.5	< 9.0	< 9.1	< 6.7	< 7.7	< 6.9	NS	NS	< 8.4	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	< 3.8	< 4.5	< 4.6	< 3.4	< 3.9	< 3.5	NS	NS	< 4.2	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	< 3.8	< 4.5	< 4.6	< 3.4	< 3.9	< 3.5	NS	NS	< 4.2	NS	NS
o-Xylene	ug/kg	NE	NE	NE	NS	< 3.8	< 4.5	< 4.6	< 3.4	< 3.9	< 3.5	NS	NS	< 4.2	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	< 3.8	< 4.5	< 4.6	< 3.4	< 3.9	< 3.5	NS	NS	< 4.2	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	< 3.8	< 4.5	< 4.6	< 3.4	< 3.9	< 3.5	NS	NS	< 4.2	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	NS	NS	NS	< 310	< 330	< 320	< 310	< 310	< 310	< 320	< 320	< 320
Acenaphthene	ug/kg	**84000**	1000000	2500000	NS	NS	NS	< 310	< 330	< 320	< 310	< 310	< 310	< 320	< 320	< 320
Acenaphthylene	ug/kg	84000	1000000	2500000	NS	NS	NS	< 310	< 330	**570**	< 310	< 310	< 310	**540**	**430**	< 320
Anthracene	ug/kg	400000	1000000	2500000	NS	NS	NS	< 310	< 330	**780**	< 310	< 310	< 310	**590**	**630**	< 320
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	NS	NS	NS	< 310	< 330	**2300**	**330**	< 310	< 310	**3800**	**3100**	**490**
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	NS	NS	NS	**330**	< 330	**2400**	**420**	**350**	< 310	**4300**	**2900**	**470**
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	NS	NS	NS	**430**	**450**	**2800**	**470**	**460**	< 310	**5100**	**3300**	**580**
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	NS	NS	NS	**330**	**330**	**1800**	**340**	**340**	< 310	**3100**	**1900**	< 320
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	NS	NS	NS	< 310	< 330	**970**	< 310	< 310	< 310	**1800**	**1800**	< 320
Chrysene	ug/kg	**1000**	**84000**	780000	NS	NS	NS	< 310	**350**	**2500**	**410**	**360**	< 310	**4100**	**3100**	**490**
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	NS	NS	NS	< 310	< 330	**370**	< 310	< 310	< 310	**750**	**500**	< 320
Fluoranthene	ug/kg	**56000**	1000000	2500000	NS	NS	NS	**420**	**520**	**4300**	**750**	**480**	< 310	**6400**	**6200**	**910**
Fluorene	ug/kg	**56000**	1000000	2500000	NS	NS	NS	< 310	< 330	< 320	< 310	< 310	< 310	< 320	< 320	< 320
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	NS	NS	NS	< 310	< 330	**1500**	< 310	< 310	< 310	**2600**	**1600**	< 320
Naphthalene	ug/kg	**56000**	1000000	2500000	NS	NS	NS	< 310	< 330	< 320	< 310	< 310	< 310	< 320	< 320	< 320
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	NS	NS	NS	< 310	< 330	**3100**	**440**	< 310	< 310	**2300**	**2000**	< 320
Pyrene	ug/kg	**40000**	1000000	2500000	NS	NS	NS	**410**	**500**	**4200**	**690**	**500**	< 310	**5900**	**5800**	**890**
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	< 310	< 330	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	< 310	< 330	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	< 310	< 330	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	< 310	< 330	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	< 310	< 330	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	< 310	< 330	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	NS	NS	NS	< 2.0	< 2.2	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/kg	NE	**10**	**10**	NS	NS	NS	**2.0**	**3.3**	NS	NS	NS	NS	NS	NS	NS
Barium	mg/kg	NE	4700	140000	NS	NS	NS	**53**	**52**	NS	NS	NS	NS	NS	NS	NS
Beryllium	mg/kg	NE	2	2	NS	NS	NS	< 1.0	< 1.1	NS	NS	NS	NS	NS	NS	NS
Cadmium	mg/kg	NE	34	1000	NS	NS	NS	< 0.50	< 0.55	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/kg	NE	100	100	NS	NS	NS	**17**	**8.7**	NS	NS	NS	NS	NS	NS	NS
Copper	mg/kg	NE	2500	76000	NS	NS	NS	**30**	**21**	NS	NS	NS	NS	NS	NS	NS
Lead	mg/kg	NE	400	**1000**	**64**	**100**	**280**	**83**	**120**	NS	NS	NS	NS	NS	NS	NS
Mercury	mg/kg	NE	20	610	NS	NS	NS	**0.21**	**0.23**	NS	NS	NS	NS	NS	NS	NS
Nickel	mg/kg	NE	1400	7500	NS	NS	NS	**11**	**6.9**	NS	NS	NS	NS	NS	NS	NS
Vanadium	mg/kg	NE	470	14000	NS	NS	NS	**15**	**14**	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/kg	NE	20000	610000	NS	NS	NS	**61**	**64**	NS	NS	NS	NS	NS	NS	NS
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	< 0.0060	< 0.0060	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	< 0.0090	< 0.0090	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	NS	NS	**0.17**	**0.55**	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	< 0.050	< 0.050	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	NS	NS	**0.40**	< 0.040	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	**0.10**	**0.15**	**0.56**	**0.022**	**0.13**	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	NS	NS	NS	**0.054**	**0.16**	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	< 0.10	< 0.11	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**95**	**95**	**91**	**94**	**90**	**94**	**96**	**95**	**95**	**93**	**93**	**92**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC1-B8 6 - 8 ft 6/10/2020 AOC1-B8 6-8FT_06/10/20 0060378	AOC1-B8 8 - 10 ft 6/10/2020 AOC1-B8 8-10FT_06/10/20 0060378	AOC1-B8 10 - 12 ft 6/10/2020 AOC1-B8 10-12FT_06/10/20 0060378	AOC1-B8 12 - 14 ft 6/10/2020 AOC1-B8 12-14FT_06/10/20 0060378	AOC1-B8 14 - 16 ft 6/10/2020 AOC1-B8 14-16FT_06/10/20 0060378	AOC1-B8 16 - 18 ft 6/10/2020 AOC1-B8 16-18FT_06/10/20 0060378	AOC1-B9 0.5 - 1 ft 6/8/2020 AOC1-B9 0.5-1FT_06/08/20 0060263	AOC1-B9 2 - 4 ft 6/8/2020 AOC1-B9 2-4FT_06/08/20 0060263	AOC1-B9 4 - 6 ft 6/11/2020 AOC1-B9 4-6FT_06/11/20 0060414	AOC1-B9 6 - 8 ft 6/11/2020 AOC1-B9 6-8FT_06/11/20 0060414	AOC1-B9 8 - 10 ft 6/11/2020 AOC1-B9 8-10FT_06/11/20 0060414	AOC1-B9 10 - 12 ft 6/11/2020 AOC1-B9 10-12FT_06/11/20 0060414
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**210**	< 51	**290**	< 52	**350**	**1100**	**94**	< 51	< 51	< 51	< 52	**89**
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	< 160	< 3.6	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	< 160	< 3.6	NS	NS	NS	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	< 320	< 7.2	NS	NS	NS	NS	NS
M,P-XYLENE (SUM OF ISO	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	< 320	< 7.2	NS	NS	NS	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	< 320	< 7.2	NS	NS	NS	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	< 160	< 3.6	NS	NS	NS	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	< 160	< 3.6	NS	NS	NS	NS	NS
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	< 160	< 3.6	NS	NS	NS	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	< 160	< 3.6	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	< 160	< 3.6	NS	NS	NS	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 320	< 310	< 310	< 310	< 310	< 330	< 320	< 310	< 310	< 300	< 310	< 300
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 320	< 310	< 310	< 310	< 310	< 330	< 320	< 310	< 310	< 300	< 310	< 300
Acenaphthylene	ug/kg	84000	1000000	2500000	**380**	< 310	**530**	< 310	**540**	< 330	< 320	< 310	< 310	< 300	< 310	< 300
Anthracene	ug/kg	400000	1000000	2500000	**820**	< 310	**880**	< 310	**1100**	< 330	< 320	< 310	< 310	< 300	< 310	< 300
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	**3500**	< 310	**4300**	< 310	**4400**	< 330	**350**	< 310	< 310	< 300	< 310	< 300
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	**3600**	< 310	**4400**	< 310	**4300**	< 330	**470**	< 310	< 310	< 300	< 310	< 300
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	**4100**	< 310	**4900**	< 310	**5100**	< 330	**550**	< 310	< 310	< 300	< 310	< 300
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	**2600**	< 310	**3100**	< 310	**3100**	< 330	**460**	< 310	< 310	< 300	< 310	< 300
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	**2000**	< 310	**2200**	< 310	**1900**	< 330	< 320	< 310	< 310	< 300	< 310	< 300
Chrysene	ug/kg	**1000**	**84000**	780000	**3700**	< 310	**4400**	< 310	**4500**	< 330	**370**	< 310	< 310	< 300	< 310	< 300
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	**630**	< 310	**830**	< 310	**740**	< 330	< 320	< 310	< 310	< 300	< 310	< 300
Fluoranthene	ug/kg	**56000**	1000000	2500000	**6500**	< 310	**7600**	< 310	**8500**	< 330	**420**	< 310	< 310	< 300	< 310	< 300
Fluorene	ug/kg	**56000**	1000000	2500000	< 320	< 310	< 310	< 310	**430**	< 330	< 320	< 310	< 310	< 300	< 310	< 300
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	**2100**	< 310	**2500**	< 310	**2400**	< 330	**340**	< 310	< 310	< 300	< 310	< 300
Naphthalene	ug/kg	**56000**	1000000	2500000	< 320	< 310	< 310	< 310	< 310	< 330	< 320	< 310	< 310	< 300	< 310	< 300
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	**2400**	< 310	**2500**	< 310	**3600**	< 330	< 320	< 310	< 310	< 300	< 310	< 300
Pyrene	ug/kg	**40000**	1000000	2500000	**6100**	< 310	**7500**	< 310	**8100**	< 330	**450**	< 310	< 310	< 300	< 310	< 300
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/kg	NE	**10**	**10**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/kg	NE	4700	140000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Beryllium	mg/kg	NE	2	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	mg/kg	NE	34	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/kg	NE	100	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/kg	NE	2500	76000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/kg	NE	400	**1000**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Mercury	mg/kg	NE	20	610	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nickel	mg/kg	NE	1400	7500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	mg/kg	NE	470	14000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/kg	NE	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**94**	**97**	**95**	**96**	**95**	**90**	**93**	**96**	**97**	**97**	**96**	**97**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
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Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
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TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC1-B9 12 - 14 ft 6/11/2020 AOC1-B9 12-14FT_06/11/20 0060414	AOC1-B10 0.5 - 2 ft 6/9/2020 AOC1-B10 0.5-2FT_06/09/20 0060304	AOC1-B10 2 - 4 ft 6/9/2020 AOC1-B10 2-4FT_06/09/20 0060304	AOC1-B10 4 - 6 ft 6/9/2020 AOC1-B10 4-6FT_06/09/20 0060304	AOC1-B10 6 - 8 ft 6/11/2020 AOC1-B10 6-8FT_06/11/20 0060414	AOC1-B10 8 - 10 ft 6/11/2020 AOC1-B10 8-10FT_06/11/20 0060414	AOC1-B11 0.5 - 2 ft 6/8/2020 AOC1-B11 0.5-2FT_06/08/20 0060263	AOC1-B11 0.5 - 2 ft 6/8/2020 OC1-B11 0.5-2FT DUP_06/08/2 0060263	AOC1-B11 2 - 4 ft 6/8/2020 AOC1-B11 2-4FT_06/08/20 0060263	AOC1-B11 4 - 6 ft 6/8/2020 AOC1-B11 4-6FT_06/08/20 0060263	AOC1-B11 8 - 10 ft 6/11/2020 AOC1-B11 8-10FT_06/11/20 0060414	AOC1-B11 10 - 12 ft 6/11/2020 AOC1-B11 10-12FT_06/11/20 0060414
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**2300**	**77**	**620**	**130**	**310**	< 56	< 54	< 54	**92**	< 52	**73**	**120**
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.3	NS	NS	< 3.6	NS	< 4.3	< 3.9	< 4.0	NS	NS	NS	< 3.5
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.3	NS	NS	< 3.6	NS	< 4.3	< 3.9	< 4.0	NS	NS	NS	< 3.5
Carbon disulfide	ug/kg	8000	500000	1000000	< 8.5	NS	NS	< 7.2	NS	< 8.5	< 7.9	< 8.1	NS	NS	NS	< 7.0
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 8.5	NS	NS	< 7.2	NS	< 8.5	< 7.9	< 8.1	NS	NS	NS	< 7.0
Naphthalene	ug/kg	56000	1000000	2500000	< 8.5	NS	NS	< 7.2	NS	< 8.5	< 7.9	< 8.1	NS	NS	NS	< 7.0
n-Butylbenzene	ug/kg	70000	500000	1000000	< 4.3	NS	NS	< 3.6	NS	< 4.3	< 3.9	< 4.0	NS	NS	NS	< 3.5
n-Propylbenzene	ug/kg	10000	500000	1000000	< 4.3	NS	NS	< 3.6	NS	< 4.3	< 3.9	< 4.0	NS	NS	NS	< 3.5
o-Xylene	ug/kg	NE	NE	NE	< 4.3	NS	NS	< 3.6	NS	< 4.3	< 3.9	< 4.0	NS	NS	NS	< 3.5
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 4.3	NS	NS	< 3.6	NS	< 4.3	< 3.9	< 4.0	NS	NS	NS	< 3.5
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 4.3	NS	NS	< 3.6	NS	< 4.3	< 3.9	< 4.0	NS	NS	NS	< 3.5
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 320	< 310	**1100**	< 320	**320**	< 330	< 320	< 320	< 300	< 310	< 310	< 320
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 320	< 310	**3200**	**360**	**1800**	< 330	< 320	< 320	< 300	< 310	< 310	< 320
Acenaphthylene	ug/kg	84000	1000000	2500000	< 320	< 310	**400**	< 320	< 320	< 330	< 320	< 320	< 300	< 310	< 310	< 320
Anthracene	ug/kg	400000	1000000	2500000	< 320	< 310	**7300**	**900**	**4200**	< 330	< 320	< 320	< 300	< 310	< 310	< 320
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 320	< 310	**17000**	**2700**	**11000**	< 330	< 320	< 320	**900**	< 310	< 310	< 320
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 320	< 310	**17000**	**2800**	**10000**	< 330	< 320	< 320	**1000**	< 310	< 310	< 320
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 320	< 310	**17000**	**3100**	**10000**	< 330	< 320	< 320	**1500**	< 310	< 310	< 320
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 320	< 310	**12000**	**2100**	**6900**	< 330	< 320	< 320	**1100**	< 310	< 310	< 320
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 320	< 310	**8200**	**1200**	**4700**	< 330	< 320	< 320	**810**	< 310	< 310	< 320
Chrysene	ug/kg	**1000**	**84000**	780000	< 320	< 310	**17000**	**2700**	**10000**	< 330	< 320	< 320	**1100**	< 310	< 310	< 320
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 320	< 310	**3400**	**510**	**1700**	< 330	< 320	< 320	< 300	< 310	< 310	< 320
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 320	< 310	**38000**	**5700**	**24000**	< 330	< 320	< 320	**2000**	< 310	< 310	< 320
Fluorene	ug/kg	**56000**	1000000	2500000	< 320	< 310	**2500**	< 320	**1700**	< 330	< 320	< 320	< 300	< 310	< 310	< 320
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 320	< 310	**8600**	**1500**	**5600**	< 330	< 320	< 320	**810**	< 310	< 310	< 320
Naphthalene	ug/kg	**56000**	1000000	2500000	< 320	< 310	**2600**	< 320	**410**	< 330	< 320	< 320	< 300	< 310	< 310	< 320
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 320	< 310	**38000**	**4700**	**25000**	< 330	< 320	< 320	**1700**	< 310	< 310	< 320
Pyrene	ug/kg	**40000**	1000000	2500000	< 320	< 310	**33000**	**5000**	**22000**	< 330	< 320	< 320	**1900**	< 310	< 310	< 320
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/kg	NE	**10**	**10**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/kg	NE	4700	140000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Beryllium	mg/kg	NE	2	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	mg/kg	NE	34	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/kg	NE	100	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/kg	NE	2500	76000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/kg	NE	400	**1000**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Mercury	mg/kg	NE	20	610	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nickel	mg/kg	NE	1400	7500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	mg/kg	NE	470	14000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/kg	NE	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**92**	**94**	**90**	**92**	**93**	**89**	**93**	**93**	**100**	**94**	**94**	**91**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC1-B12 0.5 - 2 ft 6/8/2020 AOC1-B12 0.5-2FT_06/08/20 0060263	AOC1-B12 2 - 4 ft 6/8/2020 AOC1-B12 2-4FT_06/08/20 0060263	AOC1-B12 2 - 4 ft 6/8/2020 AOC1-B12 2-4FT DUP_06/08/2 0060263	AOC1-B12 4 - 6 ft 6/8/2020 AOC1-B12 4-6FT_06/08/20 0060263	AOC1-B12 8 - 10 ft 6/11/2020 AOC1-B12 8-10FT_06/11/20 0060414	AOC1-B12 10 - 12 ft 6/11/2020 AOC1-B12 10-12FT_06/11/20 0060414	AOC1-B12 12 - 14 ft 6/11/2020 AOC1-B12 12-14FT_06/11/20 0060414	AOC1-B13 0.5 - 2 ft 6/8/2020 AOC1-B13 0.5-2FT_06/08/20 0060263	AOC1-B13 2 - 4 ft 6/8/2020 AOC1-B13 2-4FT_06/08/20 0060263	AOC1-B13 4 - 6 ft 6/8/2020 AOC1-B13 4-6FT_06/08/20 0060263	AOC1-B13 8 - 10 ft 6/11/2020 AOC1-B13 8-10FT_06/11/20 0060414	AOC1-B13 8 - 10 ft 6/11/2020 AOC1-B13 8-10FT DUP_06/11/2 0060414
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 52	**400**	**240**	**340**	**820**	**2800**	**11000**	< 51	< 53	< 52	**140**	NS
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	< 3.4	NS	< 3.3	NS	NS	NS	NS	< 4.1	NS	< 3.7	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	< 3.4	NS	< 3.3	NS	NS	NS	NS	< 4.1	NS	< 3.7	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	< 6.7	NS	< 6.7	NS	NS	NS	NS	< 8.2	NS	< 7.4	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	< 6.7	NS	< 6.7	NS	NS	NS	NS	< 8.2	NS	< 7.4	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	< 6.7	NS	< 6.7	NS	NS	NS	NS	< 8.2	NS	< 7.4	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	< 3.4	NS	< 3.3	NS	NS	NS	NS	< 4.1	NS	< 3.7	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	< 3.4	NS	< 3.3	NS	NS	NS	NS	< 4.1	NS	< 3.7	NS
o-Xylene	ug/kg	NE	NE	NE	NS	< 3.4	NS	< 3.3	NS	NS	NS	NS	< 4.1	NS	< 3.7	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	< 3.4	NS	< 3.3	NS	NS	NS	NS	< 4.1	NS	< 3.7	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	< 3.4	NS	< 3.3	NS	NS	NS	NS	< 4.1	NS	< 3.7	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 320	< 310	< 310	< 310	< 310	**760**	**120000**	< 310	< 320	< 310	< 320	NS
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 320	< 310	< 310	< 310	< 310	< 310	**4900**	< 310	< 320	< 310	< 320	NS
Acenaphthylene	ug/kg	84000	1000000	2500000	< 320	< 310	< 310	< 310	< 310	< 310	**1200**	< 310	< 320	< 310	< 320	NS
Anthracene	ug/kg	400000	1000000	2500000	< 320	< 310	< 310	< 310	< 310	< 310	< 320	< 310	< 320	< 310	< 320	NS
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	**510**	< 310	< 310	< 310	**350**	< 310	< 320	< 310	**340**	< 310	< 320	NS
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	**610**	< 310	< 310	< 310	**440**	< 310	< 320	< 310	**410**	< 310	< 320	NS
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	**680**	< 310	< 310	< 310	**500**	< 310	< 320	**330**	**610**	< 310	< 320	NS
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	**480**	< 310	< 310	< 310	**390**	< 310	< 320	< 310	**370**	< 310	< 320	NS
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 320	< 310	< 310	< 310	< 310	< 310	< 320	< 310	< 320	< 310	< 320	NS
Chrysene	ug/kg	**1000**	**84000**	780000	**520**	< 310	< 310	< 310	**360**	< 310	< 320	< 310	**420**	< 310	< 320	NS
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 320	< 310	< 310	< 310	< 310	< 310	< 320	< 310	< 320	< 310	< 320	NS
Fluoranthene	ug/kg	**56000**	1000000	2500000	**820**	**350**	**400**	< 310	**630**	< 310	< 320	**440**	**820**	< 310	**320**	NS
Fluorene	ug/kg	**56000**	1000000	2500000	< 320	< 310	< 310	< 310	< 310	< 310	**5500**	< 310	< 320	< 310	< 320	NS
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	**370**	< 310	< 310	< 310	**310**	< 310	< 320	< 310	< 320	< 310	< 320	NS
Naphthalene	ug/kg	**56000**	1000000	2500000	< 320	< 310	< 310	< 310	< 310	< 310	**23000**	< 310	< 320	< 310	< 320	NS
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	**350**	< 310	**320**	< 310	**450**	< 310	**20000**	< 310	**370**	< 310	< 320	NS
Pyrene	ug/kg	**40000**	1000000	2500000	**810**	< 310	**330**	< 310	**580**	< 310	**750**	**370**	**660**	< 310	< 320	NS
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/kg	NE	**10**	**10**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/kg	NE	4700	140000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Beryllium	mg/kg	NE	2	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	mg/kg	NE	34	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/kg	NE	100	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/kg	NE	2500	76000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/kg	NE	400	**1000**	NS	NS	NS	NS	NS	NS	NS	**39**	**320**	**200**	**150**	**200**
Mercury	mg/kg	NE	20	610	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nickel	mg/kg	NE	1400	7500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	mg/kg	NE	470	14000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/kg	NE	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	NS	NS	NS	**0.013**	**0.54**	**0.25**	**0.50**	**0.59**
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**94**	**94**	**94**	**96**	**96**	**95**	**91**	**95**	**93**	**95**	**94**	**94**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
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ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID					AOC1-B13	AOC1-B14	AOC1-B14	AOC1-B14	AOC1-B14	AOC1-B14	AOC1-B16	AOC1-B16	AOC1-B16	AOC1-B16	AOC1-B16	AOC1-B16
Depth Interval					10 - 12 ft	0.5 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft	15 - 17 ft	17 - 19 ft	19 - 21 ft	21 - 23 ft	23 - 25 ft	25 - 27 ft
Sample Date	Unit	GBPMC	RDEC	ICDEC	6/11/2020	6/8/2020	6/8/2020	6/8/2020	6/11/2020	6/11/2020	8/18/2020	8/18/2020	8/18/2020	8/18/2020	8/18/2020	8/18/2020
Sample ID					AOC1-B13 10-12FT_06/11/20	AOC1-B14 0.5-2FT_06/08/20	AOC1-B14 2-4FT_06/08/20	AOC1-B14 4-6FT_06/08/20	AOC1-B14 6-8FT_06/11/20	AOC1-B14 6-8FT DUP_06/11/2	AOC1-B16 15-17FT_08/18/20	AOC1-B16 17-19FT_08/18/20	AOC1-B16 19-21FT_08/18/20	AOC1-B16 21-23FT_08/18/20	AOC1-B16 23-25FT_08/18/20	AOC1-B16 25-27FT_08/18/20
SDG					0060414	0060263	0060263	0060263	0060414	0060414	0080493	0080493	0080493	0080493	0080493	0080493
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	NS	< 56	< 58	< 59	**150**	< 56	< 50	< 51	< 50	< 51	< 51	**7600**
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	< 3.7	NS	< 4.3	NS	NS	NS	< 3.5	NS	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	< 3.7	NS	< 4.3	NS	NS	NS	< 3.5	NS	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	< 7.3	NS	< 8.7	NS	NS	NS	< 6.9	NS	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	NS	< 7.3	NS	< 8.7	NS	NS	NS	< 6.9	NS	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	< 7.3	NS	< 8.7	NS	NS	NS	< 6.9	NS	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	< 3.7	NS	< 4.3	NS	NS	NS	< 3.5	NS	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	< 3.7	NS	< 4.3	NS	NS	NS	< 3.5	NS	NS	NS
o-Xylene	ug/kg	NE	NE	NE	NS	NS	< 3.7	NS	< 4.3	NS	NS	NS	< 3.5	NS	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	< 3.7	NS	< 4.3	NS	NS	NS	< 3.5	NS	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	< 3.7	NS	< 4.3	NS	NS	NS	< 3.5	NS	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Acenaphthene	ug/kg	**84000**	1000000	2500000	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Acenaphthylene	ug/kg	84000	1000000	2500000	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Anthracene	ug/kg	400000	1000000	2500000	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Chrysene	ug/kg	**1000**	**84000**	780000	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Fluoranthene	ug/kg	**56000**	1000000	2500000	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Fluorene	ug/kg	**56000**	1000000	2500000	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Naphthalene	ug/kg	**56000**	1000000	2500000	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
Pyrene	ug/kg	**40000**	1000000	2500000	NS	< 330	< 340	< 350	< 340	< 340	< 300	< 300	< 300	< 300	< 300	< 330
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/kg	NE	**10**	**10**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/kg	NE	4700	140000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Beryllium	mg/kg	NE	2	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	mg/kg	NE	34	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/kg	NE	100	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/kg	NE	2500	76000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/kg	NE	400	**1000**	**37**	**3.9**	**21**	**5.3**	**17**	**35**	NS	NS	NS	NS	NS	NS
Mercury	mg/kg	NE	20	610	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nickel	mg/kg	NE	1400	7500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	mg/kg	NE	470	14000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/kg	NE	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	**0.061**	< 0.013	< 0.013	< 0.013	**0.026**	**0.020**	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**92**	**88**	**87**	**83**	**87**	**88**	**98**	**98**	**98**	**98**	**98**	**91**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID					AOC1-B16	AOC1-B16	AOC1-B17	AOC1-B17	AOC1-B17	AOC1-B17	AOC1-B17	AOC1-B17	AOC1-B17	AOC1-B17	AOC2-B1	AOC2-B1
Depth Interval					27 - 29 ft	29 - 31 ft	15 - 17 ft	17 - 19 ft	19 - 21 ft	21 - 23 ft	23 - 25 ft	25 - 27 ft	27 - 29 ft	29 - 31 ft	0 - 2 ft	10 - 15 ft
Sample Date	Unit	GBPMC	RDEC	ICDEC	8/18/2020	8/18/2020	8/21/2020	8/21/2020	8/21/2020	8/21/2020	8/21/2020	8/21/2020	8/21/2020	8/21/2020	3/19/2020	3/19/2020
Sample ID					AOC1-B16 27-29FT_08/18/20	AOC1-B16 29-31FT_08/18/20	AOC1-B17 15-17FT_08/21/20	AOC1-B17 17-19FT_08/21/20	AOC1-B17 19-21FT_08/21/20	AOC1-B17 21-23FT_08/21/20	AOC1-B17 23-25FT_08/21/20	AOC1-B17 25-27FT_08/21/20	AOC1-B17 27-29FT_08/21/20	AOC1-B17 29-31FT_08/21/20	AOC2-B1 0-2FT_03/19/20	AOC2-B1 10-15FT_03/19/20
SDG					0080493	0080493	0080642	0080642	0080642	0080642	0080642	0080642	0080642	0080642	0030573	0030573
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**3400**	**160**	< 50	< 50	< 50	< 51	< 51	< 52	< 54	< 54	< 55	**23000**
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.5	NS	NS	NS	NS	NS	NS	< 4.8	NS	< 4.5	< 4.8	< 2900
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.5	NS	NS	NS	NS	NS	NS	< 4.8	NS	< 4.5	< 4.8	< 2900
Carbon disulfide	ug/kg	8000	500000	1000000	< 6.9	NS	NS	NS	NS	NS	NS	< 9.7	NS	< 8.9	< 9.6	< 5800
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 6.9	NS	NS	NS	NS	NS	NS	< 9.7	NS	< 8.9	< 9.6	< 5800
Naphthalene	ug/kg	56000	1000000	2500000	< 6.9	NS	NS	NS	NS	NS	NS	< 9.7	NS	< 8.9	< 9.6	**35000**
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.5	NS	NS	NS	NS	NS	NS	< 4.8	NS	< 4.5	< 4.8	< 2900
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.5	NS	NS	NS	NS	NS	NS	< 4.8	NS	< 4.5	< 4.8	< 2900
o-Xylene	ug/kg	NE	NE	NE	< 3.5	NS	NS	NS	NS	NS	NS	< 4.8	NS	< 4.5	< 4.8	< 2900
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.5	NS	NS	NS	NS	NS	NS	< 4.8	NS	< 4.5	< 4.8	< 2900
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.5	NS	NS	NS	NS	NS	NS	< 4.8	NS	< 4.5	< 4.8	< 2900
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**220000**
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**590000**
Acenaphthylene	ug/kg	84000	1000000	2500000	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**11000**
Anthracene	ug/kg	400000	1000000	2500000	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**210000**
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**150000**
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**41000**
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**63000**
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**13000**
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**22000**
Chrysene	ug/kg	**1000**	**84000**	780000	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**120000**
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**4800**
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**950000**
Fluorene	ug/kg	**56000**	1000000	2500000	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**680000**
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**14000**
Naphthalene	ug/kg	**56000**	1000000	2500000	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**5000**
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**2300000**
Pyrene	ug/kg	**40000**	1000000	2500000	< 350	< 330	< 310	< 300	< 300	< 300	< 310	< 310	< 320	< 320	< 320	**550000**
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 320	< 3500
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 320	< 3500
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 320	**67000**
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 320	**660000**
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 320	< 3500
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 320	< 3500
Metals																
Antimony	mg/kg	NE	27	8200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 2.1	< 2.2
Arsenic	mg/kg	NE	**10**	**10**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**2.6**	< 1.1
Barium	mg/kg	NE	4700	140000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**46**	**23**
Beryllium	mg/kg	NE	2	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 1.1	< 1.1
Cadmium	mg/kg	NE	34	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.54	< 0.54
Chromium (Total)	mg/kg	NE	100	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**16**	**3.7**
Copper	mg/kg	NE	2500	76000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**17**	**3.1**
Lead	mg/kg	NE	400	**1000**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**4.3**	**4.2**
Mercury	mg/kg	NE	20	610	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.14	< 0.15
Nickel	mg/kg	NE	1400	7500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**12**	< 2.2
Vanadium	mg/kg	NE	470	14000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**20**	**6.2**
Zinc	mg/kg	NE	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**31**	**19**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.0060
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.0090
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.22**
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.050
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.040
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.013
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.046**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.11	< 0.12
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**86**	**91**	**98**	**99**	**98**	**98**	**97**	**96**	**92**	**92**	**91**	**85**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC2-B2 0.5 - 2 ft 6/9/2020 AOC2-B2 0.5-2FT_06/09/20 0060304	AOC2-B2 2 - 4 ft 6/9/2020 AOC2-B2 2-4FT_06/09/20 0060304	AOC2-B2 4 - 6 ft 6/9/2020 AOC2-B2 4-6FT_06/09/20 0060304	AOC2-B2 6 - 8 ft 6/11/2020 AOC2-B2 6-8FT_06/11/20 0060414	AOC2-B2 8 - 10 ft 6/11/2020 AOC2-B2 8-10FT_06/11/20 0060414	AOC2-B3 0.5 - 2 ft 6/9/2020 AOC2-B3 0.5-2FT_06/09/20 0060304	AOC2-B3 2 - 4 ft 6/9/2020 AOC2-B3 2-4FT_06/09/20 0060304	AOC2-B3 4 - 6 ft 6/9/2020 AOC2-B3 4-6FT_06/09/20 0060304	AOC2-B3 6 - 8 ft 6/12/2020 AOC2-B3 6-8FT_06/12/20 0060468	AOC2-B3 8 - 10 ft 6/12/2020 AOC2-B3 8-10FT_06/12/20 0060468	AOC2-B3 10 - 12 ft 6/12/2020 AOC2-B3 10-12FT_06/12/20 0060468	AOC2-B3 12 - 14 ft 6/12/2020 AOC2-B3 12-14FT_06/12/20 0060468
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 51	**220**	**490**	**140**	< 51	< 51	< 53	< 51	**390**	**2000**	**480**	**15000**
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 300	< 310	**980**	< 320	< 300	< 310	< 320	< 310	< 310	< 310	< 310	**300000**
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 300	**370**	**2000**	**330**	< 300	< 310	< 320	< 310	< 310	**550**	< 310	**410000**
Acenaphthylene	ug/kg	84000	1000000	2500000	< 300	< 310	**840**	< 320	< 300	< 310	< 320	< 310	**720**	**3300**	**480**	< 32000
Anthracene	ug/kg	400000	1000000	2500000	< 300	**1100**	**6100**	**920**	< 300	< 310	< 320	**880**	**1600**	< 15000	**2500**	**220000**
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 300	**3700**	**17000**	**3400**	< 300	< 310	**680**	**390**	**7900**	**51000**	**14000**	**110000**
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 300	**3200**	**14000**	**3000**	< 300	< 310	**540**	**330**	**13000**	**20000**	**3400**	< 32000
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 300	**3800**	**16000**	**3400**	< 300	< 310	**1300**	**740**	**22000**	**45000**	**7200**	**46000**
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 300	**2200**	**9700**	**1900**	< 300	< 310	**560**	**360**	**4900**	< 15000	**1500**	< 32000
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 300	**1200**	**6300**	**1300**	< 300	< 310	**410**	< 310	**5800**	< 15000	**2300**	< 32000
Chrysene	ug/kg	**1000**	**84000**	780000	< 300	**3800**	**17000**	**3400**	< 300	< 310	**1100**	**700**	**14000**	**49000**	**12000**	**89000**
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 300	**580**	**3100**	**520**	< 300	< 310	< 320	< 310	**1700**	< 15000	**540**	< 32000
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 300	**7500**	**33000**	**6700**	< 300	< 310	**1400**	**860**	**22000**	**250000**	**84000**	**700000**
Fluorene	ug/kg	**56000**	1000000	2500000	< 300	**320**	**1700**	< 320	< 300	< 310	< 320	< 310	**450**	**2500**	**630**	**510000**
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 300	**1800**	**7700**	**1600**	< 300	< 310	**470**	< 310	**4900**	< 15000	**1400**	< 32000
Naphthalene	ug/kg	**56000**	1000000	2500000	< 300	< 310	**740**	< 320	< 300	< 310	< 320	< 310	< 310	**330**	< 310	**130000**
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 300	**3800**	**19000**	**3800**	< 300	< 310	**540**	**430**	**690**	**2700**	**680**	**1800000**
Pyrene	ug/kg	**40000**	1000000	2500000	< 300	**7200**	**32000**	**6100**	< 300	< 310	**1200**	**640**	**36000**	**210000**	**53000**	**410000**
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/kg	NE	**10**	**10**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/kg	NE	4700	140000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Beryllium	mg/kg	NE	2	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	mg/kg	NE	34	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/kg	NE	100	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/kg	NE	2500	76000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/kg	NE	400	**1000**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Mercury	mg/kg	NE	20	610	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nickel	mg/kg	NE	1400	7500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	mg/kg	NE	470	14000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/kg	NE	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**96**	**94**	**89**	**94**	**96**	**96**	**94**	**96**	**96**	**97**	**97**	**92**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID					AOC2-B3	AOC2-B4	AOC2-B4	AOC2-B4	AOC2-B4	AOC2-B4	AOC2-B4	AOC2-B5	AOC2-B5	AOC2-B5	AOC3-B1	AOC3-B1
Depth Interval					12 - 14 ft	0.5 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	0 - 3 in	4 - 5 ft
Sample Date	Unit	GBPMC	RDEC	ICDEC	6/12/2020	6/11/2020	6/11/2020	6/11/2020	6/12/2020	6/12/2020	6/12/2020	6/15/2020	6/15/2020	6/16/2020	3/17/2020	3/17/2020
Sample ID					AOC2-B3 12-14FT DUP_06/12/2	AOC2-B4 0.5-2FT_06/11/20	AOC2-B4 2-4FT_06/11/20	AOC2-B4 4-6FT_06/11/20	AOC2-B4 6-8FT_06/12/20	AOC2-B4 8-10FT_06/12/20	AOC2-B4 10-12FT_06/12/20	AOC2-B5 2-4FT_06/15/20	AOC2-B5 4-6FT_06/15/20	AOC2-B5 6-8FT_06/16/20	AOC3 B-1 0-3IN_03/17/20	AOC3 B-1 4-5FT_03/17/20
SDG					0060468	0060414	0060414	0060414	0060468	0060468	0060468	0060470	0060470	0060512	0030476	0030476
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**16000**	< 52	< 52	**87**	**150**	< 52	**54**	**260**	< 53	< 55	**25000**	< 53
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	**330000**	< 310	< 310	< 320	**630**	< 310	< 310	< 310	< 330	< 340	**6800**	< 320
Acenaphthene	ug/kg	**84000**	1000000	2500000	**530000**	< 310	< 310	< 320	**1100**	< 310	< 310	< 310	< 330	< 340	< 650	< 320
Acenaphthylene	ug/kg	84000	1000000	2500000	< 32000	< 310	< 310	< 320	< 310	< 310	< 310	< 310	< 330	< 340	< 650	< 320
Anthracene	ug/kg	400000	1000000	2500000	**300000**	< 310	< 310	**370**	**1400**	< 310	< 310	< 310	< 330	< 340	< 650	< 320
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	**140000**	< 310	**560**	**1600**	**1800**	< 310	**510**	< 310	< 330	< 340	**1400**	< 320
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	**38000**	< 310	**520**	**1500**	**1900**	< 310	**410**	< 310	< 330	< 340	**1000**	< 320
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	**60000**	< 310	**900**	**2200**	**3000**	< 310	**680**	< 310	< 330	< 340	**2500**	< 320
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 32000	< 310	**350**	**800**	**1100**	< 310	< 310	< 310	< 330	< 340	**730**	< 320
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 32000	< 310	**380**	**870**	**1200**	< 310	**310**	< 310	< 330	< 340	**1400**	< 320
Chrysene	ug/kg	**1000**	**84000**	780000	**110000**	< 310	**670**	**1800**	**2100**	< 310	**540**	< 310	< 330	< 340	**2300**	< 320
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 32000	< 310	< 310	< 320	**360**	< 310	< 310	< 310	< 330	< 340	< 650	< 320
Fluoranthene	ug/kg	**56000**	1000000	2500000	**970000**	< 310	**790**	**2200**	**4100**	< 310	**1100**	< 310	< 330	< 340	**4200**	< 320
Fluorene	ug/kg	**56000**	1000000	2500000	**660000**	< 310	< 310	< 320	**1500**	< 310	**340**	< 310	< 330	< 340	< 650	< 320
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 32000	< 310	**320**	**740**	**1100**	< 310	< 310	< 310	< 330	< 340	< 650	< 320
Naphthalene	ug/kg	**56000**	1000000	2500000	**170000**	< 310	< 310	< 320	**570**	< 310	< 310	< 310	< 330	< 340	**1600**	< 320
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	**2300000**	< 310	< 310	**480**	**5600**	< 310	**1000**	< 310	< 330	< 340	**2900**	< 320
Pyrene	ug/kg	**40000**	1000000	2500000	**530000**	< 310	**900**	**2400**	**3400**	< 310	**890**	< 310	< 330	< 340	**5200**	< 320
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 2.2	NS
Arsenic	mg/kg	NE	**10**	**10**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**1.5**	NS
Barium	mg/kg	NE	4700	140000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**31**	NS
Beryllium	mg/kg	NE	2	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 1.1	NS
Cadmium	mg/kg	NE	34	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.55	NS
Chromium (Total)	mg/kg	NE	100	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**11**	NS
Copper	mg/kg	NE	2500	76000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**32**	NS
Lead	mg/kg	NE	400	**1000**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**14**	NS
Mercury	mg/kg	NE	20	610	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.14	NS
Nickel	mg/kg	NE	1400	7500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**13**	NS
Vanadium	mg/kg	NE	470	14000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**23**	NS
Zinc	mg/kg	NE	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**45**	NS
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.050	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.050	NS
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.32**	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.050	NS
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.042**	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.013	NS
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.26**	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.11	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 1.1	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 1.1	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 1.1	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 1.1	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 5.6	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 230	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 5.6	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 23	NS
Other																
% Solids	%	NE	NE	NE	**92**	**96**	**95**	**93**	**96**	**95**	**96**	**96**	**92**	**88**	**91**	**93**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**6.09**	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**200 >**	NS

Notes:
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ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC4-B1 3 - 5 ft 3/20/2020 AOC4 B1 3-5FT_03/20/20 0030593	AOC4-B1 7 - 9 ft 3/20/2020 AOC4 B1 7-9FT_03/20/20 0030593	AOC4-B2 3 - 5 ft 3/20/2020 AOC4 B2 3-5FT_03/20/20 0030593	AOC4-B2 7 - 9 ft 3/20/2020 AOC4 B2 7-9FT_03/20/20 0030593	AOC4-B3 5 - 5 ft 3/20/2020 AOC4 B3 5FT_03/20/20 0030593	AOC4-B3 6 - 8 ft 3/23/2020 AOC4 B3 6-8FT_03/23/20 0030624	AOC4-B4 2 - 4 ft 3/23/2020 AOC4 B4 2-4FT_03/23/20 0030624	AOC4-B4 6 - 8 ft 3/23/2020 AOC4 B4 6-8FT_03/23/20 0030624	AOC5-B1 1 - 3 ft 3/19/2020 AOC5-B1 1-3FT_03/19/20 0030573	AOC5-B1 4 - 6 ft 3/19/2020 AOC5-B1 4-6FT_03/19/20 0030573	AOC5-B1A 1 - 3 ft 3/19/2020 AOC5-B1A 1-3FT_03/19/20 0030573	AOC5-B2 1 - 3 ft 3/18/2020 AOC5 B2 1-3FT_03/18/20 0030543
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 53	< 56	< 53	< 54	< 51	< 54	< 51	< 60	**160**	< 54	**250**	< 53
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.1	< 3.6	< 4.3	< 3.5	< 3.9	< 3.8	< 5.9	< 4.4	< 5.5	< 3.8	< 5.5	< 4.3
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.1	< 3.6	< 4.3	< 3.5	< 3.9	< 3.8	< 5.9	< 4.4	< 5.5	< 3.8	< 5.5	< 4.3
Carbon disulfide	ug/kg	8000	500000	1000000	< 8.3	< 7.2	< 8.7	< 7.0	< 7.7	< 7.7	< 12	< 8.8	< 11	< 7.7	< 11	< 8.5
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 8.3	< 7.2	< 8.7	< 7.0	< 7.7	< 7.7	< 12	< 8.8	< 11	< 7.7	< 11	< 8.5
Naphthalene	ug/kg	56000	1000000	2500000	< 8.3	< 7.2	< 8.7	< 7.0	< 7.7	< 7.7	< 12	< 8.8	< 11	< 7.7	< 11	< 8.5
n-Butylbenzene	ug/kg	70000	500000	1000000	< 4.1	< 3.6	< 4.3	< 3.5	< 3.9	< 3.8	< 5.9	< 4.4	< 5.5	< 3.8	< 5.5	< 4.3
n-Propylbenzene	ug/kg	10000	500000	1000000	< 4.1	< 3.6	< 4.3	< 3.5	< 3.9	< 3.8	< 5.9	< 4.4	< 5.5	< 3.8	< 5.5	< 4.3
o-Xylene	ug/kg	NE	NE	NE	< 4.1	< 3.6	< 4.3	< 3.5	< 3.9	< 3.8	< 5.9	< 4.4	< 5.5	< 3.8	< 5.5	< 4.3
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 4.1	< 3.6	< 4.3	< 3.5	< 3.9	< 3.8	< 5.9	< 4.4	< 5.5	< 3.8	< 5.5	< 4.3
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 4.1	< 3.6	< 4.3	< 3.5	< 3.9	< 3.8	< 5.9	< 4.4	< 5.5	< 3.8	< 5.5	< 4.3
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Acenaphthylene	ug/kg	84000	1000000	2500000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Anthracene	ug/kg	400000	1000000	2500000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Chrysene	ug/kg	**1000**	**84000**	780000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Fluorene	ug/kg	**56000**	1000000	2500000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Naphthalene	ug/kg	**56000**	1000000	2500000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Pyrene	ug/kg	**40000**	1000000	2500000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Carbazole	ug/kg	1000	31000	290000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Dibenzofuran	ug/kg	1400	68000	1000000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 320	< 350	< 330	< 330	< 310	< 320	< 300	< 350	< 320	< 320	< 320	< 320
Metals																
Antimony	mg/kg	NE	27	8200	< 2.0	< 2.3	< 2.0	< 2.2	< 2.0	< 2.0	< 2.1	< 1.6	< 2.1	< 2.0	< 2.1	< 2.0
Arsenic	mg/kg	NE	**10**	**10**	**1.2**	**1.8**	**1.5**	**1.8**	< 0.99	< 1.0	< 1.0	**1.1**	**1.3**	< 0.99	**2.8**	< 0.98
Barium	mg/kg	NE	4700	140000	**27**	**28**	**24**	**45**	**19**	**35**	**29**	**40**	**30**	**16**	**27**	**36**
Beryllium	mg/kg	NE	2	2	< 1.0	< 1.1	< 1.0	< 1.1	< 0.99	< 1.0	< 1.0	< 0.81	< 1.1	< 0.99	< 1.0	< 0.98
Cadmium	mg/kg	NE	34	1000	< 0.50	< 0.56	< 0.50	< 0.56	< 0.50	< 0.51	< 0.52	< 0.41	< 0.53	< 0.50	< 0.52	< 0.49
Chromium (Total)	mg/kg	NE	100	100	**7.1**	**3.0**	**6.3**	**10**	**5.3**	**4.7**	**6.1**	**6.2**	**8.5**	**6.9**	**10**	**5.5**
Copper	mg/kg	NE	2500	76000	**17**	**4.0**	**14**	**19**	**6.5**	**6.0**	**11**	**7.1**	**16**	**9.3**	**14**	**7.7**
Lead	mg/kg	NE	400	**1000**	**24**	< 2.3	**23**	**29**	**3.4**	**2.5**	**18**	**2.3**	**24**	**3.3**	**26**	**12**
Mercury	mg/kg	NE	20	610	< 0.13	< 0.14	< 0.14	< 0.13	< 0.13	< 0.14	< 0.13	< 0.14	< 0.14	< 0.13	< 0.14	< 0.13
Nickel	mg/kg	NE	1400	7500	**5.8**	< 2.3	**4.4**	**4.9**	**3.1**	**3.1**	**4.2**	**4.1**	**6.0**	**4.2**	**6.3**	**3.6**
Vanadium	mg/kg	NE	470	14000	**13**	**6.3**	**10**	**16**	**6.7**	**9.4**	**10**	**11**	**16**	**9.2**	**15**	**11**
Zinc	mg/kg	NE	20000	610000	**46**	**35**	**43**	**51**	**16**	**18**	**24**	**18**	**31**	**19**	**33**	**28**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	< 0.0060	NS	< 0.0060	NS	< 0.0060	NS	< 0.0060	NS	< 0.0060	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	< 0.0090	NS	< 0.0090	NS	< 0.0090	NS	< 0.0090	NS	< 0.0090	NS	NS
Barium	mg/l	10	NE	NE	NS	**0.19**	NS	**0.26**	NS	**0.13**	NS	**0.15**	NS	**0.24**	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	< 0.050	NS	< 0.050	NS	< 0.050	NS	< 0.050	NS	< 0.050	NS	NS
Copper	mg/l	13	NE	NE	NS	< 0.040	NS	**0.16**	NS	< 0.040	NS	< 0.040	NS	< 0.040	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	< 0.013	NS	< 0.013	NS	< 0.013	NS	< 0.013	NS	< 0.013	NS	NS
Zinc	mg/l	50	NE	NE	NS	**0.11**	NS	**0.12**	NS	**0.033**	NS	**0.036**	NS	**0.052**	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.11	< 0.12	< 0.11	< 0.11	< 0.10	< 0.11	< 0.10	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**93**	**86**	**92**	**90**	**98**	**92**	**97**	**83**	**92**	**92**	**92**	**93**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID					AOC5-B2	AOC6-B1	AOC6-B1	AOC6-B2	AOC6-B2	AOC6-B2	AOC6-B3	AOC6-B3	AOC6-B3	AOC8-B1	AOC8-B1	AOC8-B2	AOC8-B2
Depth Interval					6 - 8 ft	0 - 2 ft	8 - 10 ft	0 - 2 ft	5 - 7 ft	2 - 4 ft	10 - 12 ft	29 - 31 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft
Sample Date	Unit	GBPMC	RDEC	ICDEC	3/24/2020	3/16/2020	3/18/2020	3/19/2020	3/30/2020	3/26/2020	3/27/2020	3/27/2020	3/23/2020	3/23/2020	3/23/2020	3/23/2020	3/23/2020
Sample ID					AOC5 B2 6-8FT_03/24/20	AOC6-B1 0-2FT_03/16/20	AOC6 B1 8-10FT_03/18/20	AOC6-B2 0-2FT_03/19/20	AOC6-B2 5-7FT_03/30/20	AOC6 B3 2-4FT_03/26/20	AOC6 B3 10-12FT_03/27/20	AOC6 B3 29-31FT_03/27/20	AOC8 B1 2-4FT_03/23/20	AOC8 B1 6-8FT_03/23/20	AOC8 B2 2-4FT_03/23/20	AOC8 B2 6-8FT_03/23/20
SDG					0030661	0030467	0030543	0030573	0030806	0030753	0030770	0030770	0030624	0030624	0030624	0030624
ETPH-CT																	
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**71**	< 54	< 56	**150**	**190**	< 54	**150**	**890**	< 52	< 54	< 53	< 56
VOCs																	
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.9	NS	< 3.3	< 4.2	< 3.6	< 3.5	< 3.8	**16**	< 4.0	< 4.2	< 3.6	< 5.2
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.9	NS	< 3.3	< 4.2	< 3.6	< 3.5	< 3.8	**6.3**	< 4.0	< 4.2	< 3.6	< 5.2
Carbon disulfide	ug/kg	8000	500000	1000000	< 7.8	NS	< 6.6	< 8.5	< 7.2	< 7.1	< 7.5	< 6.6	< 8.0	< 8.4	< 7.2	< 10
M,P-XYLENE (SUM OF ISO	ug/kg	NE	NE	NE	< 7.8	NS	< 6.6	< 8.5	< 7.2	< 7.1	< 7.5	< 6.6	< 8.0	< 8.4	< 7.2	< 10
Naphthalene	ug/kg	56000	1000000	2500000	< 7.8	NS	< 6.6	< 8.5	< 7.2	< 7.1	< 7.5	**13**	< 8.0	< 8.4	< 7.2	< 10
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.9	NS	< 3.3	< 4.2	< 3.6	< 3.5	< 3.8	**3.9**	< 4.0	< 4.2	< 3.6	< 5.2
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.9	NS	< 3.3	< 4.2	< 3.6	< 3.5	< 3.8	< 3.3	< 4.0	< 4.2	< 3.6	< 5.2
o-Xylene	ug/kg	NE	NE	NE	< 3.9	NS	< 3.3	< 4.2	< 3.6	< 3.5	< 3.8	< 3.3	< 4.0	< 4.2	< 3.6	< 5.2
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.9	NS	< 3.3	< 4.2	< 3.6	< 3.5	< 3.8	< 3.3	< 4.0	< 4.2	< 3.6	< 5.2
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.9	NS	< 3.3	< 4.2	< 3.6	< 3.5	< 3.8	< 3.3	< 4.0	< 4.2	< 3.6	< 5.2
PAHs																	
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 330	< 320	< 330	< 320	< 310	< 320	< 310	**1500**	< 310	< 320	< 320	< 340
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 330	< 320	< 330	< 320	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Acenaphthylene	ug/kg	84000	1000000	2500000	< 330	< 320	< 330	< 320	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Anthracene	ug/kg	400000	1000000	2500000	< 330	< 320	< 330	< 320	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 330	< 320	< 330	**500**	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 330	< 320	< 330	**520**	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 330	< 320	< 330	**810**	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 330	< 320	< 330	**360**	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 330	< 320	< 330	**320**	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Chrysene	ug/kg	**1000**	**84000**	780000	< 330	< 320	< 330	**580**	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 330	< 320	< 330	< 320	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 330	**400**	< 330	**1000**	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Fluorene	ug/kg	**56000**	1000000	2500000	< 330	< 320	< 330	< 320	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 330	< 320	< 330	< 320	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Naphthalene	ug/kg	**56000**	1000000	2500000	< 330	< 320	< 330	< 320	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 330	< 320	< 330	**460**	< 310	< 320	< 310	**590**	< 310	< 320	< 320	< 340
Pyrene	ug/kg	**40000**	1000000	2500000	< 330	**350**	< 330	**860**	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
SVOCs																	
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 330	NS	< 330	< 320	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 330	NS	< 330	< 320	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Carbazole	ug/kg	1000	31000	290000	< 330	NS	< 330	< 320	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Dibenzofuran	ug/kg	1400	68000	1000000	< 330	NS	< 330	< 320	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 330	NS	< 330	< 320	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 330	NS	< 330	< 320	< 310	< 320	< 310	< 320	< 310	< 320	< 320	< 340
Metals																	
Antimony	mg/kg	NE	27	8200	< 2.2	< 2.1	< 2.1	< 2.2	< 2.1	< 2.1	< 2.0	< 2.1	< 2.0	< 2.1	< 2.1	< 2.3
Arsenic	mg/kg	NE	**10**	**10**	**1.7**	< 1.0	**2.7**	**3.6**	**1.7**	**4.7**	< 1.0	< 1.1	**1.7**	< 1.0	< 1.1	< 1.1
Barium	mg/kg	NE	4700	140000	**60**	**76**	**23**	**43**	**44**	**28**	**43**	**14**	**36**	**51**	**19**	**39**
Beryllium	mg/kg	NE	2	2	< 1.1	< 1.0	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	< 1.1	< 1.0	< 1.0	< 1.1	< 1.1
Cadmium	mg/kg	NE	34	1000	< 0.55	< 0.51	< 0.54	< 0.54	< 0.52	< 0.53	< 0.51	< 0.53	< 0.50	< 0.52	**0.53**	< 0.56
Chromium (Total)	mg/kg	NE	100	100	**6.1**	**11**	**10**	**11**	**8.6**	**13**	**9.3**	**2.8**	**5.2**	**4.8**	**3.7**	**4.5**
Copper	mg/kg	NE	2500	76000	**12**	**25**	**32**	**23**	**18**	**9.0**	**8.7**	**5.7**	**4.9**	**3.0**	**37**	**2.3**
Lead	mg/kg	NE	400	**1000**	**34**	**18**	**28**	**71**	**34**	**6.9**	**16**	**2.3**	**8.9**	< 2.1	< 2.1	< 2.3
Mercury	mg/kg	NE	20	610	< 0.13	< 0.13	< 0.14	< 0.13	< 0.13	**0.32**	< 0.13	< 0.14	< 0.13	< 0.13	< 0.13	< 0.14
Nickel	mg/kg	NE	1400	7500	**4.1**	**8.5**	**7.0**	**9.0**	**7.0**	**10**	**8.0**	**2.2**	**3.5**	**2.7**	**6.2**	< 2.3
Vanadium	mg/kg	NE	470	14000	**12**	**22**	**14**	**25**	**19**	**20**	**21**	**5.2**	**8.3**	**8.3**	**76**	**7.8**
Zinc	mg/kg	NE	20000	610000	**45**	**54**	**30**	**43**	**43**	**24**	**28**	**12**	**25**	**19**	**42**	**16**
Metals-SPLP																	
Antimony	mg/l	0.06	NE	NE	NS	NS	< 0.0060	< 0.0060	< 0.0060	NS	NS	< 0.0060	NS	< 0.0060	NS	< 0.0060
Arsenic	mg/l	0.5	NE	NE	NS	NS	< 0.0090	< 0.0090	< 0.0090	NS	NS	< 0.0090	NS	< 0.0090	NS	< 0.0090
Barium	mg/l	10	NE	NE	NS	NS	**0.25**	**0.21**	**0.42**	NS	NS	**0.32**	NS	**0.21**	NS	**0.17**
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	< 0.050	< 0.050	< 0.050	NS	NS	< 0.050	NS	< 0.050	NS	< 0.050
Copper	mg/l	13	NE	NE	NS	NS	< 0.040	< 0.040	< 0.040	NS	NS	< 0.040	NS	< 0.040	NS	< 0.040
Lead	mg/l	**0.15**	NE	NE	NS	NS	< 0.013	< 0.013	**0.047**	NS	NS	< 0.013	NS	< 0.013	NS	< 0.013
Zinc	mg/l	50	NE	NE	NS	NS	**0.050**	**0.044**	**0.17**	NS	NS	**0.067**	NS	**0.062**	NS	**0.038**
Cyanide																	
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																	
Total PCBs	mg/kg	NE	1	10	< 0.11	NS	< 0.11	< 0.11	< 0.11	< 0.11	< 0.10	< 0.11	< 0.10	< 0.11	< 0.11	< 0.11
Pesticides																	
4-4'-DDD	ug/kg	10**	1700	23800	< 1.1	NS	NS	NS	NS	NS	NS	NS	< 1.0	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	< 1.1	NS	NS	NS	NS	NS	NS	NS	< 1.0	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	**1.6**	NS	NS	NS	NS	NS	NS	NS	< 1.0	NS	NS	NS
Dieldrin	ug/kg	7	38	360	< 1.1	NS	NS	NS	NS	NS	NS	NS	< 1.0	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	< 5.5	NS	NS	NS	NS	NS	NS	NS	< 5.2	NS	NS	NS
Herbicides																	
Total Herbiceds	ug/kg	NE	NE	NE	< 220	NS	NS	NS	NS	NS	NS	NS	< 210	NS	NS	NS
Reactivity																	
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																	
% Solids	%	NE	NE	NE	**89**	**93**	**88**	**92**	**94**	**92**	**96**	**91**	**95**	**92**	**93**	**87**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC9-B1 0 - 2 ft 3/24/2020 AOC9 B1 0-2FT_03/24/20 0030661	AOC9-B1 6 - 8 ft 3/24/2020 AOC9 B1 6-8FT_03/24/20 0030661	AOC9-B2 4 - 6 ft 3/24/2020 AOC9 B2 4-6FT_03/24/20 0030661	AOC10-B1 0 - 2 ft 3/17/2020 AOC10 B-1 0-2FT_03/17/20 0030476	AOC10-B1 5 - 7 ft 3/24/2020 AOC10 B1 5-7FT_03/24/20 0030661	AOC10-B2 0 - 2 ft 3/18/2020 AOC10 B2 0-2FT_03/18/20 0030543	AOC10-B2 8 - 10 ft 3/18/2020 AOC10 B2 8-10FT_03/18/20 0030543	AOC10-B3 0 - 2 ft 3/17/2020 AOC10 B-3 0-2FT_03/17/20 0030476	AOC10-B3 8 - 10 ft 3/19/2020 AOC10-B3 8-10FT_03/19/20 0030573	AOC10-B4 0 - 2 ft 3/17/2020 AOC10 B-4 0-2FT_03/17/20 0030476	AOC10-B4 0 - 2 ft 3/23/2020 AOC10-B4 0-2FT_03/23/20 0030624	AOC10-B4 10 - 12 ft 3/24/2020 AOC10 B4 10-12FT_03/24/20 0030661
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 53	**280**	< 51	< 54	< 57	**930**	< 60	**77**	**69**	**280**	< 53	< 61
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 6.7	< 5.6	< 4.3	< 6.1	< 3.8	< 4.4	< 3.7	< 3.8	< 5.8	< 3.5	< 5.2	< 3.4
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 6.7	< 5.6	< 4.3	< 6.1	< 3.8	< 4.4	< 3.7	< 3.8	< 5.8	< 3.5	< 5.2	< 3.4
Carbon disulfide	ug/kg	8000	500000	1000000	< 13	< 11	< 8.5	< 12	< 7.6	< 8.7	< 7.4	< 7.5	< 12	< 7.0	< 10	< 6.9
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 13	< 11	< 8.5	< 12	< 7.6	< 8.7	< 7.4	< 7.5	< 12	< 7.0	< 10	< 6.9
Naphthalene	ug/kg	56000	1000000	2500000	< 13	< 11	< 8.5	< 12	< 7.6	< 8.7	< 7.4	< 7.5	< 12	< 7.0	< 10	< 6.9
n-Butylbenzene	ug/kg	70000	500000	1000000	< 6.7	< 5.6	< 4.3	< 6.1	< 3.8	< 4.4	< 3.7	< 3.8	< 5.8	< 3.5	< 5.2	< 3.4
n-Propylbenzene	ug/kg	10000	500000	1000000	< 6.7	< 5.6	< 4.3	< 6.1	< 3.8	< 4.4	< 3.7	< 3.8	< 5.8	< 3.5	< 5.2	< 3.4
o-Xylene	ug/kg	NE	NE	NE	< 6.7	< 5.6	< 4.3	< 6.1	< 3.8	< 4.4	< 3.7	< 3.8	< 5.8	< 3.5	< 5.2	< 3.4
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 6.7	< 5.6	< 4.3	< 6.1	< 3.8	< 4.4	< 3.7	< 3.8	< 5.8	< 3.5	< 5.2	< 3.4
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 6.7	< 5.6	< 4.3	< 6.1	< 3.8	< 4.4	< 3.7	< 3.8	< 5.8	< 3.5	< 5.2	< 3.4
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 320	< 310	< 330	< 350	< 320	< 360	< 320	< 350	< 310	< 320	< 370
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	**810**	< 310	< 330	< 350	< 320	< 360	< 320	< 350	< 310	< 320	< 370
Acenaphthylene	ug/kg	84000	1000000	2500000	< 310	< 320	< 310	< 330	< 350	< 320	< 360	< 320	< 350	**590**	< 320	< 370
Anthracene	ug/kg	400000	1000000	2500000	**810**	**2400**	< 310	< 330	< 350	< 320	< 360	< 320	< 350	**570**	< 320	< 370
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	**340**	**590**	< 310	< 330	< 350	< 320	< 360	< 320	< 350	**2300**	< 320	< 370
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 310	< 320	< 310	< 330	< 350	< 320	< 360	< 320	< 350	**2700**	< 320	< 370
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 310	**350**	< 310	< 330	< 350	**470**	< 360	< 320	< 350	**3400**	< 320	< 370
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 310	< 320	< 310	< 330	< 350	< 320	< 360	< 320	< 350	**1900**	< 320	< 370
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 310	< 320	< 310	< 330	< 350	< 320	< 360	< 320	< 350	**1000**	< 320	< 370
Chrysene	ug/kg	**1000**	**84000**	780000	**350**	**600**	< 310	< 330	< 350	**330**	< 360	< 320	< 350	**2500**	< 320	< 370
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 310	< 320	< 310	< 330	< 350	< 320	< 360	< 320	< 350	**330**	< 320	< 370
Fluoranthene	ug/kg	**56000**	1000000	2500000	**1800**	**4100**	< 310	< 330	< 350	**550**	< 360	< 320	< 350	**5200**	< 320	< 370
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	**1600**	< 310	< 330	< 350	< 320	< 360	< 320	< 350	< 310	< 320	< 370
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 310	< 320	< 310	< 330	< 350	< 320	< 360	< 320	< 350	**1300**	< 320	< 370
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 320	< 310	< 330	< 350	< 320	< 360	< 320	< 350	< 310	< 320	< 370
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	**1700**	**7600**	< 310	< 330	< 350	< 320	< 360	< 320	< 350	**2200**	< 320	< 370
Pyrene	ug/kg	**40000**	1000000	2500000	**1100**	**2400**	< 310	< 330	< 350	**480**	< 360	< 320	< 350	**4600**	< 320	< 370
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 310	< 320	< 310	< 330	< 350	< 320	< 360	< 320	< 350	< 310	< 320	< 370
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 320	< 310	< 330	< 350	< 320	< 360	< 320	< 350	< 310	< 320	< 370
Carbazole	ug/kg	1000	31000	290000	< 310	**930**	< 310	< 330	< 350	< 320	< 360	< 320	< 350	< 310	< 320	< 370
Dibenzofuran	ug/kg	1400	68000	1000000	< 310	**860**	< 310	< 330	< 350	< 320	< 360	< 320	< 350	< 310	< 320	< 370
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 320	< 310	< 330	< 350	< 320	< 360	< 320	< 350	< 310	< 320	< 370
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 310	< 320	< 310	< 330	< 350	< 320	< 360	< 320	< 350	< 310	< 320	< 370
Metals																
Antimony	mg/kg	NE	27	8200	< 2.0	< 2.1	< 2.0	< 2.2	< 2.2	< 2.1	< 2.4	< 2.0	< 2.3	< 2.1	< 2.1	< 2.4
Arsenic	mg/kg	NE	**10**	**10**	**1.3**	**1.8**	**2.9**	**4.2**	**1.3**	**1.7**	< 1.2	**2.4**	< 1.1	**1.1**	**2.4**	< 1.2
Barium	mg/kg	NE	4700	140000	**36**	**41**	**56**	**31**	**32**	**35**	**31**	**44**	**35**	**41**	**32**	**55**
Beryllium	mg/kg	NE	2	2	< 1.0	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1	< 1.2	< 0.98	< 1.1	< 1.0	< 1.1	< 1.2
Cadmium	mg/kg	NE	34	1000	< 0.51	< 0.52	< 0.51	< 0.55	< 0.54	< 0.53	< 0.59	< 0.49	< 0.56	< 0.52	< 0.53	< 0.61
Chromium (Total)	mg/kg	NE	100	100	**15**	**11**	**13**	**9.1**	**4.3**	**7.8**	**4.7**	**9.5**	**3.8**	**9.7**	**6.6**	**6.5**
Copper	mg/kg	NE	2500	76000	**8.2**	**9.6**	**17**	**19**	**3.6**	**30**	**4.2**	**60**	**2.9**	**28**	**19**	**4.0**
Lead	mg/kg	NE	400	**1000**	**12**	**18**	**7.2**	**47**	< 2.2	**32**	< 2.4	**34**	< 2.3	**28**	**49**	< 2.4
Mercury	mg/kg	NE	20	610	< 0.13	**0.23**	< 0.13	< 0.14	< 0.15	< 0.13	< 0.15	< 0.13	< 0.15	< 0.13	< 0.14	< 0.15
Nickel	mg/kg	NE	1400	7500	**8.0**	**5.8**	**6.3**	**6.9**	< 2.2	**5.8**	**2.4**	**13**	< 2.3	**8.6**	**4.7**	**3.3**
Vanadium	mg/kg	NE	470	14000	**12**	**14**	**14**	**15**	**7.5**	**15**	**9.2**	**13**	**6.6**	**22**	**13**	**12**
Zinc	mg/kg	NE	20000	610000	**38**	**46**	**35**	**47**	**13**	**51**	**18**	**77**	**15**	**66**	**40**	**24**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060	< 0.0060
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090	< 0.0090
Barium	mg/l	10	NE	NE	NS	NS	NS	**0.27**	**0.10**	**0.25**	**0.21**	**0.22**	NS	**0.25**	**0.30**	**0.16**
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	NS	< 0.050	< 0.050	< 0.050
Copper	mg/l	13	NE	NE	NS	NS	NS	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	NS	< 0.040	< 0.040	< 0.040
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	**0.020**	**0.040**	**0.013**	< 0.013	< 0.013	NS	< 0.013	**0.020**	< 0.013
Zinc	mg/l	50	NE	NE	NS	NS	NS	**0.073**	**0.029**	**0.069**	**0.063**	**0.086**	NS	**0.065**	**0.088**	**0.027**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	< 1.1	NS	< 1.1	< 1.2	< 1.1	NS	< 1.0	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.10	< 0.11	< 0.10	NS	< 0.12	< 0.11	< 0.12	NS	< 0.12	NS	< 0.11	< 0.12
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**94**	**92**	**97**	**91**	**85**	**94**	**81**	**94**	**84**	**96**	**92**	**81**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC12-B1 0 - 2 ft 3/23/2020 AOC12-B1 0-2FT_03/23/20 0030624	AOC12-B1 10 - 12 ft 3/24/2020 AOC12 B1 10-12FT_03/24/20 0030661	AOC12-B2 0 - 2 ft 3/23/2020 AOC12-B2 0-2FT_03/23/20 0030624	AOC12-B2 5 - 7 ft 3/24/2020 AOC12 B2 5-7FT_03/24/20 0030661	AOC13-B1 0 - 2 ft 3/19/2020 AOC13-B1 0-2FT_03/19/20 0030573	AOC13-B1 7 - 9 ft 3/23/2020 AOC13 B1 7-9FT_03/23/20 0030624	AOC13-B2 2 - 4 ft 3/23/2020 AOC13 B2 2-4FT_03/23/20 0030624	AOC13-B2 6 - 8 ft 3/23/2020 AOC13 B2 6-8FT_03/23/20 0030624	AOC13-B3 5 - 7 ft 3/27/2020 AOC13 B3 5-7FT_03/27/20 0030770	AOC13-B3 10 - 12 ft 3/30/2020 AOC13-B3 10-12FT_03/30/20 0030806	AOC13-B4 4 - 5 ft 3/27/2020 AOC13 B4 4-5FT_03/27/20 0030770	AOC13-B4 6 - 8 ft 3/27/2020 AOC13 B4 6-8FT_03/27/20 0030770
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 52	< 59	< 54	< 53	< 55	< 56	< 52	< 60	< 53	**2100**	< 54	< 56
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 6.6	< 4.1	< 6.2	< 3.2	< 4.9	< 3.8	< 3.2	< 3.7	< 3.6	**17**	< 5.7	< 4.0
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 6.6	< 4.1	< 6.2	< 3.2	< 4.9	< 3.8	< 3.2	< 3.7	< 3.6	**9.2**	< 5.7	< 4.0
Carbon disulfide	ug/kg	8000	500000	1000000	< 13	< 8.1	< 12	< 6.3	< 9.8	< 7.6	< 6.5	< 7.4	< 7.3	< 6.8	< 11	< 7.9
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 13	< 8.1	< 12	< 6.3	< 9.8	< 7.6	< 6.5	< 7.4	< 7.3	**13**	< 11	< 7.9
Naphthalene	ug/kg	56000	1000000	2500000	< 13	< 8.1	< 12	< 6.3	< 9.8	< 7.6	< 6.5	< 7.4	< 7.3	< 6.8	< 11	< 7.9
n-Butylbenzene	ug/kg	70000	500000	1000000	< 6.6	< 4.1	< 6.2	< 3.2	< 4.9	< 3.8	< 3.2	< 3.7	< 3.6	< 3.4	< 5.7	< 4.0
n-Propylbenzene	ug/kg	10000	500000	1000000	< 6.6	< 4.1	< 6.2	< 3.2	< 4.9	< 3.8	< 3.2	< 3.7	< 3.6	< 3.4	< 5.7	< 4.0
o-Xylene	ug/kg	NE	NE	NE	< 6.6	< 4.1	< 6.2	< 3.2	< 4.9	< 3.8	< 3.2	< 3.7	< 3.6	**14**	< 5.7	< 4.0
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 6.6	< 4.1	< 6.2	< 3.2	< 4.9	< 3.8	< 3.2	< 3.7	< 3.6	< 3.4	< 5.7	< 4.0
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 6.6	< 4.1	< 6.2	< 3.2	< 4.9	< 3.8	< 3.2	< 3.7	< 3.6	< 3.4	< 5.7	< 4.0
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Acenaphthylene	ug/kg	84000	1000000	2500000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Anthracene	ug/kg	400000	1000000	2500000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Chrysene	ug/kg	**1000**	**84000**	780000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Pyrene	ug/kg	**40000**	1000000	2500000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Carbazole	ug/kg	1000	31000	290000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Dibenzofuran	ug/kg	1400	68000	1000000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 310	< 360	< 320	< 320	< 330	< 340	< 300	< 360	< 320	< 340	< 320	< 330
Metals																
Antimony	mg/kg	NE	27	8200	< 2.0	< 2.3	< 2.0	< 2.1	< 2.1	< 2.3	< 2.1	< 2.4	< 2.1	< 2.2	< 2.1	< 2.2
Arsenic	mg/kg	NE	**10**	**10**	< 0.99	< 1.2	< 1.0	**1.3**	< 1.0	< 1.1	**1.7**	**3.2**	< 1.0	< 1.1	**4.5**	< 1.1
Barium	mg/kg	NE	4700	140000	**23**	**17**	**27**	**43**	**47**	**35**	**67**	**99**	**23**	**28**	**38**	**21**
Beryllium	mg/kg	NE	2	2	< 0.99	< 1.2	< 1.0	< 1.1	< 1.0	< 1.1	< 1.0	< 1.2	< 1.0	< 1.1	< 1.1	< 1.1
Cadmium	mg/kg	NE	34	1000	< 0.49	< 0.58	< 0.50	< 0.53	< 0.52	< 0.56	< 0.52	< 0.60	< 0.52	< 0.56	< 0.54	< 0.55
Chromium (Total)	mg/kg	NE	100	100	**5.6**	**5.5**	**7.4**	**8.6**	**14**	**3.6**	**5.8**	**8.3**	**7.7**	**9.3**	**14**	**2.8**
Copper	mg/kg	NE	2500	76000	**8.3**	**5.6**	**11**	**9.3**	**27**	**3.6**	**4.0**	**5.6**	**5.2**	**9.0**	**16**	**3.4**
Lead	mg/kg	NE	400	**1000**	**22**	< 2.3	**24**	**36**	**11**	< 2.3	**2.6**	< 2.4	**3.5**	**2.5**	**16**	**3.3**
Mercury	mg/kg	NE	20	610	< 0.13	< 0.15	< 0.14	< 0.13	< 0.14	< 0.14	< 0.13	< 0.15	< 0.13	< 0.14	< 0.14	< 0.13
Nickel	mg/kg	NE	1400	7500	**3.8**	< 2.3	**4.4**	**5.5**	**8.8**	< 2.3	**3.6**	**5.2**	**4.2**	**5.0**	**10**	< 2.2
Vanadium	mg/kg	NE	470	14000	**7.9**	**5.7**	**9.4**	**19**	**31**	**9.0**	**12**	**16**	**9.8**	**13**	**11**	**7.1**
Zinc	mg/kg	NE	20000	610000	**21**	**23**	**23**	**36**	**85**	**15**	**31**	**28**	**16**	**26**	**21**	**19**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	< 0.0060	NS	NS	NS	< 0.0060	< 0.0060	NS	< 0.0060	NS	< 0.0060	NS	< 0.0060
Arsenic	mg/l	0.5	NE	NE	< 0.0090	NS	NS	NS	< 0.0090	< 0.0090	NS	< 0.0090	NS	< 0.0090	NS	< 0.0090
Barium	mg/l	10	NE	NE	**0.17**	NS	NS	NS	**0.26**	**0.28**	NS	**0.22**	NS	**0.28**	NS	**0.32**
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	NS	NS	NS	< 0.050	< 0.050	NS	< 0.050	NS	< 0.050	NS	< 0.050
Copper	mg/l	13	NE	NE	< 0.040	NS	NS	NS	**0.061**	< 0.040	NS	< 0.040	NS	< 0.040	NS	< 0.040
Lead	mg/l	**0.15**	NE	NE	< 0.013	NS	NS	NS	< 0.013	< 0.013	NS	< 0.013	NS	< 0.013	NS	< 0.013
Zinc	mg/l	50	NE	NE	**0.041**	NS	NS	NS	**0.17**	**0.060**	NS	**0.053**	NS	**0.089**	NS	**0.080**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.10	< 0.12	< 0.11	< 0.11	< 0.11	< 0.11	< 0.10	< 0.12	< 0.10	< 0.11	< 0.11	< 0.11
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	< 1.1	< 1.1	NS	< 1.0	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	< 1.1	< 1.1	NS	< 1.0	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	< 1.1	< 1.1	NS	< 1.0	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	< 1.1	< 1.1	NS	< 1.0	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	< 5.3	< 5.5	NS	< 5.2	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	< 220	< 220	NS	< 210	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**94**	**83**	**92**	**93**	**91**	**89**	**97**	**82**	**94**	**88**	**92**	**89**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC13-B5 2 - 4 ft 6/16/2020 AOC13-B5 2-4FT_06/16/20 0060512	AOC13-B5 2 - 4 ft 6/16/2020 AOC13-B5 2-4FT DUP_06/16/2 0060512	AOC13-B5 4 - 6 ft 6/16/2020 AOC13-B5 4-6FT_06/16/20 0060512	AOC13-B5 6 - 8 ft 6/16/2020 AOC13-B5 6-8FT_06/16/20 0060512	AOC13-B5 8 - 10 ft 6/16/2020 AOC13-B5 8-10FT_06/16/20 0060512	AOC13-B5 10 - 12 ft 6/16/2020 AOC13-B5 10-12FT_06/16/20 0060512	AOC13-B6 2 - 4 ft 6/16/2020 AOC13-B6 2-4FT_06/16/20 0060512	AOC13-B6 4 - 6 ft 6/16/2020 AOC13-B6 4-6FT_06/16/20 0060512	AOC13-B6 6 - 8 ft 6/16/2020 AOC13-B6 6-8FT_06/16/20 0060512	AOC13-B6 8 - 10 ft 6/16/2020 AOC13-B6 8-10FT_06/16/20 0060512	AOC13-B6 10 - 12 ft 6/16/2020 AOC13-B6 10-12FT_06/16/20 0060512	AOC14-B1 0 - 2 ft 3/16/2020 AOC14-B1 0-2FT_03/16/20 0030467
ETPH-CT																	
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 52	< 51	< 51	< 50	< 53	< 52	< 51	**69**	< 58	< 51	< 56	< 55
VOCs																	
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.8
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.8
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 14
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 14
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 14
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.8
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.8
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.8
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.8
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.8
PAHs																	
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Acenaphthene	ug/kg	**84000**	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Acenaphthylene	ug/kg	84000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Anthracene	ug/kg	400000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Chrysene	ug/kg	**1000**	**84000**	780000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Fluoranthene	ug/kg	**56000**	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Fluorene	ug/kg	**56000**	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Naphthalene	ug/kg	**56000**	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Pyrene	ug/kg	**40000**	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 330
SVOCs																	
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																	
Antimony	mg/kg	NE	27	8200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/kg	NE	**10**	**10**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/kg	NE	4700	140000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Beryllium	mg/kg	NE	2	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	mg/kg	NE	34	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/kg	NE	100	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/kg	NE	2500	76000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/kg	NE	400	**1000**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Mercury	mg/kg	NE	20	610	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nickel	mg/kg	NE	1400	7500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	mg/kg	NE	470	14000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/kg	NE	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals-SPLP																	
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.0060
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.0090
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.41**
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.050
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.040
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.013
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.079**
Cyanide																	
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																	
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																	
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																	
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																	
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																	
% Solids	%	NE	NE	NE	**96**	**97**	**96**	**97**	**94**	**95**	**96**	**94**	**84**	**96**	**88**	**90**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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Yellow highlighted values exceed GBPMC
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< = Constituent not detected at listed concentration
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TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC14-B1 2 - 4 ft 3/16/2020 AOC14-B1 2-4FT_03/16/20 0030467	AOC14-B1 4 - 6 ft 3/16/2020 AOC14 B1 4-6FT_03/16/20 0030543	AOC14-B1 4 - 6 ft 3/30/2020 AOC14-B1 4-6FT_03/30/20 0030806	AOC14-B1 6 - 8 ft 3/30/2020 AOC14-B1 6-8FT_03/30/20 0030806	AOC14-B1 8 - 10 ft 3/30/2020 AOC14-B1 8-10FT_03/30/20 0030806	AOC14-B2 0 - 2 ft 6/1/2020 AOC14-B2 0-2FT_06/01/20 0060041	AOC14-B2 2 - 4 ft 6/1/2020 AOC14-B2 2-4FT_06/01/20 0060041	AOC14-B2 4 - 6 ft 6/1/2020 AOC14-B2 4-6FT_06/01/20 0060041	AOC14-B2 8.5 - 10 ft 6/5/2020 AOC14-B2 8.5-10_06/05/20 0060230	AOC14-B3 0 - 2 ft 6/1/2020 AOC14-B3 0-2FT_06/01/20 0060041	AOC14-B3 2 - 4 ft 6/1/2020 AOC14-B3 2-4FT_06/01/20 0060041	AOC14-B3 4 - 6 ft 6/1/2020 AOC14-B3 4-6FT_06/01/20 0060041
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**1100**	**1700**	**3600**	**74**	< 60	< 52	< 50	< 56	< 55	< 53	< 55	< 58
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	< 6.5	< 4.3	< 3.8	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	< 6.5	< 4.3	< 3.8	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	< 13	**11**	**8.0**	NS	NS	NS	NS	NS	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	NS	< 13	< 8.6	< 7.5	NS	NS	NS	NS	NS	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	< 13	< 8.6	< 7.5	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	< 6.5	< 4.3	< 3.8	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	< 6.5	< 4.3	< 3.8	NS	NS	NS	NS	NS	NS	NS
o-Xylene	ug/kg	NE	NE	NE	NS	NS	< 6.5	< 4.3	< 3.8	NS	NS	NS	NS	NS	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	< 6.5	< 4.3	< 3.8	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	< 6.5	< 4.3	< 3.8	NS	NS	NS	NS	NS	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Acenaphthylene	ug/kg	84000	1000000	2500000	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Anthracene	ug/kg	400000	1000000	2500000	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Chrysene	ug/kg	**1000**	**84000**	780000	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Fluorene	ug/kg	**56000**	1000000	2500000	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Naphthalene	ug/kg	**56000**	1000000	2500000	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
Pyrene	ug/kg	**40000**	1000000	2500000	< 340	< 340	< 360	< 380	< 360	< 320	< 300	< 340	< 330	< 320	< 330	< 350
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	< 340	< 360	< 380	< 360	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	< 340	< 360	< 380	< 360	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	< 340	< 360	< 380	< 360	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	< 340	< 360	< 380	< 360	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	< 340	< 360	< 380	< 360	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	< 340	< 360	< 380	< 360	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	NS	< 2.2	< 2.3	< 2.6	< 2.3	< 2.0	< 2.0	< 2.1	< 2.2	**2.1**	< 2.2	< 2.3
Arsenic	mg/kg	NE	**10**	**10**	NS	**21**	**13**	**3.8**	**1.8**	**3.8**	**4.4**	**2.6**	**2.2**	**5.5**	**3.1**	**2.3**
Barium	mg/kg	NE	4700	140000	NS	**28**	**28**	**34**	**17**	**34**	**31**	**27**	**25**	**40**	**29**	**27**
Beryllium	mg/kg	NE	2	2	NS	< 1.1	< 1.2	< 1.3	< 1.1	< 0.98	< 0.99	< 1.1	< 1.1	< 1.0	< 1.1	< 1.2
Cadmium	mg/kg	NE	34	1000	NS	< 0.54	< 0.58	< 0.65	< 0.57	< 0.49	< 0.50	< 0.54	< 0.54	< 0.52	< 0.54	< 0.59
Chromium (Total)	mg/kg	NE	100	100	NS	**13**	**7.7**	**7.5**	**5.5**	**8.6**	**10**	**9.7**	**13**	**17**	**8.9**	**11**
Copper	mg/kg	NE	2500	76000	NS	**12**	**8.2**	**11**	**23**	**27**	**24**	**10**	**7.4**	**30**	**21**	**16**
Lead	mg/kg	NE	400	**1000**	NS	**36**	**40**	**16**	**3.7**	**110**	**100**	**17**	**3.6**	**80**	**12**	**11**
Mercury	mg/kg	NE	20	610	NS	< 0.14	< 0.15	< 0.16	< 0.14	**0.45**	**0.62**	< 0.14	< 0.13	**3.5**	**1.2**	< 0.15
Nickel	mg/kg	NE	1400	7500	NS	**6.2**	**4.1**	**3.7**	**3.1**	**9.6**	**8.8**	**7.8**	**7.2**	**9.0**	**8.4**	**8.2**
Vanadium	mg/kg	NE	470	14000	NS	**19**	**12**	**11**	**6.6**	**14**	**14**	**14**	**15**	**15**	**14**	**16**
Zinc	mg/kg	NE	20000	610000	NS	**19**	**23**	**15**	**13**	**28**	**27**	**31**	**21**	**22**	**19**	**20**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	< 0.0060	NS	< 0.0060	< 0.0060	NS	< 0.0060	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	< 0.0090	NS	**0.013**	< 0.0090	NS	< 0.0090	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	**0.23**	NS	**0.15**	**0.23**	NS	**0.069**	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	NS	< 0.050	< 0.050	NS	< 0.050	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	< 0.040	NS	**0.064**	< 0.040	NS	< 0.040	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	< 0.013	NS	**0.26**	**0.020**	NS	**0.037**	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	**0.050**	NS	**0.050**	**0.059**	NS	< 0.020	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	< 0.11	< 0.12	< 0.13	< 0.12	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	< 1.0	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	< 1.0	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	< 1.0	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	< 1.0	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	< 5.4	NS	NS	NS	< 5.2	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**85**	**87**	**83**	**77**	**83**	**93**	**97**	**89**	**90**	**94**	**90**	**85**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID					AOC14-B3	AOC14-B4	AOC14-B4	AOC14-B4	AOC14-B4	AOC14-B4	AOC14-B5	AOC14-B5	AOC14-B5	AOC14-B5	AOC14-B6	AOC14-B6
Depth Interval					6 - 8.5 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	4 - 6 ft	6 - 8.5 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8.5 ft	0 - 2 ft	2 - 4 ft
Sample Date	Unit	GBPMC	RDEC	ICDEC	6/8/2020	6/1/2020	6/1/2020	6/1/2020	6/8/2020	6/8/2020	6/1/2020	6/1/2020	6/1/2020	6/8/2020	6/1/2020	6/1/2020
Sample ID					AOC14-B3 6-8.5FT_06/08/20	AOC14-B4 0-2FT_06/01/20	AOC14-B4 2-4FT_06/01/20	AOC14-B4 4-6FT_06/01/20	AOC14-B4 4-6FT DUP_06/01/2	AOC14-B4 6-8.5FT_06/08/20	AOC14-B5 0-2FT_06/01/20	AOC14-B5 2-4FT_06/01/20	AOC14-B5 4-6FT_06/01/20	AOC14-B5 6-8.5FT_06/08/20	AOC14-B6 0-2FT_06/01/20	AOC14-B6 2-4FT_06/01/20
SDG					0060263	0060041	0060041	0060041	0060041	0060263	0060041	0060041	0060041	0060263	0060041	0060041
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 60	**59**	**3200**	**7600**	**5600**	**1900**	< 52	< 54	< 52	< 56	**160**	< 52
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 360	< 340	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	**420**	< 320
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 360	< 340	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	< 320	< 320
Acenaphthylene	ug/kg	84000	1000000	2500000	< 360	< 340	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	< 320	< 320
Anthracene	ug/kg	400000	1000000	2500000	< 360	< 340	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	< 320	< 320
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 360	< 340	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	**610**	< 320
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 360	< 340	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	**540**	< 320
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 360	**440**	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	**1300**	< 320
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 360	< 340	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	**490**	< 320
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 360	< 340	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	**540**	< 320
Chrysene	ug/kg	**1000**	**84000**	780000	< 360	**430**	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	**1000**	< 320
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 360	< 340	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	< 320	< 320
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 360	**480**	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	**1000**	< 320
Fluorene	ug/kg	**56000**	1000000	2500000	< 360	< 340	< 330	< 330	< 330	**580**	< 320	< 320	< 310	< 330	< 320	< 320
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 360	< 340	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	**490**	< 320
Naphthalene	ug/kg	**56000**	1000000	2500000	< 360	< 340	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	**460**	< 320
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 360	**350**	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	**880**	< 320
Pyrene	ug/kg	**40000**	1000000	2500000	< 360	**360**	< 330	< 330	< 330	< 340	< 320	< 320	< 310	< 330	**800**	< 320
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	< 2.3	**3.3**	< 2.1	< 2.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.0	< 2.1	**18**	< 2.0
Arsenic	mg/kg	NE	**10**	**10**	< 1.1	**24**	**3.6**	**3.1**	**2.9**	**1.9**	**7.8**	**14**	**5.8**	**5.0**	**27**	**3.6**
Barium	mg/kg	NE	4700	140000	**21**	**69**	**38**	**46**	**43**	**27**	**45**	**66**	**27**	**74**	**64**	**31**
Beryllium	mg/kg	NE	2	2	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	< 1.1	< 1.1	< 1.0
Cadmium	mg/kg	NE	34	1000	< 0.56	< 0.56	< 0.53	< 0.55	< 0.54	< 0.53	< 0.52	< 0.53	< 0.51	< 0.53	< 0.54	< 0.51
Chromium (Total)	mg/kg	NE	100	100	**5.9**	**20**	**11**	**32**	**11**	**8.3**	**14**	**10**	**10**	**11**	**13**	**7.2**
Copper	mg/kg	NE	2500	76000	**13**	**69**	**26**	**32**	**21**	**12**	**28**	**26**	**11**	**10**	**63**	**20**
Lead	mg/kg	NE	400	**1000**	**13**	**150**	**18**	**18**	**15**	**10**	**39**	**73**	**13**	**13**	**100**	**11**
Mercury	mg/kg	NE	20	610	< 0.14	**0.19**	< 0.13	< 0.14	< 0.14	< 0.14	< 0.13	< 0.13	< 0.13	< 0.14	< 0.13	< 0.13
Nickel	mg/kg	NE	1400	7500	**7.7**	**13**	**8.2**	**16**	**9.1**	**7.8**	**8.9**	**5.6**	**5.7**	**6.4**	**11**	**5.6**
Vanadium	mg/kg	NE	470	14000	**9.3**	**20**	**16**	**16**	**17**	**14**	**24**	**15**	**13**	**22**	**23**	**11**
Zinc	mg/kg	NE	20000	610000	**32**	**29**	**19**	**80**	**29**	**16**	**23**	**24**	**16**	**21**	**28**	**20**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	< 0.0060	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	< 0.0090	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	**0.14**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	< 0.050	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	< 0.040	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	< 0.013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	NS	**0.047**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	**NS**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	< 1.1	NS	NS	NS	NS	< 1.0	NS	NS	NS	< 1.1	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	**3.7**	NS	NS	NS	NS	< 1.0	NS	NS	NS	**2.3**	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	**5.4**	NS	NS	NS	NS	**4.6**	NS	NS	NS	**5.9**	NS
Dieldrin	ug/kg	7	38	360	NS	< 1.1	NS	NS	NS	NS	< 1.0	NS	NS	NS	< 1.1	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	< 5.6	NS	NS	NS	NS	< 5.2	NS	NS	NS	< 5.3	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**82**	**89**	**92**	**91**	**90**	**89**	**94**	**93**	**94**	**89**	**93**	**94**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID					AOC14-B6	AOC14-B6	AOC14-B7	AOC14-B7	AOC14-B7	AOC14-B7	AOC14-B8	AOC14-B8	AOC14-B8	AOC14-B8	AOC14-B8	AOC14-B9
Depth Interval					4 - 6 ft	8.5 - 10 ft	0.5 - 2 ft	2 - 4 ft	4 - 6 ft	8.5 - 10 ft	0.5 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	0.5 - 2 ft
Sample Date	Unit	GBPMC	RDEC	ICDEC	6/1/2020	6/8/2020	6/1/2020	6/1/2020	6/1/2020	6/8/2020	6/2/2020	6/2/2020	6/2/2020	6/9/2020	6/9/2020	6/2/2020
Sample ID					AOC14-B6 4-6FT_06/01/20	AOC14-B6 8.5-10FT_06/08/20	AOC14-B7 0.5-2FT_06/01/20	AOC14-B7 2-4FT_06/01/20	AOC14-B7 4-6FT_06/01/20	AOC14-B7 8.5-10FT_06/08/20	AOC14-B8 0.5-2FT_06/02/20	AOC14-B8 2-4FT_06/02/20	AOC14-B8 4-6FT_06/02/20	AOC14-B8 6-8FT_06/09/20	AOC14-B8 8-10FT_06/09/20	AOC14-B9 0.5-2FT_06/02/20
SDG					0060041	0060263	0060041	0060041	0060041	0060263	0060120	0060120	0060120	0060304	0060304	0060120
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 53	< 57	< 51	< 51	< 51	< 55	**71**	< 53	< 52	**130**	< 59	< 52
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M,P-XYLENE (SUM OF ISO	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	< 310	< 360	< 320
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	< 310	< 360	< 320
Acenaphthylene	ug/kg	84000	1000000	2500000	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	< 310	< 360	< 320
Anthracene	ug/kg	400000	1000000	2500000	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	< 310	< 360	< 320
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	< 310	< 360	< 320
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	< 310	< 360	< 320
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	**500**	< 360	< 320
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	**320**	< 360	< 320
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	< 310	< 360	< 320
Chrysene	ug/kg	**1000**	**84000**	780000	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	**350**	< 360	< 320
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	< 310	< 360	< 320
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 320	< 340	< 310	< 310	< 310	< 330	< 310	**340**	< 310	**440**	< 360	< 320
Fluorene	ug/kg	**56000**	1000000	2500000	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	< 310	< 360	< 320
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	< 310	< 360	< 320
Naphthalene	ug/kg	**56000**	1000000	2500000	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	< 310	< 360	< 320
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	< 310	< 360	< 320
Pyrene	ug/kg	**40000**	1000000	2500000	< 320	< 340	< 310	< 310	< 310	< 330	< 310	< 320	< 310	**350**	< 360	< 320
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	< 2.1	< 2.1	< 2.0	< 1.9	< 2.1	< 2.0	< 1.9	< 2.1	< 2.1	< 2.1	< 2.4	< 2.1
Arsenic	mg/kg	NE	**10**	**10**	**4.3**	**3.3**	**3.3**	**2.1**	**1.2**	**2.1**	**4.0**	**3.3**	**1.6**	**2.4**	< 1.2	**3.0**
Barium	mg/kg	NE	4700	140000	**39**	**20**	**34**	**50**	**19**	**23**	**32**	**35**	**23**	**30**	**37**	**46**
Beryllium	mg/kg	NE	2	2	< 1.0	< 1.1	< 1.0	< 0.96	< 1.0	< 1.0	< 0.96	< 1.1	< 1.0	< 1.0	< 1.2	< 1.0
Cadmium	mg/kg	NE	34	1000	< 0.52	< 0.53	< 0.50	< 0.48	< 0.51	< 0.51	< 0.48	< 0.53	< 0.52	< 0.52	< 0.59	< 0.52
Chromium (Total)	mg/kg	NE	100	100	**8.5**	**9.5**	**6.1**	**5.0**	**5.5**	**8.2**	**14**	**7.4**	**8.3**	**8.5**	**4.8**	**7.4**
Copper	mg/kg	NE	2500	76000	**27**	**7.6**	**13**	**15**	**7.9**	**9.7**	**24**	**23**	**8.7**	**23**	**4.2**	**36**
Lead	mg/kg	NE	400	**1000**	**13**	**5.2**	**7.1**	**8.5**	**6.8**	**16**	**30**	**26**	**8.7**	**31**	**6.6**	**36**
Mercury	mg/kg	NE	20	610	< 0.13	< 0.14	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.12	< 0.13	< 0.15	< 0.13
Nickel	mg/kg	NE	1400	7500	**7.5**	**8.4**	**3.1**	**3.0**	**2.1**	**4.3**	**5.4**	**5.8**	**4.3**	**7.8**	**3.1**	**6.4**
Vanadium	mg/kg	NE	470	14000	**14**	**15**	**10**	**10**	**8.9**	**17**	**14**	**11**	**8.9**	**15**	**10**	**12**
Zinc	mg/kg	NE	20000	610000	**26**	**22**	**12**	**16**	**8.4**	**18**	**27**	**24**	**12**	**41**	**16**	**58**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	< 1.0	NS	NS	NS	< 1.0	NS	NS	NS	NS	< 1.1
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	< 1.0	NS	NS	NS	< 1.0	NS	NS	NS	NS	< 1.1
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	< 1.0	NS	NS	NS	**2.4**	NS	NS	NS	NS	**1.8**
Dieldrin	ug/kg	7	38	360	NS	NS	< 1.0	NS	NS	NS	< 1.0	NS	NS	NS	NS	< 1.1
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	< 5.2	NS	NS	NS	< 5.2	NS	NS	NS	NS	< 5.3
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**93**	**87**	**95**	**96**	**97**	**89**	**95**	**94**	**95**	**94**	**83**	**94**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC14-B9 2 - 4 ft 6/2/2020 AOC14-B9 2-4FT_06/02/20 0060120	AOC14-B9 4 - 6 ft 6/2/2020 AOC14-B9 4-6FT_06/02/20 0060120	AOC14-B9 8.5 - 10 ft 6/8/2020 AOC14-B9 8.5-10FT_06/08/20 0060263	AOC14-B10 0.5 - 2 ft 6/2/2020 AOC14-B10 0.5-2FT_06/02/20 0060120	AOC14-B10 2 - 4 ft 6/2/2020 AOC14-B10 2-4FT_06/02/20 0060120	AOC14-B10 4 - 6 ft 6/2/2020 AOC14-B10 4-6FT_06/02/20 0060120	AOC14-B10 6 - 8 ft 6/9/2020 AOC14-B10 6-8FT_06/09/20 0060304	AOC14-B10 8 - 10 ft 6/9/2020 AOC14-B10 8-10FT_06/09/20 0060304	AOC14-B11 0.5 - 2 ft 6/2/2020 AOC14-B11 0.5-2FT_06/02/20 0060120	AOC14-B11 2 - 4 ft 6/2/2020 AOC14-B11 2-4FT_06/02/20 0060120	AOC14-B11 4 - 6 ft 6/2/2020 AOC14-B11 4-6FT_06/02/20 0060120	AOC14-B11 6 - 8 ft 6/9/2020 AOC14-B11 6-8FT_06/09/20 0060304
ETPH-CT																	
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**95**	**71**	< 57	**240**	< 53	< 53	**130**	< 58	< 53	< 52	< 52	< 55
VOCs																	
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PAHs																	
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	**790**	< 400	< 350	< 320	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 350	< 400	< 350	< 320	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Acenaphthylene	ug/kg	84000	1000000	2500000	< 350	< 400	< 350	**520**	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Anthracene	ug/kg	400000	1000000	2500000	< 350	< 400	< 350	< 320	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 350	**410**	< 350	**510**	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 350	**470**	< 350	**830**	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 350	**510**	< 350	**1600**	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 350	< 400	< 350	**1100**	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 350	< 400	< 350	**620**	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Chrysene	ug/kg	**1000**	**84000**	780000	**350**	**440**	< 350	**670**	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 350	< 400	< 350	< 320	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Fluoranthene	ug/kg	**56000**	1000000	2500000	**420**	**660**	< 350	**460**	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Fluorene	ug/kg	**56000**	1000000	2500000	< 350	< 400	< 350	< 320	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 350	< 400	< 350	**940**	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Naphthalene	ug/kg	**56000**	1000000	2500000	**450**	< 400	< 350	< 320	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	**700**	< 400	< 350	< 320	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
Pyrene	ug/kg	**40000**	1000000	2500000	**420**	**630**	< 350	**470**	< 320	< 310	< 320	< 350	< 320	< 310	< 310	< 330
SVOCs																	
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																	
Antimony	mg/kg	NE	27	8200	**5.0**	**3.9**	< 2.2	< 2.0	NS	NS	< 1.9	< 2.2	< 2.1	< 2.0	< 2.0	< 2.1
Arsenic	mg/kg	NE	**10**	**10**	**7.5**	**15**	**4.6**	**8.9**	NS	NS	**3.6**	< 1.1	**5.0**	**2.2**	**2.1**	**1.5**
Barium	mg/kg	NE	4700	140000	**79**	**91**	**52**	**57**	NS	NS	**35**	**32**	**38**	**27**	**27**	**43**
Beryllium	mg/kg	NE	2	2	< 1.1	< 1.3	< 1.1	< 1.0	NS	NS	< 0.97	< 1.1	< 1.1	< 0.99	< 1.0	< 1.1
Cadmium	mg/kg	NE	34	1000	< 0.57	< 0.64	< 0.55	< 0.51	NS	NS	< 0.49	< 0.55	< 0.53	< 0.49	< 0.50	< 0.54
Chromium (Total)	mg/kg	NE	100	100	**18**	**13**	**5.7**	**10**	NS	NS	**7.5**	**3.6**	**12**	**5.8**	**6.9**	**7.2**
Copper	mg/kg	NE	2500	76000	**140**	**210**	**48**	**29**	NS	NS	**41**	**2.6**	**100**	**7.8**	**14**	**13**
Lead	mg/kg	NE	400	**1000**	**150**	**300**	**56**	**47**	NS	NS	**38**	< 2.2	**35**	**5.1**	**6.2**	**17**
Mercury	mg/kg	NE	20	610	**0.25**	**0.81**	< 0.14	**0.28**	NS	NS	< 0.13	< 0.15	< 0.13	< 0.13	< 0.13	< 0.13
Nickel	mg/kg	NE	1400	7500	**14**	**11**	**3.8**	**8.7**	NS	NS	**7.2**	< 2.2	**21**	**3.9**	**5.0**	**4.5**
Vanadium	mg/kg	NE	470	14000	**11**	**11**	**9.0**	**25**	NS	NS	**20**	**8.4**	**18**	**11**	**12**	**13**
Zinc	mg/kg	NE	20000	610000	**160**	**460**	**85**	**39**	NS	NS	**48**	**12**	**500**	**18**	**19**	**25**
Metals-SPLP																	
Antimony	mg/l	0.06	NE	NE	< 0.0060	< 0.0060	NS	NS	NS	NS	NS	NS	< 0.0060	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	< 0.0090	< 0.0090	NS	NS	NS	NS	NS	NS	< 0.0090	NS	NS	NS
Barium	mg/l	10	NE	NE	**0.24**	**0.32**	NS	NS	NS	NS	NS	NS	**0.24**	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	< 0.050	NS	NS	NS	NS	NS	NS	< 0.050	NS	NS	NS
Copper	mg/l	13	NE	NE	**0.081**	**0.18**	NS	NS	NS	NS	NS	NS	< 0.040	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	**0.062**	**0.27**	NS	NS	NS	NS	NS	NS	**0.026**	NS	NS	NS
Zinc	mg/l	50	NE	NE	**0.32**	**1.9**	NS	NS	NS	NS	NS	NS	**0.10**	NS	NS	NS
Cyanide																	
Cyanide	mg/kg	NE	1400	41000	**NS**	**NS**	NS	NS	NS	NS	NS	NS	**NS**	NS	NS	NS
PCBs																	
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																	
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	< 1.1	NS	NS	NS	NS	< 1.1	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	< 1.1	NS	NS	NS	NS	< 1.1	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	**1.9**	NS	NS	NS	NS	< 1.1	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	< 1.1	NS	NS	NS	NS	< 1.1	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	< 5.3	NS	NS	NS	NS	< 5.3	NS	NS	NS
Herbicides																	
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																	
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																	
% Solids	%	NE	NE	NE	**86**	**74**	**86**	**94**	**94**	**95**	**94**	**85**	**94**	**96**	**95**	**90**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
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RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC14-B11 8 - 10 ft 6/9/2020 AOC14-B11 8-10FT_06/09/20 0060304	AOC14-B12 0 - 2 ft 6/2/2020 AOC14-B12 0-2FT_06/02/20 0060120	AOC14-B12 2 - 4 ft 6/2/2020 AOC14-B12 2-4FT_06/02/20 0060120	AOC14-B12 4 - 6 ft 6/8/2020 AOC14-B12 4-6FT_06/08/20 0060263	AOC14-B12 4 - 6 ft 6/8/2020 AOC14-B12 4-6FT DUP_06/08/2 0060263	AOC14-B12 6 - 8.5 ft 6/8/2020 AOC14-B12 6-8.5FT_06/08/20 0060263	AOC14-B13 0 - 2 ft 6/2/2020 AOC14-B13 0-2FT_06/02/20 0060120	AOC14-B13 2 - 4 ft 6/2/2020 AOC14-B13 2-4FT_06/02/20 0060120	AOC14-B13 4 - 6 ft 6/2/2020 AOC14-B13 4-6FT_06/02/20 0060120	AOC14-B13 6 - 8.5 ft 6/8/2020 AOC14-B13 6-8.5FT_06/08/20 0060263	AOC14-B14 0 - 2 ft 6/2/2020 AOC14-B14 0-2FT_06/02/20 0060120	AOC14-B14 2 - 4 ft 6/2/2020 AOC14-B14 2-4FT_06/02/20 0060120
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 61	**100**	< 51	< 52	< 52	< 55	< 54	< 54	< 56	< 57	**1100**	**1500**
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.3
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.3
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 8.7
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 8.7
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 8.7
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.3
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.3
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.3
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.3
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.3
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 370	< 310	< 310	< 310	< 310	< 330	< 330	< 320	< 340	< 340	**1500**	< 320
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 370	< 310	< 310	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Acenaphthylene	ug/kg	84000	1000000	2500000	< 370	**430**	< 310	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Anthracene	ug/kg	400000	1000000	2500000	< 370	< 310	< 310	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 370	**800**	< 310	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 370	**750**	< 310	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 370	**1600**	**560**	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 370	**720**	< 310	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 370	**620**	< 310	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Chrysene	ug/kg	**1000**	**84000**	780000	< 370	**1000**	**380**	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 370	< 310	< 310	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 370	**1300**	**420**	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Fluorene	ug/kg	**56000**	1000000	2500000	< 370	< 310	< 310	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 370	**650**	< 310	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Naphthalene	ug/kg	**56000**	1000000	2500000	< 370	< 310	< 310	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 370	< 310	< 310	< 310	< 310	< 330	< 330	< 320	< 340	< 340	**400**	< 320
Pyrene	ug/kg	**40000**	1000000	2500000	< 370	**1100**	**360**	< 310	< 310	< 330	< 330	< 320	< 340	< 340	< 320	< 320
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	< 2.2	**3.9**	< 1.9	< 2.0	< 2.1	< 2.1	< 2.1	< 2.1	< 2.3	< 2.1	< 2.1	< 2.1
Arsenic	mg/kg	NE	**10**	**10**	**2.0**	**21**	**12**	**6.0**	**4.6**	**1.1**	**5.9**	**6.5**	**2.3**	< 1.1	**7.6**	**23**
Barium	mg/kg	NE	4700	140000	**45**	**37**	**26**	**32**	**33**	**17**	**34**	**37**	**15**	**21**	**64**	**48**
Beryllium	mg/kg	NE	2	2	< 1.1	< 1.0	< 0.96	< 1.0	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Cadmium	mg/kg	NE	34	1000	< 0.56	< 0.52	< 0.48	< 0.50	< 0.52	< 0.52	< 0.53	< 0.53	< 0.57	< 0.53	< 0.53	< 0.53
Chromium (Total)	mg/kg	NE	100	100	**6.2**	**13**	**7.4**	**12**	**11**	**4.5**	**18**	**12**	**6.7**	**3.7**	**58**	**7.4**
Copper	mg/kg	NE	2500	76000	**4.5**	**57**	**31**	**45**	**21**	**5.7**	**26**	**29**	**26**	**7.4**	**15**	**9.1**
Lead	mg/kg	NE	400	**1000**	< 2.2	**77**	**41**	**49**	**17**	**2.1**	**21**	**21**	**24**	**36**	**43**	**61**
Mercury	mg/kg	NE	20	610	< 0.15	**0.14**	**0.25**	< 0.13	< 0.13	< 0.14	< 0.14	< 0.13	< 0.14	< 0.14	< 0.14	< 0.13
Nickel	mg/kg	NE	1400	7500	**3.7**	**13**	**6.2**	**22**	**8.2**	< 2.1	**12**	**6.8**	**4.6**	< 2.1	**28**	**3.9**
Vanadium	mg/kg	NE	470	14000	**12**	**20**	**11**	**17**	**16**	**6.2**	**19**	**15**	**11**	**9.3**	**30**	**15**
Zinc	mg/kg	NE	20000	610000	**16**	**35**	**23**	**130**	**31**	**8.6**	**25**	**16**	**8.4**	**12**	**22**	**5.8**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	< 0.0060	< 0.0060	NS	NS	NS	< 0.0060	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	< 0.0090	< 0.0090	NS	NS	NS	< 0.0090	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	**0.20**	**0.18**	NS	NS	NS	**0.19**	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	< 0.050	< 0.050	NS	NS	NS	< 0.050	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	< 0.040	< 0.040	NS	NS	NS	< 0.040	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	< 0.013	< 0.013	NS	NS	NS	< 0.013	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	NS	**0.060**	**0.065**	NS	NS	NS	**0.076**	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	**NS**	**NS**	NS	NS	NS	**NS**	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	< 1.1	NS	NS	NS	NS	< 1.1	NS	NS	NS	< 1.1	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	**1.7**	NS	NS	NS	NS	< 1.1	NS	NS	NS	< 1.1	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	**9.5**	NS	NS	NS	NS	**2.3**	NS	NS	NS	**2.0**	NS
Dieldrin	ug/kg	7	38	360	NS	< 1.1	NS	NS	NS	NS	< 1.1	NS	NS	NS	< 1.1	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	< 5.3	NS	NS	NS	NS	< 5.5	NS	NS	NS	< 5.3	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**79**	**94**	**96**	**95**	**95**	**90**	**91**	**92**	**87**	**87**	**92**	**94**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID					AOC14-B14	AOC14-B14	AOC14-B14	AOC14-B14	AOC14-B15	AOC14-B15	AOC14-B15	AOC14-B15	AOC14-B16	AOC14-B16	AOC14-B16	AOC14-B16
Depth Interval					4 - 6 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
Sample Date	Unit	GBPMC	RDEC	ICDEC	6/2/2020	6/2/2020	6/9/2020	6/9/2020	6/3/2020	6/3/2020	6/3/2020	6/9/2020	6/3/2020	6/3/2020	6/3/2020	6/9/2020
Sample ID					AOC14-B14 4-6FT_06/02/20	OC14-B14 4-6FT DUP_06/02/2	AOC14-B14 6-8FT_06/09/20	AOC14-B14 8-10FT_06/09/20	AOC14-B15 0-2FT_06/03/20	AOC14-B15 2-4FT_06/03/20	AOC14-B15 4-6FT_06/03/20	AOC14-B15 6-8FT_06/09/20	AOC14-B16 0-2FT_06/03/20	AOC14-B16 2-4FT_06/03/20	AOC14-B16 4-6FT_06/03/20	AOC14-B16 6-8FT_06/09/20
SDG					0060120	0060120	0060304	0060304	0060175	0060175	0060175	0060304	0060175	0060175	0060175	0060304
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**6100**	**5500**	**1300**	**770**	< 53	< 53	< 56	< 52	< 53	< 59	< 51	< 52
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Acenaphthylene	ug/kg	84000	1000000	2500000	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Anthracene	ug/kg	400000	1000000	2500000	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Chrysene	ug/kg	**1000**	**84000**	780000	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 320	< 320	< 320	< 350	**350**	< 310	< 330	< 310	**600**	< 350	< 310	< 310
Fluorene	ug/kg	**56000**	1000000	2500000	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Naphthalene	ug/kg	**56000**	1000000	2500000	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	< 320	< 350	< 310	< 310
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	**650**	< 350	< 310	< 310
Pyrene	ug/kg	**40000**	1000000	2500000	< 320	< 320	< 320	< 350	< 320	< 310	< 330	< 310	**460**	< 350	< 310	< 310
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	< 2.1	< 2.0	< 2.1	< 2.3	**3.1**	< 2.1	< 2.1	< 2.1	**10**	< 2.3	< 2.0	< 2.0
Arsenic	mg/kg	NE	**10**	**10**	**4.6**	**5.6**	**18**	**15**	**13**	**2.5**	**3.0**	**3.7**	**5.9**	**2.8**	**2.3**	**4.2**
Barium	mg/kg	NE	4700	140000	**310**	**85**	**47**	**35**	**53**	**22**	**26**	**51**	**27**	**32**	**29**	**38**
Beryllium	mg/kg	NE	2	2	< 1.0	< 0.99	< 1.1	< 1.1	< 1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.2	< 0.99	< 1.0
Cadmium	mg/kg	NE	34	1000	< 0.52	< 0.50	< 0.53	< 0.57	< 0.53	< 0.52	< 0.52	< 0.52	< 0.51	< 0.58	< 0.49	< 0.51
Chromium (Total)	mg/kg	NE	100	100	**3.3**	**3.9**	**12**	**7.3**	**12**	**9.9**	**8.5**	**12**	**11**	**8.4**	**9.0**	**8.2**
Copper	mg/kg	NE	2500	76000	**24**	**26**	**12**	**65**	**24**	**10**	**9.4**	**22**	**33**	**30**	**25**	**23**
Lead	mg/kg	NE	400	**1000**	**340**	**360**	**50**	**240**	**130**	**3.7**	**5.1**	**24**	**19**	**6.2**	**3.6**	**18**
Mercury	mg/kg	NE	20	610	< 0.14	< 0.14	< 0.14	< 0.15	**0.30**	< 0.13	< 0.14	< 0.13	**0.42**	< 0.15	< 0.12	< 0.13
Nickel	mg/kg	NE	1400	7500	**2.3**	**2.3**	**5.9**	**3.8**	**6.8**	**6.9**	**8.2**	**8.8**	**7.7**	**7.9**	**7.2**	**7.2**
Vanadium	mg/kg	NE	470	14000	**6.6**	**8.0**	**21**	**13**	**16**	**13**	**15**	**20**	**12**	**14**	**13**	**14**
Zinc	mg/kg	NE	20000	610000	**5.2**	**7.0**	**16**	**13**	**12**	**15**	**19**	**27**	**15**	**16**	**12**	**17**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	< 0.0060	NS	NS	NS	< 0.0060	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	< 0.0090	NS	NS	NS	< 0.0090	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	**0.32**	NS	NS	NS	**0.19**	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	NS	NS	NS	< 0.050	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	< 0.040	NS	NS	NS	< 0.040	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	**0.049**	NS	NS	NS	< 0.013	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	**0.076**	NS	NS	NS	**0.054**	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	**NS**	NS	NS	NS	**NS**	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	< 1.1	NS	NS	NS	< 1.0	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	< 1.1	NS	NS	NS	< 1.0	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	**5.4**	NS	NS	NS	< 1.0	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	< 1.1	NS	NS	NS	< 1.0	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	< 5.3	NS	NS	NS	< 5.2	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**92**	**92**	**91**	**85**	**93**	**94**	**90**	**94**	**94**	**85**	**96**	**94**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC14-B17 0 - 2 ft 6/3/2020 AOC14-B17 0-2FT_06/03/20 0060175	AOC14-B17 2 - 4 ft 6/3/2020 AOC14-B17 2-4FT_06/03/20 0060175	AOC14-B17 4 - 6 ft 6/3/2020 AOC14-B17 4-6FT_06/03/20 0060175	AOC14-B17 6 - 8 ft 6/9/2020 AOC14-B17 6-8FT_06/09/20 0060304	AOC14-B18 0 - 2 ft 6/3/2020 AOC14-B18 0-2FT_06/03/20 0060175	AOC14-B18 2 - 4 ft 6/3/2020 AOC14-B18 2-4FT_06/03/20 0060175	AOC14-B18 4 - 6 ft 6/9/2020 AOC14-B18 4-6FT_06/09/20 0060304	AOC14-B18 6 - 8 ft 6/9/2020 AOC14-B18 6-8FT_06/09/20 0060304	AOC14-B18 8 - 10 ft 6/9/2020 AOC14-B18 8-10FT_06/09/20 0060304	AOC14-B19 0 - 2 ft 6/3/2020 AOC14-B19 0-2FT_06/03/20 0060175	AOC14-B19 2 - 4 ft 6/3/2020 AOC14-B19 2-4FT_06/03/20 0060175	AOC14-B19 4 - 6 ft 6/3/2020 AOC14-B19 4-6FT_06/03/20 0060175
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 53	< 55	< 55	< 53	< 56	< 53	< 54	< 55	< 54	< 55	< 55	< 56
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Acenaphthylene	ug/kg	84000	1000000	2500000	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Anthracene	ug/kg	400000	1000000	2500000	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Chrysene	ug/kg	**1000**	**84000**	780000	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
Pyrene	ug/kg	**40000**	1000000	2500000	< 310	< 330	< 330	< 320	< 340	< 320	< 330	< 330	< 320	< 330	< 330	< 340
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	**14**	**4.7**	< 2.1	**4.6**	< 2.3	< 2.1	**3.6**	**19**	< 2.2	< 2.2	< 2.3	< 2.2
Arsenic	mg/kg	NE	**10**	**10**	**3.7**	**4.0**	**1.8**	**3.6**	**9.6**	**3.2**	**5.0**	**4.8**	**1.2**	**12**	**4.8**	**1.8**
Barium	mg/kg	NE	4700	140000	**32**	**39**	**19**	**46**	**50**	**31**	**38**	**39**	**22**	**26**	**11**	**7.3**
Beryllium	mg/kg	NE	2	2	< 1.0	< 1.1	< 1.0	< 1.0	< 1.1	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Cadmium	mg/kg	NE	34	1000	< 0.51	< 0.53	< 0.52	< 0.52	< 0.56	< 0.52	< 0.52	< 0.56	< 0.54	< 0.54	< 0.56	< 0.56
Chromium (Total)	mg/kg	NE	100	100	**9.0**	**15**	**6.4**	**8.4**	**27**	**11**	**9.0**	**8.9**	**5.8**	**13**	**11**	**5.8**
Copper	mg/kg	NE	2500	76000	**62**	**53**	**17**	**44**	**57**	**27**	**130**	**140**	**8.5**	**12**	**5.0**	**6.6**
Lead	mg/kg	NE	400	**1000**	**110**	**56**	**22**	**81**	**48**	**26**	**120**	**110**	**7.0**	**52**	**3.5**	**3.2**
Mercury	mg/kg	NE	20	610	**1.6**	**0.26**	< 0.13	**0.47**	**0.17**	**0.15**	**0.25**	**0.33**	< 0.14	< 0.13	< 0.13	< 0.14
Nickel	mg/kg	NE	1400	7500	**7.4**	**10**	**6.8**	**8.3**	**13**	**7.9**	**8.8**	**8.2**	**6.3**	**5.9**	**4.6**	**4.5**
Vanadium	mg/kg	NE	470	14000	**11**	**15**	**13**	**15**	**38**	**16**	**14**	**14**	**8.7**	**17**	**14**	**8.7**
Zinc	mg/kg	NE	20000	610000	**22**	**25**	**19**	**36**	**36**	**71**	**33**	**37**	**20**	**14**	**12**	**9.1**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	< 0.0060	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	< 0.0090	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	**0.18**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	< 0.040	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	**0.025**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	**0.054**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	**NS**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	< 1.1	NS	NS	NS	< 1.1	NS	NS	NS	NS	< 1.1	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	< 1.1	NS	NS	NS	**8.1**	NS	NS	NS	NS	< 1.1	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	< 1.1	NS	NS	NS	**25**	NS	NS	NS	NS	**2.3**	NS	NS
Dieldrin	ug/kg	7	38	360	< 1.1	NS	NS	NS	< 1.1	NS	NS	NS	NS	< 1.1	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	< 5.3	NS	NS	NS	< 5.6	NS	NS	NS	NS	< 5.5	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**94**	**89**	**89**	**93**	**88**	**92**	**91**	**90**	**92**	**90**	**89**	**88**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
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Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID					AOC14-B19	AOC14-B19	AOC14-B19	AOC14-B19	AOC14-B20	AOC14-B20	AOC14-B20	AOC14-B20	AOC14-B21	AOC14-B21	AOC14-B21	AOC14-B21
Depth Interval					4 - 6 ft	6 - 8 ft	6 - 8 ft	8 - 10 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	0.5 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
Sample Date	Unit	GBPMC	RDEC	ICDEC	6/3/2020	6/9/2020	6/9/2020	6/9/2020	6/3/2020	6/3/2020	6/4/2020	6/10/2020	6/4/2020	6/4/2020	6/4/2020	6/10/2020
Sample ID					AOC14-B19 4-6FT DUP_06/03/2	AOC14-B19 6-8FT_06/09/20	AOC14-B19 6-8FT DUP_06/09/2	AOC14-B19 8-10FT_06/09/20	AOC14-B20 0-2FT_06/03/20	AOC14-B20 2-4FT_06/03/20	AOC14 B20 4-6FT_06/04/20	AOC14-B20 6-8FT_06/10/20	AOC14-B21 0.5-2FT_06/04/20	AOC14-B21 2-4FT_06/04/20	AOC14 B21 4-6FT_06/04/20	AOC14-B21 6-8FT_06/10/20
SDG					0060175	0060304	0060304	0060304	0060175	0060175	0060205	0060378	0060205	0060205	0060205	0060378
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 60	< 54	< 55	< 57	< 52	< 61	< 54	< 54	**77**	< 53	< 58	< 55
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 360	< 330	< 330	< 340	< 310	< 370	< 320	< 320	< 310	< 320	< 350	< 340
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 360	< 330	< 330	< 340	< 310	< 370	< 320	< 320	< 310	< 320	< 350	< 340
Acenaphthylene	ug/kg	84000	1000000	2500000	< 360	< 330	< 330	< 340	< 310	< 370	< 320	< 320	< 310	< 320	< 350	< 340
Anthracene	ug/kg	400000	1000000	2500000	< 360	< 330	< 330	< 340	< 310	< 370	< 320	< 320	< 310	< 320	< 350	< 340
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 360	< 330	< 330	< 340	< 310	< 370	< 320	**360**	< 310	< 320	< 350	< 340
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 360	< 330	< 330	< 340	< 310	< 370	< 320	**330**	< 310	< 320	< 350	< 340
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 360	< 330	< 330	< 340	**560**	**420**	< 320	**820**	**320**	< 320	< 350	< 340
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 360	< 330	< 330	< 340	< 310	< 370	< 320	< 320	< 310	< 320	< 350	< 340
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 360	< 330	< 330	< 340	< 310	< 370	< 320	**470**	< 310	< 320	< 350	< 340
Chrysene	ug/kg	**1000**	**84000**	780000	< 360	< 330	< 330	< 340	**380**	< 370	< 320	**770**	< 310	< 320	< 350	< 340
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 360	< 330	< 330	< 340	< 310	< 370	< 320	< 320	< 310	< 320	< 350	< 340
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 360	< 330	< 330	< 340	**460**	**420**	< 320	**2000**	< 310	< 320	< 350	< 340
Fluorene	ug/kg	**56000**	1000000	2500000	< 360	< 330	< 330	< 340	< 310	< 370	< 320	**400**	< 310	< 320	< 350	< 340
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 360	< 330	< 330	< 340	< 310	< 370	< 320	< 320	< 310	< 320	< 350	< 340
Naphthalene	ug/kg	**56000**	1000000	2500000	< 360	< 330	< 330	< 340	< 310	< 370	< 320	< 320	< 310	< 320	< 350	< 340
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 360	< 330	< 330	< 340	**320**	< 370	< 320	**2800**	< 310	< 320	< 350	< 340
Pyrene	ug/kg	**40000**	1000000	2500000	< 360	< 330	< 330	< 340	**390**	< 370	< 320	**1300**	< 310	< 320	< 350	< 340
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	< 2.3	< 2.1	< 2.2	< 2.3	< 2.0	< 2.5	< 2.1	< 2.1	< 2.1	< 2.1	< 2.3	< 2.2
Arsenic	mg/kg	NE	**10**	**10**	**2.1**	**5.3**	**4.7**	**1.9**	**4.8**	**6.0**	**3.1**	**7.1**	**6.8**	< 1.0	< 1.1	< 1.1
Barium	mg/kg	NE	4700	140000	**8.8**	**17**	**14**	**10**	**49**	**38**	**15**	**47**	**34**	**23**	**20**	**18**
Beryllium	mg/kg	NE	2	2	< 1.2	< 1.0	< 1.1	< 1.1	< 1.0	< 1.2	< 1.0	< 1.1	< 1.0	< 1.0	< 1.1	< 1.1
Cadmium	mg/kg	NE	34	1000	< 0.58	< 0.52	< 0.55	< 0.57	< 0.51	< 0.62	< 0.52	< 0.53	< 0.51	< 0.52	< 0.57	< 0.56
Chromium (Total)	mg/kg	NE	100	100	**6.6**	**8.0**	**6.7**	**5.3**	**22**	**15**	**8.7**	**18**	**9.1**	**4.4**	**3.4**	**3.3**
Copper	mg/kg	NE	2500	76000	**6.7**	**7.9**	**7.2**	**6.5**	**28**	**23**	**8.2**	**25**	**35**	**11**	**7.9**	**9.0**
Lead	mg/kg	NE	400	**1000**	**3.2**	**24**	**20**	< 2.3	**16**	**16**	**3.4**	**19**	**35**	**4.7**	**3.4**	**5.7**
Mercury	mg/kg	NE	20	610	< 0.14	< 0.14	< 0.13	< 0.14	< 0.13	< 0.16	< 0.13	< 0.14	< 0.13	< 0.13	< 0.15	< 0.13
Nickel	mg/kg	NE	1400	7500	**4.4**	**4.4**	**3.7**	**3.3**	**20**	**11**	**7.0**	**13**	**8.1**	**2.8**	< 2.3	**2.3**
Vanadium	mg/kg	NE	470	14000	**10**	**12**	**10**	**8.7**	**25**	**24**	**13**	**29**	**17**	**6.5**	**7.4**	**7.1**
Zinc	mg/kg	NE	20000	610000	**11**	**10**	**9.6**	**9.7**	**35**	**40**	**16**	**29**	**47**	**13**	**11**	**14**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	< 1.0	NS	NS	NS	< 1.0	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	< 1.0	NS	NS	NS	< 1.0	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	< 1.0	NS	NS	NS	< 1.0	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	< 1.0	NS	NS	NS	< 1.0	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	< 5.2	NS	NS	NS	< 5.2	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**82**	**91**	**92**	**86**	**95**	**80**	**93**	**91**	**95**	**94**	**86**	**89**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC14-B21 8 - 10 ft 6/10/2020 AOC14-B21 8-10FT_06/10/20 0060378	AOC14-B22 0.5 - 2 ft 6/4/2020 AOC14-B22 0.5-2FT_06/04/20 0060205	AOC14-B22 2 - 4 ft 6/4/2020 AOC14-B22 2-4FT_06/04/20 0060205	AOC14-B22 4 - 6 ft 6/4/2020 AOC14 B22 4-6FT_06/04/20 0060205	AOC14-B22 6 - 8 ft 6/10/2020 AOC14-B22 6-8FT_06/10/20 0060378	AOC14-B22 8 - 10 ft 6/10/2020 AOC14-B22 8-10FT_06/10/20 0060378	AOC14-B23 0.5 - 2 ft 6/4/2020 AOC14-B23 0.5-2FT_06/04/20 0060205	AOC14-B23 2 - 4 ft 6/4/2020 AOC14-B23 2-4FT_06/04/20 0060205	AOC14-B23 4 - 6 ft 6/4/2020 AOC14 B23 4-6FT_06/04/20 0060205	AOC14-B23 6 - 8 ft 6/10/2020 AOC14-B23 6-8FT_06/10/20 0060378	AOC14-B23 8 - 10 ft 6/10/2020 AOC14-B23 8-10FT_06/10/20 0060378	AOC14-B24 0 - 2 ft 6/4/2020 AOC14-B24 0-2FT_06/04/20 0060205
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 57	**120**	< 52	< 52	< 52	< 58	< 52	< 53	< 53	< 51	< 57	< 52
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Acenaphthylene	ug/kg	84000	1000000	2500000	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Anthracene	ug/kg	400000	1000000	2500000	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Chrysene	ug/kg	**1000**	**84000**	780000	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Fluorene	ug/kg	**56000**	1000000	2500000	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Naphthalene	ug/kg	**56000**	1000000	2500000	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
Pyrene	ug/kg	**40000**	1000000	2500000	< 340	< 310	< 320	< 310	< 310	< 350	< 310	< 310	< 310	< 310	< 340	< 310
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	< 2.2	< 2.1	< 2.0	< 2.0	< 2.1	< 2.2	< 2.0	< 2.0	< 2.1	< 2.1	< 2.2	< 2.0
Arsenic	mg/kg	NE	**10**	**10**	< 1.1	**3.3**	**2.0**	**1.8**	**1.7**	< 1.1	**3.4**	**2.7**	**1.3**	**3.8**	**1.1**	**2.5**
Barium	mg/kg	NE	4700	140000	**29**	**30**	**30**	**51**	**22**	**31**	**37**	**42**	**53**	**54**	**65**	**74**
Beryllium	mg/kg	NE	2	2	< 1.1	< 1.0	< 1.0	< 0.98	< 1.0	< 1.1	< 0.98	< 1.0	< 1.0	< 1.0	< 1.1	< 0.99
Cadmium	mg/kg	NE	34	1000	< 0.56	< 0.52	< 0.50	< 0.49	< 0.52	< 0.56	< 0.49	< 0.51	< 0.52	< 0.52	< 0.56	< 0.49
Chromium (Total)	mg/kg	NE	100	100	**2.9**	**8.2**	**4.1**	**6.1**	**2.6**	< 2.2	**6.4**	**7.9**	**6.5**	**6.5**	**4.9**	**6.4**
Copper	mg/kg	NE	2500	76000	< 2.2	**130**	**8.5**	**14**	**13**	< 2.2	**25**	**16**	**6.3**	**13**	**3.8**	**26**
Lead	mg/kg	NE	400	**1000**	< 2.2	**65**	**13**	**12**	**7.1**	< 2.2	**50**	**47**	**21**	**33**	**3.8**	**180**
Mercury	mg/kg	NE	20	610	< 0.14	< 0.13	< 0.13	< 0.13	< 0.12	< 0.15	**0.17**	< 0.13	< 0.13	< 0.13	< 0.14	**0.43**
Nickel	mg/kg	NE	1400	7500	< 2.2	**6.7**	**2.8**	**2.6**	< 2.1	< 2.2	**5.2**	**5.1**	**2.8**	**3.9**	**2.7**	**4.5**
Vanadium	mg/kg	NE	470	14000	**6.2**	**13**	**8.8**	**13**	**6.5**	**5.7**	**16**	**12**	**11**	**14**	**12**	**12**
Zinc	mg/kg	NE	20000	610000	**12**	**81**	**21**	**22**	**15**	**15**	**38**	**40**	**19**	**33**	**22**	**130**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	< 0.0060	< 0.0060	NS	NS	NS	NS	NS	NS	NS	NS	< 0.0060
Arsenic	mg/l	0.5	NE	NE	NS	< 0.0090	< 0.0090	NS	NS	NS	NS	NS	NS	NS	NS	< 0.0090
Barium	mg/l	10	NE	NE	NS	**0.39**	**0.26**	NS	NS	NS	NS	NS	NS	NS	NS	**0.49**
Chromium (Total)	mg/l	0.5	NE	NE	NS	< 0.050	< 0.050	NS	NS	NS	NS	NS	NS	NS	NS	< 0.050
Copper	mg/l	13	NE	NE	NS	**0.33**	< 0.040	NS	NS	NS	NS	NS	NS	NS	NS	< 0.040
Lead	mg/l	**0.15**	NE	NE	NS	**0.053**	**0.016**	NS	NS	NS	NS	NS	NS	NS	NS	**0.30**
Zinc	mg/l	50	NE	NE	NS	**0.23**	**0.10**	NS	NS	NS	NS	NS	NS	NS	NS	**0.42**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	**NS**	**NS**	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	< 1.0	NS	NS	NS	NS	< 1.0	NS	NS	NS	NS	< 1.0
4-4'-DDE	ug/kg	10**	1200	16800	NS	< 1.0	NS	NS	NS	NS	< 1.0	NS	NS	NS	NS	< 1.0
4-4'-DDT	ug/kg	**10****	1200	16800	NS	< 1.0	NS	NS	NS	NS	< 1.0	NS	NS	NS	NS	< 1.0
Dieldrin	ug/kg	7	38	360	NS	< 1.0	NS	NS	NS	NS	< 1.0	NS	NS	NS	NS	< 1.0
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	< 5.2	NS	NS	NS	NS	< 5.2	NS	NS	NS	NS	< 5.2
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**88**	**94**	**95**	**95**	**96**	**85**	**95**	**94**	**94**	**95**	**86**	**95**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC14-B24 2 - 4 ft 6/4/2020 AOC14-B24 2-4FT_06/04/20 0060205	AOC14-B24 4 - 6 ft 6/4/2020 AOC14 B24 4-6FT_06/04/20 0060205	AOC14-B24 6 - 8 ft 6/10/2020 AOC14-B24 6-8FT_06/10/20 0060378	AOC14-B24 8 - 10 ft 6/10/2020 AOC14-B24 8-10FT_06/10/20 0060378	AOC14-B25 0.5 - 2 ft 6/5/2020 AOC14-B25 0.5-2_06/05/20 0060230	AOC14-B25 2 - 4 ft 6/5/2020 AOC14-B25 2-4_06/05/20 0060230	AOC14-B25 2 - 4 ft 6/5/2020 C14-B25 2-4 DUPLICATE_06/0 0060230	AOC14-B25 4 - 6 ft 6/5/2020 AOC14-B25 4-6_06/05/20 0060230	AOC14-B25 6 - 8 ft 6/10/2020 AOC14-B25 6-8FT_06/10/20 0060378	AOC14-B25 8 - 10 ft 6/10/2020 AOC14-B25 8-10FT_06/10/20 0060378	AOC15-B1 0 - 2 ft 3/16/2020 AOC15-B1 0-2FT_03/16/20 0030467	AOC15-B2 0 - 2 ft 3/17/2020 AOC15 B-2 0-2FT_03/17/20 0030476
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 56	< 58	< 55	< 58	< 52	< 51	< 51	< 51	< 51	< 58	**400**	**63**
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.0	< 3.7
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.0	< 3.7
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 12	< 7.5
M,P-XYLENE (SUM OF ISO	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 12	< 7.5
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 12	< 7.5
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.0	< 3.7
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.0	< 3.7
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.0	< 3.7
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.0	< 3.7
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 6.0	< 3.7
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	< 330	< 360
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	< 330	< 360
Acenaphthylene	ug/kg	84000	1000000	2500000	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	< 330	< 360
Anthracene	ug/kg	400000	1000000	2500000	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	< 330	< 360
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	**370**	**750**
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	**340**	**710**
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	**680**	**1600**
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	**450**	**430**
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	< 330	**680**
Chrysene	ug/kg	**1000**	**84000**	780000	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	**570**	**1000**
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	< 330	< 360
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	**590**	**1300**
Fluorene	ug/kg	**56000**	1000000	2500000	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	< 330	< 360
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	**380**	**420**
Naphthalene	ug/kg	**56000**	1000000	2500000	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	< 330	< 360
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	< 330	< 360
Pyrene	ug/kg	**40000**	1000000	2500000	< 340	< 350	< 330	< 350	< 310	< 310	< 310	< 310	< 310	< 350	**520**	**1100**
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	ug/kg	1000	31000	290000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	< 2.1	< 2.2	< 2.1	< 2.3	< 2.0	< 2.0	< 1.9	< 2.0	< 2.0	< 2.4	**30**	**4.5**
Arsenic	mg/kg	NE	**10**	**10**	**2.3**	**1.8**	**3.2**	< 1.2	**3.2**	< 1.0	**1.3**	**1.3**	**1.2**	< 1.2	**14**	**15**
Barium	mg/kg	NE	4700	140000	**110**	**110**	**110**	**93**	**25**	**26**	**21**	**50**	**26**	**35**	**76**	**59**
Beryllium	mg/kg	NE	2	2	< 1.1	< 1.1	< 1.1	< 1.2	< 0.98	< 1.0	< 0.95	< 1.0	< 1.0	< 1.2	< 1.1	< 1.2
Cadmium	mg/kg	NE	34	1000	< 0.53	< 0.54	< 0.53	< 0.58	< 0.49	< 0.50	< 0.47	< 0.51	< 0.50	< 0.59	**0.64**	< 0.60
Chromium (Total)	mg/kg	NE	100	100	**8.3**	**8.9**	**8.5**	**6.9**	**9.7**	**4.5**	**3.5**	**2.6**	**3.4**	**2.8**	**18**	**54**
Copper	mg/kg	NE	2500	76000	**8.9**	**7.1**	**30**	**3.9**	**13**	**2.0**	**3.3**	**2.6**	**6.4**	< 2.4	**150**	**61**
Lead	mg/kg	NE	400	**1000**	**24**	**8.3**	**110**	< 2.3	**15**	< 2.0	**3.2**	< 2.0	**7.4**	< 2.4	**260**	**52**
Mercury	mg/kg	NE	20	610	< 0.14	< 0.15	**0.16**	< 0.15	< 0.13	< 0.12	< 0.12	< 0.12	< 0.12	< 0.14	**10**	< 0.15
Nickel	mg/kg	NE	1400	7500	**5.2**	**5.0**	**9.5**	**3.8**	**4.6**	< 2.0	**1.9**	< 2.0	**2.5**	< 2.4	**9.9**	**32**
Vanadium	mg/kg	NE	470	14000	**19**	**21**	**17**	**16**	**13**	**7.2**	**8.1**	**6.9**	**7.4**	**7.1**	**19**	**28**
Zinc	mg/kg	NE	20000	610000	**45**	**39**	**76**	**30**	**23**	**9.1**	**11**	**11**	**15**	**12**	**53**	**43**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.020**	< 0.0060
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.0090	< 0.0090
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.33**	**0.12**
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.050	< 0.050
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.18**	< 0.040
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.085**	< 0.013
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.052**	**0.070**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.12
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	< 1.0	NS	NS	NS	NS	NS	NS	**3.6**
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	< 1.0	NS	NS	NS	NS	NS	NS	**5.1**
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	< 1.0	NS	NS	NS	NS	NS	NS	**16**
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	< 1.0	NS	NS	NS	NS	NS	NS	**3.4**
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	< 5.2	NS	NS	NS	NS	NS	NS	< 5.9
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**89**	**84**	**90**	**86**	**96**	**97**	**97**	**97**	**97**	**84**	**89**	**84**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC15-B3 0 - 2 ft 3/17/2020 AOC15 B-3 0-2FT_03/17/20 0030476	AOC16-B1 0 - 2 ft 3/17/2020 AOC16 B-1 0-2FT_03/17/20 0030476	AOC16-B2 1 - 3 ft 3/18/2020 AOC16 B2 1-3FT_03/18/20 0030543	AOC16-B2 8 - 10 ft 3/18/2020 AOC16 B2 8-10FT_03/18/20 0030543	AOC16-B3 2 - 4 ft 3/18/2020 AOC16 B3 2-4FT_03/18/20 0030543	AOC16-B3 8 - 10 ft 3/18/2020 AOC16 B3 8-10FT_03/18/20 0030543	AOC16-B4 2 - 4 ft 3/18/2020 AOC16 B4 2-4FT_03/18/20 0030543	AOC16-B4 8 - 10 ft 3/18/2020 AOC16 B4 8-10FT_03/18/20 0030543	AOC16-B5 0 - 2 ft 6/5/2020 AOC16-B5 0-2_06/05/20 0060230	AOC16-B5 2 - 4 ft 6/5/2020 AOC16-B5 2-4_06/05/20 0060230	AOC17-B1 2 - 4 ft 3/19/2020 AOC17-B1 2-4FT_03/19/20 0030573	AOC17-B1 8 - 10 ft 3/19/2020 AOC17-B1 8-10FT_03/19/20 0030573
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 55	< 57	**69**	< 54	< 53	< 54	**160**	**440**	NS	NS	**1400**	**75**
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.8	< 5.7
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.8	< 5.7
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 9.7	< 11
M,P-XYLENE (SUM OF ISO	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 9.7	< 11
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 9.7	< 11
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.8	< 5.7
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.8	< 5.7
o-Xylene	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.8	< 5.7
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.8	< 5.7
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 4.8	< 5.7
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 340	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 340	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Acenaphthylene	ug/kg	84000	1000000	2500000	< 340	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Anthracene	ug/kg	400000	1000000	2500000	< 340	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 340	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 340	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	**610**	**550**	**550**	< 330	< 320	< 330	**350**	< 320	NS	NS	< 310	< 350
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 340	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 340	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Chrysene	ug/kg	**1000**	**84000**	780000	**420**	**400**	**450**	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 340	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Fluoranthene	ug/kg	**56000**	1000000	2500000	**370**	**470**	**820**	< 330	< 320	< 330	**460**	< 320	NS	NS	< 310	< 350
Fluorene	ug/kg	**56000**	1000000	2500000	< 340	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 340	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Naphthalene	ug/kg	**56000**	1000000	2500000	< 340	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 340	< 340	**740**	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Pyrene	ug/kg	**40000**	1000000	2500000	< 340	**380**	**650**	< 330	< 320	< 330	**490**	< 320	NS	NS	< 310	< 350
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Carbazole	ug/kg	1000	31000	290000	NS	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Dibenzofuran	ug/kg	1400	68000	1000000	NS	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	< 340	< 330	< 330	< 320	< 330	< 320	< 320	NS	NS	< 310	< 350
Metals																
Antimony	mg/kg	NE	27	8200	**4.1**	**4.5**	**7.2**	< 2.1	**2.1**	< 2.0	**5.9**	< 2.0	< 2.0	< 2.0	< 2.1	< 2.3
Arsenic	mg/kg	NE	**10**	**10**	**5.9**	**23**	**9.3**	**3.4**	**2.3**	**1.5**	**7.0**	**3.4**	**3.7**	**3.3**	**1.1**	< 1.2
Barium	mg/kg	NE	4700	140000	**34**	**51**	**71**	**36**	**21**	**17**	**35**	**32**	**36**	**45**	**42**	**26**
Beryllium	mg/kg	NE	2	2	< 1.1	< 1.1	< 1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.98	< 1.0	< 1.0	< 1.2
Cadmium	mg/kg	NE	34	1000	< 0.57	< 0.56	< 0.54	< 0.51	< 0.50	< 0.51	< 0.52	< 0.51	< 0.49	< 0.51	< 0.52	< 0.59
Chromium (Total)	mg/kg	NE	100	100	**12**	**20**	**17**	**21**	**7.4**	**7.5**	**15**	**9.4**	**8.6**	**43**	**7.8**	**4.1**
Copper	mg/kg	NE	2500	76000	**57**	**84**	**150**	**150**	**37**	**24**	**94**	**36**	**25**	**11**	**8.3**	**3.0**
Lead	mg/kg	NE	400	**1000**	**75**	**60**	**74**	**26**	**14**	**15**	**44**	**76**	**48**	**17**	**4.0**	< 2.3
Mercury	mg/kg	NE	20	610	< 0.14	< 0.14	< 0.14	< 0.14	< 0.13	< 0.14	< 0.14	< 0.13	< 0.13	< 0.14	< 0.13	< 0.15
Nickel	mg/kg	NE	1400	7500	**21**	**39**	**9.7**	**8.6**	**7.0**	**6.5**	**7.9**	**6.7**	**5.7**	**19**	**4.8**	< 2.3
Vanadium	mg/kg	NE	470	14000	**26**	**23**	**20**	**12**	**11**	**10**	**15**	**18**	**14**	**15**	**9.9**	**10**
Zinc	mg/kg	NE	20000	610000	**85**	**76**	**50**	**76**	**37**	**34**	**41**	**38**	**44**	**29**	**20**	**17**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	< 0.0060	NS	< 0.0060	< 0.0060	**0.0068**	NS	NS	NS	< 0.0060	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	< 0.0090	NS	< 0.0090	< 0.0090	< 0.0090	NS	NS	NS	< 0.0090	NS
Barium	mg/l	10	NE	NE	NS	NS	**0.30**	NS	**0.28**	**0.20**	**0.29**	NS	NS	NS	**0.13**	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	< 0.050	NS	< 0.050	< 0.050	< 0.050	NS	NS	NS	< 0.050	NS
Copper	mg/l	13	NE	NE	NS	NS	< 0.040	NS	< 0.040	< 0.040	< 0.040	NS	NS	NS	< 0.040	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	< 0.013	NS	< 0.013	< 0.013	< 0.013	NS	NS	NS	< 0.013	NS
Zinc	mg/l	50	NE	NE	NS	NS	**0.052**	NS	**0.045**	**0.050**	**0.045**	NS	NS	NS	**0.035**	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	NS	NS	< 0.11	< 0.12
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	< 230	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**87**	**87**	**91**	**91**	**92**	**91**	**92**	**92**	**94**	**91**	**94**	**84**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC17-B2 2 - 4 ft 3/19/2020 AOC17-B2 2-4FT_03/19/20 0030573	AOC17-B2 9 - 11 ft 3/19/2020 AOC17-B2 9-11FT_03/19/20 0030573	AOC17-B3 0 - 2 ft 3/19/2020 AOC17-B3 0-2FT_03/19/20 0030573	AOC17-B4 0.5 - 2 ft 6/5/2020 AOC17-B4 0.5-2_06/05/20 0060230	AOC17-B4 2 - 4 ft 6/5/2020 AOC17-B4 2-4_06/05/20 0060230	AOC17-B4 4 - 6 ft 6/5/2020 AOC17-B4 4-6_06/05/20 0060230	AOC17-B4 6 - 8 ft 6/10/2020 AOC17-B4 6-8FT_06/10/20 0060378	AOC17-B5 0 - 2 ft 6/15/2020 AOC17-B5 0-2FT_06/15/20 0060470	AOC17-B5 2 - 4 ft 6/15/2020 AOC17-B5 2-4FT_06/15/20 0060470	AOC17-B5 4 - 6 ft 6/16/2020 AOC17-B5 4-6FT_06/16/20 0060512	AOC17-B5 6 - 8 ft 6/16/2020 AOC17-B5 6-8FT_06/16/20 0060512	AOC18-B1 2 - 4 ft 3/24/2020 AOC18 B1 2-4FT_03/24/20 0030661
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 52	< 58	**740**	< 52	< 52	< 52	< 51	**54**	< 52	< 51	< 56	< 56
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 5.1	< 4.7	< 4.3	NS	NS	NS	NS	NS	NS	NS	NS	< 5.4
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 5.1	< 4.7	< 4.3	NS	NS	NS	NS	NS	NS	NS	NS	< 5.4
Carbon disulfide	ug/kg	8000	500000	1000000	< 10	< 9.4	< 8.5	NS	NS	NS	NS	NS	NS	NS	NS	< 11
M,P-XYLENE (SUM OF ISO	ug/kg	NE	NE	NE	< 10	< 9.4	< 8.5	NS	NS	NS	NS	NS	NS	NS	NS	< 11
Naphthalene	ug/kg	56000	1000000	2500000	< 10	< 9.4	< 8.5	NS	NS	NS	NS	NS	NS	NS	NS	< 11
n-Butylbenzene	ug/kg	70000	500000	1000000	< 5.1	< 4.7	< 4.3	NS	NS	NS	NS	NS	NS	NS	NS	< 5.4
n-Propylbenzene	ug/kg	10000	500000	1000000	< 5.1	< 4.7	< 4.3	NS	NS	NS	NS	NS	NS	NS	NS	< 5.4
o-Xylene	ug/kg	NE	NE	NE	< 5.1	< 4.7	< 4.3	NS	NS	NS	NS	NS	NS	NS	NS	< 5.4
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 5.1	< 4.7	< 4.3	NS	NS	NS	NS	NS	NS	NS	NS	< 5.4
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 5.1	< 4.7	< 4.3	NS	NS	NS	NS	NS	NS	NS	NS	< 5.4
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 350	< 320	< 310	< 310	< 310	< 310	< 310	< 310	< 310	< 340	< 330
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	< 350	< 320	< 310	< 310	< 310	< 310	< 310	< 310	< 310	< 340	< 330
Acenaphthylene	ug/kg	84000	1000000	2500000	< 310	< 350	< 320	< 310	< 310	< 310	< 310	< 310	< 310	< 310	< 340	< 330
Anthracene	ug/kg	400000	1000000	2500000	< 310	< 350	< 320	< 310	< 310	< 310	< 310	< 310	< 310	< 310	< 340	< 330
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 310	< 350	**460**	< 310	< 310	< 310	< 310	**470**	< 310	< 310	< 340	< 330
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 310	< 350	**490**	< 310	< 310	< 310	< 310	**510**	< 310	< 310	< 340	< 330
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 310	< 350	**650**	< 310	< 310	< 310	< 310	**700**	< 310	< 310	< 340	< 330
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 310	< 350	**440**	< 310	< 310	< 310	< 310	**420**	< 310	< 310	< 340	< 330
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 310	< 350	< 320	< 310	< 310	< 310	< 310	< 310	< 310	< 310	< 340	< 330
Chrysene	ug/kg	**1000**	**84000**	780000	< 310	< 350	**530**	< 310	< 310	< 310	< 310	**540**	< 310	< 310	< 340	< 330
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 310	< 350	< 320	< 310	< 310	< 310	< 310	< 310	< 310	< 310	< 340	< 330
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 310	< 350	**890**	< 310	< 310	< 310	< 310	**880**	< 310	< 310	< 340	**400**
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	< 350	< 320	< 310	< 310	< 310	< 310	< 310	< 310	< 310	< 340	< 330
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 310	< 350	**340**	< 310	< 310	< 310	< 310	**340**	< 310	< 310	< 340	< 330
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 350	< 320	< 310	< 310	< 310	< 310	< 310	< 310	< 310	< 340	< 330
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 310	**660**	**400**	< 310	< 310	< 310	< 310	**640**	< 310	< 310	< 340	< 330
Pyrene	ug/kg	**40000**	1000000	2500000	< 310	< 350	**820**	< 310	< 310	< 310	< 310	**710**	< 310	< 310	< 340	**350**
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 310	< 350	< 320	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 350	< 320	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Carbazole	ug/kg	1000	31000	290000	< 310	< 350	< 320	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Dibenzofuran	ug/kg	1400	68000	1000000	< 310	< 350	< 320	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 350	< 320	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 310	< 350	< 320	NS	NS	NS	NS	NS	NS	NS	NS	< 330
Metals																
Antimony	mg/kg	NE	27	8200	< 1.9	< 2.2	< 2.1	NS	NS	NS	NS	NS	NS	NS	NS	< 2.0
Arsenic	mg/kg	NE	**10**	**10**	< 0.97	< 1.1	**2.2**	NS	NS	NS	NS	NS	NS	NS	NS	**1.5**
Barium	mg/kg	NE	4700	140000	**35**	**46**	**50**	NS	NS	NS	NS	NS	NS	NS	NS	**44**
Beryllium	mg/kg	NE	2	2	< 0.97	< 1.1	< 1.1	NS	NS	NS	NS	NS	NS	NS	NS	< 1.0
Cadmium	mg/kg	NE	34	1000	< 0.49	< 0.55	< 0.53	NS	NS	NS	NS	NS	NS	NS	NS	< 0.51
Chromium (Total)	mg/kg	NE	100	100	**5.5**	**7.0**	**15**	NS	NS	NS	NS	NS	NS	NS	NS	**6.3**
Copper	mg/kg	NE	2500	76000	**3.6**	**3.8**	**18**	NS	NS	NS	NS	NS	NS	NS	NS	**19**
Lead	mg/kg	NE	400	**1000**	**2.0**	**3.0**	**83**	NS	NS	NS	NS	NS	NS	NS	NS	**92**
Mercury	mg/kg	NE	20	610	< 0.13	< 0.14	**0.19**	NS	NS	NS	NS	NS	NS	NS	NS	**0.17**
Nickel	mg/kg	NE	1400	7500	**3.2**	**2.6**	**8.4**	NS	NS	NS	NS	NS	NS	NS	NS	**5.3**
Vanadium	mg/kg	NE	470	14000	**8.9**	**9.5**	**13**	NS	NS	NS	NS	NS	NS	NS	NS	**11**
Zinc	mg/kg	NE	20000	610000	**15**	**15**	**52**	NS	NS	NS	NS	NS	NS	NS	NS	**89**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	< 0.0060	< 0.0060	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	< 0.0090	< 0.0090	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	**0.22**	**0.27**	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	< 0.050	**0.059**	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	< 0.040	< 0.040	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	< 0.013	**0.056**	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	NS	**0.12**	**0.10**	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.10	< 0.12	< 0.11	NS	NS	NS	NS	NS	NS	NS	NS	< 0.11
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**97**	**86**	**93**	**94**	**95**	**96**	**96**	**95**	**97**	**97**	**87**	**90**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC18-B2 0 - 2 ft 3/19/2020 AOC18-B2 0-2FT_03/19/20 0030573	AOC18-B2 3 - 5 ft 3/19/2020 AOC18-B2 3-5FT_03/19/20 0030573	AOC19-B1 2 - 4 ft 3/20/2020 AOC19 B1 2-4FT_03/20/20 0030593	AOC19-B1 10 - 12 ft 3/20/2020 AOC19 B1 10-12FT_03/20/20 0030593	AOC19-B2 0 - 2 ft 3/18/2020 AOC19 B2 0-2FT_03/18/20 0030543	AOC19-B2 7 - 9 ft 3/20/2020 AOC19 B2 7-9FT_03/20/20 0030593	AOC19-B3 0 - 2 ft 3/18/2020 AOC19 B3 0-2FT_03/18/20 0030543	AOC19-B3 6 - 8 ft 3/20/2020 AOC19 B3 6-8FT_03/20/20 0030593	AOC19-B4 2 - 4 ft 3/17/2020 AOC19 B-4 2-4FT_03/17/20 0030476	AOC19-B4 7 - 9 ft 3/20/2020 AOC19 B4 7-9FT_03/20/20 0030593	AOC19-B4A 2 - 4 ft 3/17/2020 AOC19 B-4A 2-4FT_03/17/20 0030476	AOC20-B1 2 - 4 ft 3/26/2020 AOC20 B1 2.5-4.5FT_03/26/20 0030753
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 52	< 56	< 52	< 61	< 49	< 53	< 50	< 54	< 51	< 57	< 52	< 52
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.1	< 4.8	< 3.8	< 5.0	< 4.2	< 4.2	< 4.4	< 4.1	< 4.7	< 4.2	< 4.3	< 3.2
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.1	< 4.8	< 3.8	< 5.0	< 4.2	< 4.2	< 4.4	< 4.1	< 4.7	< 4.2	< 4.3	< 3.2
Carbon disulfide	ug/kg	8000	500000	1000000	< 8.2	< 9.6	< 7.7	< 10	< 8.4	< 8.4	< 8.7	< 8.3	< 9.3	< 8.3	< 8.5	< 6.5
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 8.2	< 9.6	< 7.7	< 10	< 8.4	< 8.4	< 8.7	< 8.3	< 9.3	< 8.3	< 8.5	< 6.5
Naphthalene	ug/kg	56000	1000000	2500000	< 8.2	< 9.6	< 7.7	< 10	< 8.4	< 8.4	< 8.7	< 8.3	< 9.3	< 8.3	< 8.5	< 6.5
n-Butylbenzene	ug/kg	70000	500000	1000000	< 4.1	< 4.8	< 3.8	< 5.0	< 4.2	< 4.2	< 4.4	< 4.1	< 4.7	< 4.2	< 4.3	< 3.2
n-Propylbenzene	ug/kg	10000	500000	1000000	< 4.1	< 4.8	< 3.8	< 5.0	< 4.2	< 4.2	< 4.4	< 4.1	< 4.7	< 4.2	< 4.3	< 3.2
o-Xylene	ug/kg	NE	NE	NE	< 4.1	< 4.8	< 3.8	< 5.0	< 4.2	< 4.2	< 4.4	< 4.1	< 4.7	< 4.2	< 4.3	< 3.2
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 4.1	< 4.8	< 3.8	< 5.0	< 4.2	< 4.2	< 4.4	< 4.1	< 4.7	< 4.2	< 4.3	< 3.2
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 4.1	< 4.8	< 3.8	< 5.0	< 4.2	< 4.2	< 4.4	< 4.1	< 4.7	< 4.2	< 4.3	< 3.2
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Acenaphthylene	ug/kg	84000	1000000	2500000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Anthracene	ug/kg	400000	1000000	2500000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Chrysene	ug/kg	**1000**	**84000**	780000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
Pyrene	ug/kg	**40000**	1000000	2500000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	< 320	< 340	< 320	< 310
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	NS	< 340	NS	< 310
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	NS	< 340	NS	< 310
Carbazole	ug/kg	1000	31000	290000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	NS	< 340	NS	< 310
Dibenzofuran	ug/kg	1400	68000	1000000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	NS	< 340	NS	< 310
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	NS	< 340	NS	< 310
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 310	< 330	< 310	< 360	< 310	< 320	< 310	< 330	NS	< 340	NS	< 310
Metals																
Antimony	mg/kg	NE	27	8200	< 2.1	< 2.1	< 2.0	< 2.4	< 2.0	< 2.0	< 2.0	< 2.0	< 1.9	< 2.1	< 2.0	< 2.1
Arsenic	mg/kg	NE	**10**	**10**	**1.2**	< 1.0	**2.2**	< 1.2	**1.4**	< 1.0	**1.7**	< 1.0	**1.3**	< 1.1	**2.0**	**2.1**
Barium	mg/kg	NE	4700	140000	**49**	**25**	**30**	**30**	**26**	**27**	**27**	**17**	**67**	**27**	**53**	**20**
Beryllium	mg/kg	NE	2	2	< 1.0	< 1.0	< 1.0	< 1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 0.97	< 1.1	< 1.0	< 1.0
Cadmium	mg/kg	NE	34	1000	< 0.52	< 0.52	< 0.50	< 0.60	< 0.51	< 0.51	< 0.51	< 0.50	< 0.49	< 0.53	< 0.51	< 0.52
Chromium (Total)	mg/kg	NE	100	100	**6.5**	**2.8**	**8.9**	**3.6**	**5.1**	**2.5**	**5.0**	< 2.0	**7.5**	**3.7**	**6.2**	**6.2**
Copper	mg/kg	NE	2500	76000	**13**	**2.7**	**9.8**	**4.7**	**8.3**	**3.9**	**7.3**	**2.4**	**9.5**	**3.4**	**9.2**	**8.6**
Lead	mg/kg	NE	400	**1000**	**47**	**3.9**	**4.3**	< 2.4	**9.7**	< 2.0	**5.8**	< 2.0	**17**	< 2.1	**19**	**5.1**
Mercury	mg/kg	NE	20	610	< 0.12	< 0.14	< 0.13	< 0.15	< 0.12	< 0.13	< 0.13	< 0.13	< 0.13	< 0.14	< 0.13	< 0.13
Nickel	mg/kg	NE	1400	7500	**4.2**	< 2.1	**6.1**	< 2.4	**3.9**	< 2.0	**3.3**	< 2.0	**5.0**	**2.2**	**4.3**	**4.9**
Vanadium	mg/kg	NE	470	14000	**15**	**5.0**	**11**	**6.6**	**11**	**7.6**	**9.6**	**2.8**	**15**	**16**	**12**	**11**
Zinc	mg/kg	NE	20000	610000	**60**	**12**	**22**	**19**	**28**	**14**	**21**	**8.8**	**64**	**13**	**55**	**17**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	< 0.0060	NS	NS	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	NS
Arsenic	mg/l	0.5	NE	NE	< 0.0090	NS	NS	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	NS
Barium	mg/l	10	NE	NE	**0.31**	NS	NS	**0.14**	**0.23**	**0.16**	**0.11**	**0.19**	**0.26**	**0.16**	**0.23**	NS
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	NS	NS	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	NS
Copper	mg/l	13	NE	NE	< 0.040	NS	NS	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	NS
Lead	mg/l	**0.15**	NE	NE	**0.055**	NS	NS	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	NS
Zinc	mg/l	50	NE	NE	**0.10**	NS	NS	**0.047**	**0.049**	**0.073**	**0.028**	**0.054**	**0.10**	**0.044**	**0.12**	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.10	< 0.11	< 0.10	< 0.12	< 0.10	< 0.11	< 0.10	< 0.11	< 0.10	< 0.11	< 0.11	< 0.11
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**95**	**89**	**96**	**81**	**97**	**94**	**97**	**90**	**94**	**87**	**94**	**95**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
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** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC20-B1 15 - 17 ft 3/26/2020 AOC20 B1 15-17FT_03/26/20 0030753	AOC20-B1 26 - 28 ft 3/26/2020 AOC20 B1 26-28FT_03/26/20 0030753	AOC20-B2 2 - 4 ft 3/27/2020 AOC20 B2 2-4FT_03/27/20 0030770	AOC20-B2 10 - 12 ft 3/27/2020 AOC20 B2 10-12FT_03/27/20 0030770	AOC20-B2 27 - 29 ft 3/27/2020 AOC20 B2 27-29FT_03/27/20 0030770	AOC20-B3 2 - 4 ft 3/27/2020 AOC20 B3 2-4FT_03/27/20 0030770	AOC20-B3 11 - 13 ft 3/30/2020 AOC20-B3 11-13FT_03/30/20 0030806	AOC20-B3 25 - 27 ft 3/30/2020 AOC20-B3 25-27FT_03/30/20 0030806	AOC20-B4 2 - 4 ft 3/26/2020 AOC20 B4 2-4FT_03/26/20 0030753	AOC20-B4 10 - 12 ft 3/26/2020 AOC20 B4 10-12FT_03/26/20 0030753	AOC20-B4 25 - 27 ft 3/26/2020 AOC20 B4 25-27FT_03/26/20 0030753	AOC20-B5 2 - 4 ft 3/26/2020 AOC20 B5 2-4FT_03/26/20 0030753
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**200**	< 50	< 51	< 52	< 51	< 52	< 60	**71**	< 59	< 55	< 53	**81**
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.5	< 2.9	< 3.5	< 2.9	< 3.3	< 2.8	< 3.8	**15**	< 3.7	< 3.4	< 3.4	< 4.6
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.5	< 2.9	< 3.5	< 2.9	< 3.3	< 2.8	< 3.8	**6.6**	< 3.7	< 3.4	< 3.4	< 4.6
Carbon disulfide	ug/kg	8000	500000	1000000	< 7.0	< 5.8	< 7.0	< 5.8	< 6.6	< 5.7	< 7.7	< 11	< 7.3	< 6.8	< 6.9	< 9.3
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 7.0	< 5.8	< 7.0	< 5.8	< 6.6	< 5.7	< 7.7	< 11	< 7.3	< 6.8	< 6.9	< 9.3
Naphthalene	ug/kg	56000	1000000	2500000	< 7.0	< 5.8	< 7.0	< 5.8	< 6.6	< 5.7	< 7.7	< 11	< 7.3	< 6.8	< 6.9	< 9.3
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.5	< 2.9	< 3.5	< 2.9	< 3.3	< 2.8	< 3.8	< 5.6	< 3.7	< 3.4	< 3.4	< 4.6
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.5	< 2.9	< 3.5	< 2.9	< 3.3	< 2.8	< 3.8	< 5.6	< 3.7	< 3.4	< 3.4	< 4.6
o-Xylene	ug/kg	NE	NE	NE	< 3.5	< 2.9	< 3.5	< 2.9	< 3.3	< 2.8	< 3.8	**5.7**	< 3.7	< 3.4	< 3.4	< 4.6
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.5	< 2.9	< 3.5	< 2.9	< 3.3	< 2.8	< 3.8	< 5.6	< 3.7	< 3.4	< 3.4	< 4.6
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.5	< 2.9	< 3.5	< 2.9	< 3.3	< 2.8	< 3.8	< 5.6	< 3.7	< 3.4	< 3.4	< 4.6
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Acenaphthylene	ug/kg	84000	1000000	2500000	**680**	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Anthracene	ug/kg	400000	1000000	2500000	**330**	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	**1400**	**300**	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	**1900**	**400**	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	**2200**	**480**	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	**450**
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	**2000**	**420**	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	**1000**	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Chrysene	ug/kg	**1000**	**84000**	780000	**1600**	**320**	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	**390**
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	**370**	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Fluoranthene	ug/kg	**56000**	1000000	2500000	**1800**	**370**	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	**650**
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	**1400**	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 310	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Pyrene	ug/kg	**40000**	1000000	2500000	**2300**	**470**	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	**590**
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 310	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Carbazole	ug/kg	1000	31000	290000	< 310	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Dibenzofuran	ug/kg	1400	68000	1000000	< 310	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 310	< 300	< 310	< 310	< 310	< 310	< 350	< 310	< 350	< 330	< 320	< 350
Metals																
Antimony	mg/kg	NE	27	8200	< 2.1	< 2.0	< 2.1	< 2.1	< 2.1	< 1.9	< 2.4	< 2.0	< 2.3	< 2.0	< 2.0	< 2.2
Arsenic	mg/kg	NE	**10**	**10**	**3.5**	**1.8**	< 1.0	< 1.0	< 1.0	< 0.97	**2.2**	< 0.99	**5.3**	**3.3**	< 1.0	**9.8**
Barium	mg/kg	NE	4700	140000	**36**	**37**	**17**	**16**	**24**	**22**	**23**	**33**	**31**	**40**	**33**	**200**
Beryllium	mg/kg	NE	2	2	< 1.0	< 0.99	< 1.0	< 1.0	< 1.0	< 0.97	< 1.2	< 0.99	< 1.1	< 1.0	< 1.0	< 1.1
Cadmium	mg/kg	NE	34	1000	< 0.52	< 0.50	< 0.52	< 0.52	< 0.51	< 0.48	< 0.60	< 0.50	< 0.57	< 0.51	< 0.51	< 0.56
Chromium (Total)	mg/kg	NE	100	100	**15**	**17**	**4.1**	**4.5**	**4.7**	**4.7**	**6.1**	**8.5**	**16**	**16**	**7.9**	**19**
Copper	mg/kg	NE	2500	76000	**13**	**9.0**	**4.7**	**4.7**	**5.7**	**7.4**	**21**	**6.0**	**10**	**16**	**8.0**	**56**
Lead	mg/kg	NE	400	**1000**	**34**	**9.5**	< 2.1	< 2.1	< 2.1	< 1.9	< 2.4	< 2.0	**41**	**76**	**3.1**	**1100**
Mercury	mg/kg	NE	20	610	< 0.13	**0.16**	< 0.13	< 0.13	< 0.12	< 0.13	< 0.15	< 0.13	< 0.15	**0.17**	**0.14**	**0.81**
Nickel	mg/kg	NE	1400	7500	**6.9**	**4.9**	**3.2**	**3.2**	**2.6**	**3.9**	**3.3**	**3.8**	**10**	**9.4**	**3.3**	**16**
Vanadium	mg/kg	NE	470	14000	**14**	**11**	**5.7**	**7.0**	**8.5**	**8.7**	**9.3**	**13**	**22**	**18**	**10**	**27**
Zinc	mg/kg	NE	20000	610000	**39**	**25**	**10**	**9.3**	**15**	**14**	**55**	**18**	**28**	**360**	**19**	**370**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	< 0.0060	NS	NS	< 0.0060	NS	NS	NS	NS	NS	< 0.0060	NS
Arsenic	mg/l	0.5	NE	NE	NS	< 0.0090	NS	NS	< 0.0090	NS	NS	NS	NS	NS	< 0.0090	NS
Barium	mg/l	10	NE	NE	NS	**0.45**	NS	NS	**0.33**	NS	NS	NS	NS	NS	**0.34**	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	< 0.050	NS	NS	< 0.050	NS	NS	NS	NS	NS	< 0.050	NS
Copper	mg/l	13	NE	NE	NS	< 0.040	NS	NS	< 0.040	NS	NS	NS	NS	NS	< 0.040	NS
Lead	mg/l	**0.15**	NE	NE	NS	< 0.013	NS	NS	< 0.013	NS	NS	NS	NS	NS	< 0.013	**0.63**
Zinc	mg/l	50	NE	NE	NS	**0.11**	NS	NS	**0.060**	NS	NS	NS	NS	NS	**0.078**	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.10	< 0.099	< 0.10	< 0.10	< 0.10	< 0.10	< 0.12	< 0.10	< 0.12	< 0.11	< 0.11	< 0.12
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	< 1.0	NS	NS	< 1.0	NS	NS	< 1.2	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	< 1.0	NS	NS	< 1.0	NS	NS	**1.6**	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	< 1.0	NS	NS	< 1.0	NS	NS	< 1.2	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	< 1.0	NS	NS	< 1.0	NS	NS	< 1.2	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	< 5.2	NS	NS	< 5.2	NS	NS	< 6.0	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	< 210	NS	NS	< 210	NS	NS	< 240	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**96**	**100**	**96**	**95**	**97**	**96**	**83**	**96**	**84**	**90**	**93**	**85**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC20-B5 6 - 8 ft 3/27/2020 AOC20 B5 6-8FT_03/27/20 0030770	AOC20-B5 26 - 28 ft 3/27/2020 AOC20 B5 26-28FT_03/27/20 0030770	AOC20-B6 2 - 4 ft 3/26/2020 AOC20 B6 2-4FT_03/26/20 0030753	AOC20-B6 10 - 12 ft 3/27/2020 AOC20 B6 10-12FT_03/27/20 0030770	AOC20-B6 27 - 29 ft 3/27/2020 AOC20 B6 27-29FT_03/27/20 0030770	AOC20-B7 0 - 2 ft 6/10/2020 AOC20-B7 0-2FT_06/10/20 0060378	AOC20-B7 0 - 2 ft 6/11/2020 AOC20-B7 0-2FT_06/11/20 0060414	AOC20-B7 2 - 4 ft 6/10/2020 AOC20-B7 2-4FT_06/10/20 0060378	AOC20-B7 4 - 6 ft 6/10/2020 AOC20-B7 4-6FT_06/10/20 0060378	AOC20-B7 5 - 7 ft 6/15/2020 AOC20-B7 5-7FT_06/15/20 0060470	AOC20-B7 6 - 8 ft 6/15/2020 AOC20-B7 6-8FT_06/15/20 0060470	AOC20-B7 8 - 10 ft 6/15/2020 AOC20-B7 8-10FT_06/15/20 0060470
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**120**	< 51	< 51	**640**	**110**	NS	< 52	NS	NS	< 51	NS	NS
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.4	< 4.1	< 3.7	**19**	**5.0**	NS	< 3.5	NS	NS	< 4.4	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.4	< 4.1	< 3.7	**6.9**	< 3.7	NS	< 3.5	NS	NS	< 4.4	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	< 6.9	< 8.2	< 7.4	< 9.4	< 7.4	NS	< 7.0	NS	NS	< 8.7	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 6.9	< 8.2	< 7.4	< 9.4	< 7.4	NS	< 7.0	NS	NS	< 8.7	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	< 6.9	< 8.2	< 7.4	< 9.4	< 7.4	NS	< 7.0	NS	NS	< 8.7	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.4	< 4.1	< 3.7	< 4.7	< 3.7	NS	< 3.5	NS	NS	< 4.4	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.4	< 4.1	< 3.7	< 4.7	< 3.7	NS	< 3.5	NS	NS	< 4.4	NS	NS
o-Xylene	ug/kg	NE	NE	NE	< 3.4	< 4.1	< 3.7	**8.1**	< 3.7	NS	< 3.5	NS	NS	< 4.4	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.4	< 4.1	< 3.7	< 4.7	< 3.7	NS	< 3.5	NS	NS	< 4.4	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.4	< 4.1	< 3.7	< 4.7	< 3.7	NS	< 3.5	NS	NS	< 4.4	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Acenaphthylene	ug/kg	84000	1000000	2500000	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Anthracene	ug/kg	400000	1000000	2500000	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 330	< 300	< 310	< 310	**360**	NS	< 310	NS	NS	< 310	NS	NS
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 330	< 300	< 310	< 310	**460**	NS	< 310	NS	NS	< 310	NS	NS
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 330	< 300	< 310	< 310	**370**	NS	< 310	NS	NS	< 310	NS	NS
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Chrysene	ug/kg	**1000**	**84000**	780000	< 330	< 300	< 310	< 310	**320**	NS	< 310	NS	NS	< 310	NS	NS
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 330	< 300	< 310	**330**	**620**	NS	< 310	NS	NS	< 310	NS	NS
Fluorene	ug/kg	**56000**	1000000	2500000	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Naphthalene	ug/kg	**56000**	1000000	2500000	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 330	< 300	< 310	< 310	**550**	NS	< 310	NS	NS	< 310	NS	NS
Pyrene	ug/kg	**40000**	1000000	2500000	< 330	< 300	< 310	**330**	**560**	NS	< 310	NS	NS	< 310	NS	NS
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	**4200**	**1800**	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Carbazole	ug/kg	1000	31000	290000	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 330	< 300	< 310	< 310	< 310	NS	< 310	NS	NS	< 310	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	< 2.2	< 1.9	< 2.0	< 2.1	< 2.1	< 2.1	NS	< 2.2	< 1.9	< 2.0	< 2.0	< 2.0
Arsenic	mg/kg	NE	**10**	**10**	**4.9**	**1.1**	< 1.0	< 1.0	< 1.0	**2.3**	NS	**6.0**	**3.3**	**2.1**	**2.9**	**9.6**
Barium	mg/kg	NE	4700	140000	**100**	**34**	**30**	**37**	**44**	**57**	NS	**32**	**20**	**29**	**32**	**21**
Beryllium	mg/kg	NE	2	2	< 1.1	< 0.96	< 1.0	< 1.0	< 1.0	< 1.1	NS	< 1.1	< 0.96	< 1.0	< 0.98	< 1.0
Cadmium	mg/kg	NE	34	1000	< 0.54	< 0.48	< 0.51	< 0.52	< 0.52	< 0.53	NS	< 0.56	< 0.48	< 0.50	< 0.49	< 0.51
Chromium (Total)	mg/kg	NE	100	100	**12**	**6.9**	**3.9**	**9.4**	**8.6**	**7.9**	NS	**13**	**12**	**8.0**	**8.8**	**7.2**
Copper	mg/kg	NE	2500	76000	**26**	**5.4**	**5.9**	**15**	**10**	**8.8**	NS	**12**	**10**	**7.0**	**7.7**	**9.6**
Lead	mg/kg	NE	400	**1000**	**360**	**13**	**3.4**	**51**	**21**	**20**	NS	**51**	**5.1**	**5.4**	**6.6**	**2.5**
Mercury	mg/kg	NE	20	610	**0.46**	< 0.13	**0.16**	< 0.13	< 0.12	< 0.13	NS	< 0.14	< 0.13	< 0.13	< 0.13	< 0.13
Nickel	mg/kg	NE	1400	7500	**8.8**	**3.2**	**3.6**	**6.6**	**6.1**	**5.8**	NS	**10**	**8.6**	**5.8**	**6.4**	**4.9**
Vanadium	mg/kg	NE	470	14000	**18**	**10**	**10**	**15**	**14**	**17**	NS	**20**	**11**	**14**	**15**	**15**
Zinc	mg/kg	NE	20000	610000	**120**	**20**	**16**	**33**	**27**	**24**	NS	**42**	**17**	**21**	**25**	**17**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	< 0.0060	NS	NS	< 0.0060	NS	< 0.0060	NS	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060
Arsenic	mg/l	0.5	NE	NE	< 0.0090	NS	NS	< 0.0090	NS	< 0.0090	NS	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090
Barium	mg/l	10	NE	NE	**0.73**	NS	NS	**0.33**	NS	**0.16**	NS	**0.15**	**0.12**	NS	**0.17**	**0.14**
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	NS	NS	< 0.050	NS	< 0.050	NS	< 0.050	< 0.050	NS	< 0.050	< 0.050
Copper	mg/l	13	NE	NE	< 0.040	NS	NS	< 0.040	NS	< 0.040	NS	< 0.040	< 0.040	NS	< 0.040	< 0.040
Lead	mg/l	**0.15**	NE	NE	**0.42**	NS	NS	< 0.013	NS	< 0.013	NS	< 0.013	< 0.013	NS	< 0.013	< 0.013
Zinc	mg/l	50	NE	NE	**0.23**	NS	NS	**0.072**	NS	**0.067**	NS	**0.068**	**0.028**	NS	**0.049**	**0.054**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	**NS**	NS	**NS**	**NS**	NS	**NS**	**NS**
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.11	< 0.10	< 0.10	< 0.10	< 0.10	NS	< 0.11	NS	NS	< 0.10	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	**7.2**	NS	NS	< 1.1	NS	NS	NS	NS	NS	< 1.0	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	**5.3**	NS	NS	< 1.1	NS	NS	NS	NS	NS	< 1.0	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	**14**	NS	NS	< 1.1	NS	NS	NS	NS	NS	< 1.0	NS	NS
Dieldrin	ug/kg	7	38	360	< 1.1	NS	NS	< 1.1	NS	NS	NS	NS	NS	< 1.0	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	< 5.5	NS	NS	< 5.3	NS	NS	NS	NS	NS	< 5.1	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	< 220	NS	NS	< 210	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**91**	**97**	**97**	**94**	**96**	**94**	**94**	**88**	**95**	**97**	**97**	**97**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
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Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
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ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC20-B7 10 - 12 ft 6/15/2020 AOC20-B7 10-12FT_06/15/20 0060470	AOC20-B7 15 - 17 ft 6/15/2020 AOC20-B7 15-17FT_06/15/20 0060470	AOC20-B7 20 - 22 ft 6/15/2020 AOC20-B7 20-22FT_06/15/20 0060470	AOC20-B7 25 - 27 ft 6/15/2020 AOC20-B7 25-27FT_06/15/20 0060470	AOC20-B7 25 - 27 ft 6/15/2020 OC20-B7 25-27FT DUP_06/15/2 0060470	AOC20-B8 0 - 2 ft 6/11/2020 AOC20-B8 0-2FT_06/11/20 0060414	AOC20-B8 2 - 4 ft 6/11/2020 AOC20-B8 2-4FT_06/11/20 0060414	AOC20-B8 2 - 4 ft 6/11/2020 AOC20-B8 2-4FT DUP_06/11/2 0060414	AOC20-B8 4 - 6 ft 6/11/2020 AOC20-B8 4-6FT_06/11/20 0060414	AOC20-B8 5 - 7 ft 6/16/2020 AOC20-B8 5-7FT_06/16/20 0060512	AOC20-B8 6 - 8 ft 6/16/2020 AOC20-B8 6-8FT_06/16/20 0060512	AOC20-B8 8 - 10 ft 6/16/2020 AOC20-B8 8-10FT_06/16/20 0060512
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 51	< 54	< 51	< 53	< 52	< 54	NS	NS	NS	< 52	NS	NS
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.9	< 4.4	< 4.5	< 4.0	NS	< 4.8	NS	NS	NS	< 3.8	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.9	< 4.4	< 4.5	< 4.0	NS	< 4.8	NS	NS	NS	< 3.8	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	< 7.8	< 8.7	< 9.0	< 8.1	NS	< 9.6	NS	NS	NS	< 7.6	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 7.8	< 8.7	< 9.0	< 8.1	NS	< 9.6	NS	NS	NS	< 7.6	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	< 7.8	< 8.7	< 9.0	< 8.1	NS	< 9.6	NS	NS	NS	< 7.6	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.9	< 4.4	< 4.5	< 4.0	NS	< 4.8	NS	NS	NS	< 3.8	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.9	< 4.4	< 4.5	< 4.0	NS	< 4.8	NS	NS	NS	< 3.8	NS	NS
o-Xylene	ug/kg	NE	NE	NE	< 3.9	< 4.4	< 4.5	< 4.0	NS	< 4.8	NS	NS	NS	< 3.8	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.9	< 4.4	< 4.5	< 4.0	NS	< 4.8	NS	NS	NS	< 3.8	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.9	< 4.4	< 4.5	< 4.0	NS	< 4.8	NS	NS	NS	< 3.8	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Acenaphthylene	ug/kg	84000	1000000	2500000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Anthracene	ug/kg	400000	1000000	2500000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 300	< 320	< 310	< 310	< 310	**340**	NS	NS	NS	< 310	NS	NS
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 300	< 320	< 310	< 310	< 310	**460**	NS	NS	NS	< 310	NS	NS
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 300	< 320	< 310	< 310	< 310	**380**	NS	NS	NS	< 310	NS	NS
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Chrysene	ug/kg	**1000**	**84000**	780000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 300	< 320	< 310	< 310	< 310	**510**	NS	NS	NS	< 310	NS	NS
Fluorene	ug/kg	**56000**	1000000	2500000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Naphthalene	ug/kg	**56000**	1000000	2500000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 300	< 320	< 310	< 310	< 310	**330**	NS	NS	NS	< 310	NS	NS
Pyrene	ug/kg	**40000**	1000000	2500000	< 300	< 320	< 310	< 310	< 310	**530**	NS	NS	NS	< 310	NS	NS
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Carbazole	ug/kg	1000	31000	290000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Dibenzofuran	ug/kg	1400	68000	1000000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 300	< 320	< 310	< 310	< 310	< 330	NS	NS	NS	< 310	NS	NS
Metals																
Antimony	mg/kg	NE	27	8200	< 2.0	< 2.1	< 2.0	< 2.1	< 2.1	NS	NS	NS	NS	< 1.9	NS	NS
Arsenic	mg/kg	NE	**10**	**10**	**2.1**	**3.6**	**3.4**	**2.6**	**3.0**	NS	NS	NS	NS	**2.1**	NS	NS
Barium	mg/kg	NE	4700	140000	**31**	**39**	**52**	**39**	**38**	NS	NS	NS	NS	**26**	NS	NS
Beryllium	mg/kg	NE	2	2	< 1.0	< 1.0	< 0.99	< 1.0	< 1.0	NS	NS	NS	NS	< 0.94	NS	NS
Cadmium	mg/kg	NE	34	1000	< 0.51	< 0.51	< 0.50	< 0.52	< 0.52	NS	NS	NS	NS	< 0.47	NS	NS
Chromium (Total)	mg/kg	NE	100	100	**7.7**	**19**	**14**	**18**	**16**	NS	NS	NS	NS	**7.2**	NS	NS
Copper	mg/kg	NE	2500	76000	**6.3**	**10**	**13**	**9.9**	**9.6**	NS	NS	NS	NS	**10**	NS	NS
Lead	mg/kg	NE	400	**1000**	< 2.0	**9.4**	**15**	**9.9**	**9.3**	NS	NS	NS	NS	**4.6**	NS	NS
Mercury	mg/kg	NE	20	610	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	NS	NS	NS	NS	< 0.12	NS	NS
Nickel	mg/kg	NE	1400	7500	**3.9**	**8.1**	**9.4**	**7.7**	**6.9**	NS	NS	NS	NS	**6.0**	NS	NS
Vanadium	mg/kg	NE	470	14000	**15**	**17**	**20**	**16**	**14**	NS	NS	NS	NS	**11**	NS	NS
Zinc	mg/kg	NE	20000	610000	**17**	**24**	**32**	**24**	**23**	NS	NS	NS	NS	**24**	NS	NS
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	< 0.0060	NS	< 0.0060	NS	< 0.0060	< 0.0060	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060
Arsenic	mg/l	0.5	NE	NE	NS	< 0.0090	NS	< 0.0090	NS	< 0.0090	< 0.0090	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090
Barium	mg/l	10	NE	NE	NS	**0.20**	NS	**0.17**	NS	**0.24**	**0.14**	**0.14**	**0.13**	NS	**0.071**	**0.11**
Chromium (Total)	mg/l	0.5	NE	NE	NS	< 0.050	NS	< 0.050	NS	< 0.050	< 0.050	< 0.050	< 0.050	NS	< 0.050	< 0.050
Copper	mg/l	13	NE	NE	NS	< 0.040	NS	< 0.040	NS	< 0.040	< 0.040	< 0.040	< 0.040	NS	< 0.040	< 0.040
Lead	mg/l	**0.15**	NE	NE	NS	< 0.013	NS	< 0.013	NS	**0.056**	< 0.013	< 0.013	< 0.013	NS	< 0.013	< 0.013
Zinc	mg/l	50	NE	NE	NS	**0.072**	NS	**0.056**	NS	**0.091**	**0.052**	**0.051**	**0.031**	NS	**0.023**	**0.031**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	**NS**	NS	**NS**	NS	**NS**	**NS**	**NS**	**NS**	NS	**NS**	**NS**
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.10	< 0.11	< 0.10	< 0.11	< 0.10	< 0.11	NS	NS	NS	< 0.10	NS	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	**2.3**	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	< 5.4	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**97**	**93**	**96**	**95**	**95**	**90**	NS	NS	NS	**97**	NS	NS
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC20-B8 10 - 12 ft 6/16/2020 AOC20-B8 10-12FT_06/16/20 0060512	AOC20-B8 15 - 17 ft 6/16/2020 AOC20-B8 15-17FT_06/16/20 0060512	AOC20-B9 0 - 2 ft 6/10/2020 AOC20-B9 0-2FT_06/10/20 0060378	AOC20-B9 0 - 2 ft 6/11/2020 AOC20-B9 0-2FT_06/11/20 0060414	AOC20-B9 2 - 4 ft 6/10/2020 AOC20-B9 2-4FT_06/10/20 0060378	AOC20-B9 4 - 6 ft 6/10/2020 AOC20-B9 4-6FT_06/10/20 0060378	AOC20-B9 5 - 7 ft 6/16/2020 AOC20-B9 5-7FT_06/16/20 0060512	AOC20-B9 6 - 8 ft 6/16/2020 AOC20-B9 6-8FT_06/16/20 0060512	AOC20-B9 8 - 10 ft 6/16/2020 AOC20-B9 8-10FT_06/16/20 0060512	AOC20-B9 10 - 12 ft 6/16/2020 AOC20-B9 10-12FT_06/16/20 0060512	AOC20-B9 20 - 22 ft 6/16/2020 AOC20-B9 20-22FT_06/16/20 0060512	AOC20-B9 25 - 27 ft 6/16/2020 AOC20-B9 25-27FT_06/16/20 0060512
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 51	< 52	NS	< 53	NS	NS	< 53	NS	NS	< 50	< 53	< 51
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.0	< 4.0	NS	< 3.5	NS	NS	< 3.7	NS	NS	< 4.0	< 4.8	< 4.8
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.0	< 4.0	NS	< 3.5	NS	NS	< 3.7	NS	NS	< 4.0	< 4.8	< 4.8
Carbon disulfide	ug/kg	8000	500000	1000000	< 8.0	< 7.9	NS	< 7.0	NS	NS	< 7.5	NS	NS	< 8.0	< 9.6	< 9.6
M,P-XYLENE (SUM OF ISO	ug/kg	NE	NE	NE	< 8.0	< 7.9	NS	< 7.0	NS	NS	< 7.5	NS	NS	< 8.0	< 9.6	< 9.6
Naphthalene	ug/kg	56000	1000000	2500000	< 8.0	< 7.9	NS	< 7.0	NS	NS	< 7.5	NS	NS	< 8.0	< 9.6	< 9.6
n-Butylbenzene	ug/kg	70000	500000	1000000	< 4.0	< 4.0	NS	< 3.5	NS	NS	< 3.7	NS	NS	< 4.0	< 4.8	< 4.8
n-Propylbenzene	ug/kg	10000	500000	1000000	< 4.0	< 4.0	NS	< 3.5	NS	NS	< 3.7	NS	NS	< 4.0	< 4.8	< 4.8
o-Xylene	ug/kg	NE	NE	NE	< 4.0	< 4.0	NS	< 3.5	NS	NS	< 3.7	NS	NS	< 4.0	< 4.8	< 4.8
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 4.0	< 4.0	NS	< 3.5	NS	NS	< 3.7	NS	NS	< 4.0	< 4.8	< 4.8
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 4.0	< 4.0	NS	< 3.5	NS	NS	< 3.7	NS	NS	< 4.0	< 4.8	< 4.8
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Acenaphthylene	ug/kg	84000	1000000	2500000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Anthracene	ug/kg	400000	1000000	2500000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	**450**	< 310	< 310
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	**600**	< 310	< 310
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	**630**	< 310	< 310
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	**460**	< 310	< 310
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	**360**	< 310	< 310
Chrysene	ug/kg	**1000**	**84000**	780000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	**430**	< 310	< 310
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	**790**	< 310	< 310
Fluorene	ug/kg	**56000**	1000000	2500000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	**380**	< 310	< 310
Naphthalene	ug/kg	**56000**	1000000	2500000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Pyrene	ug/kg	**40000**	1000000	2500000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	**770**	< 310	< 310
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Carbazole	ug/kg	1000	31000	290000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Dibenzofuran	ug/kg	1400	68000	1000000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 300	< 310	NS	< 320	NS	NS	< 310	NS	NS	< 300	< 310	< 310
Metals																
Antimony	mg/kg	NE	27	8200	< 2.0	< 2.0	< 2.1	NS	< 1.9	< 2.1	< 2.1	NS	NS	< 2.0	NS	< 2.1
Arsenic	mg/kg	NE	**10**	**10**	**2.3**	**3.0**	**3.0**	NS	**3.9**	**2.9**	**4.0**	NS	NS	**1.6**	NS	**1.4**
Barium	mg/kg	NE	4700	140000	**42**	**43**	**43**	NS	**21**	**17**	**32**	NS	NS	**45**	NS	**30**
Beryllium	mg/kg	NE	2	2	< 1.0	< 1.0	< 1.1	NS	< 0.96	< 1.0	< 1.1	NS	NS	< 1.0	NS	< 1.0
Cadmium	mg/kg	NE	34	1000	< 0.51	< 0.51	< 0.53	NS	< 0.48	< 0.52	< 0.53	NS	NS	< 0.50	NS	< 0.52
Chromium (Total)	mg/kg	NE	100	100	**11**	**17**	**9.7**	NS	**7.0**	**5.8**	**11**	NS	NS	**10**	NS	**6.8**
Copper	mg/kg	NE	2500	76000	**8.1**	**13**	**15**	NS	**13**	**9.6**	**13**	NS	NS	**11**	NS	**8.0**
Lead	mg/kg	NE	400	**1000**	**9.1**	**13**	**74**	NS	**5.3**	< 2.1	**11**	NS	NS	**16**	NS	**2.7**
Mercury	mg/kg	NE	20	610	< 0.13	< 0.12	< 0.13	NS	< 0.13	< 0.13	< 0.13	NS	NS	< 0.13	NS	< 0.13
Nickel	mg/kg	NE	1400	7500	**5.4**	**7.5**	**6.8**	NS	**6.0**	**5.2**	**6.4**	NS	NS	**6.5**	NS	**4.9**
Vanadium	mg/kg	NE	470	14000	**15**	**18**	**16**	NS	**11**	**8.7**	**13**	NS	NS	**16**	NS	**11**
Zinc	mg/kg	NE	20000	610000	**27**	**35**	**35**	NS	**34**	**27**	**36**	NS	NS	**32**	NS	**19**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	< 0.0060	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060
Arsenic	mg/l	0.5	NE	NE	< 0.0090	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090
Barium	mg/l	10	NE	NE	**0.19**	**0.20**	**0.16**	NS	**0.13**	**0.15**	NS	**0.16**	**0.14**	NS	**0.15**	**0.13**
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	< 0.050	< 0.050	NS	< 0.050	< 0.050	NS	< 0.050	< 0.050	NS	< 0.050	< 0.050
Copper	mg/l	13	NE	NE	< 0.040	< 0.040	< 0.040	NS	< 0.040	< 0.040	NS	< 0.040	< 0.040	NS	< 0.040	< 0.040
Lead	mg/l	**0.15**	NE	NE	< 0.013	< 0.013	< 0.013	NS	< 0.013	< 0.013	NS	< 0.013	< 0.013	NS	< 0.013	< 0.013
Zinc	mg/l	50	NE	NE	**0.050**	**0.062**	**0.033**	NS	**0.048**	**0.067**	NS	**0.073**	**0.059**	NS	**0.058**	**0.075**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	**NS**	**NS**	**NS**	NS	**NS**	**NS**	NS	**NS**	**NS**	NS	**NS**	**NS**
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.10	< 0.10	NS	< 0.11	NS	NS	< 0.11	NS	NS	< 0.10	< 0.10	< 0.10
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	< 5.3	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**97**	**96**	**93**	**94**	**95**	**95**	**94**	NS	NS	**97**	**95**	**96**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC20-B10 0 - 2 ft 6/11/2020 AOC20-B10 0-2FT_06/11/20 0060414	AOC20-B10 2 - 4 ft 6/11/2020 AOC20-B10 2-4FT_06/11/20 0060414	AOC20-B10 4 - 6 ft 6/11/2020 AOC20-B10 4-6FT_06/11/20 0060414	AOC20-B10 5 - 7 ft 6/15/2020 AOC20-B10 5-7FT_06/15/20 0060470	AOC20-B10 6 - 8 ft 6/15/2020 AOC20-B10 6-8FT_06/15/20 0060470	AOC20-B10 8 - 10 ft 6/15/2020 AOC20-B10 8-10FT_06/15/20 0060470	AOC20-B10 15 - 17 ft 6/15/2020 AOC20-B10 15-17FT_06/15/20 0060470	AOC20-B10 20 - 22 ft 6/15/2020 AOC20-B10 20-22FT_06/15/20 0060470	AOC20-B10 28 - 30 ft 6/15/2020 AOC20-B10 28-30FT_06/15/20 0060470	AOC20-B11 0 - 2 ft 6/11/2020 AOC20-B11 0-2FT_06/11/20 0060414	AOC20-B11 5 - 7 ft 6/16/2020 AOC20-B11 5-7FT_06/16/20 0060512	AOC20-B11 10 - 12 ft 6/16/2020 AOC20-B11 10-12FT_06/16/20 0060512
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**79**	NS	NS	< 54	NS	NS	< 52	< 55	< 53	**440**	< 51	**120**
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.6	NS	NS	< 3.8	NS	NS	< 4.2	< 5.5	< 4.0	< 4.1	< 4.4	< 3.8
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.6	NS	NS	< 3.8	NS	NS	< 4.2	< 5.5	< 4.0	< 4.1	< 4.4	< 3.8
Carbon disulfide	ug/kg	8000	500000	1000000	< 7.2	NS	NS	< 7.6	NS	NS	< 8.3	< 11	< 8.0	< 8.1	< 8.8	< 7.5
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 7.2	NS	NS	< 7.6	NS	NS	< 8.3	< 11	< 8.0	< 8.1	< 8.8	< 7.5
Naphthalene	ug/kg	56000	1000000	2500000	< 7.2	NS	NS	< 7.6	NS	NS	< 8.3	< 11	< 8.0	< 8.1	< 8.8	< 7.5
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.6	NS	NS	< 3.8	NS	NS	< 4.2	< 5.5	< 4.0	< 4.1	< 4.4	< 3.8
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.6	NS	NS	< 3.8	NS	NS	< 4.2	< 5.5	< 4.0	< 4.1	< 4.4	< 3.8
o-Xylene	ug/kg	NE	NE	NE	< 3.6	NS	NS	< 3.8	NS	NS	< 4.2	< 5.5	< 4.0	< 4.1	< 4.4	< 3.8
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.6	NS	NS	< 3.8	NS	NS	< 4.2	< 5.5	< 4.0	< 4.1	< 4.4	< 3.8
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.6	NS	NS	< 3.8	NS	NS	< 4.2	< 5.5	< 4.0	< 4.1	< 4.4	< 3.8
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	< 340	< 300	< 310
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	< 340	< 300	< 310
Acenaphthylene	ug/kg	84000	1000000	2500000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**3100**	**330**	**690**
Anthracene	ug/kg	400000	1000000	2500000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**2000**	< 300	**400**
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	**360**	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**6200**	**630**	**1600**
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	**380**	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**7300**	**850**	**1900**
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	**470**	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**7900**	**860**	**2100**
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**6800**	**840**	**1700**
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	**510**	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**2800**	**360**	**600**
Chrysene	ug/kg	**1000**	**84000**	780000	**400**	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**5700**	**630**	**1500**
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**1200**	< 300	**320**
Fluoranthene	ug/kg	**56000**	1000000	2500000	**650**	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**10000**	**1100**	**2700**
Fluorene	ug/kg	**56000**	1000000	2500000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**540**	< 300	< 310
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**5200**	**620**	**1300**
Naphthalene	ug/kg	**56000**	1000000	2500000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	< 340	< 300	< 310
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**4500**	**310**	**1100**
Pyrene	ug/kg	**40000**	1000000	2500000	**610**	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**9800**	**1100**	**2700**
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	< 340	< 300	< 310
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	< 340	< 300	< 310
Carbazole	ug/kg	1000	31000	290000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	**590**	< 300	< 310
Dibenzofuran	ug/kg	1400	68000	1000000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	< 340	< 300	< 310
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	< 340	< 300	< 310
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 320	NS	NS	< 320	NS	NS	< 310	< 330	< 310	< 340	< 300	< 310
Metals																
Antimony	mg/kg	NE	27	8200	NS	NS	NS	< 2.0	NS	NS	< 2.0	< 2.0	< 2.0	< 2.2	< 2.0	< 2.0
Arsenic	mg/kg	NE	**10**	**10**	NS	NS	NS	**3.8**	NS	NS	**2.7**	**2.7**	**2.3**	**6.2**	**3.1**	**2.4**
Barium	mg/kg	NE	4700	140000	NS	NS	NS	**70**	NS	NS	**110**	**55**	**53**	**33**	**27**	**40**
Beryllium	mg/kg	NE	2	2	NS	NS	NS	< 1.0	NS	NS	< 1.0	< 1.0	< 1.0	< 1.1	< 1.0	< 1.0
Cadmium	mg/kg	NE	34	1000	NS	NS	NS	< 0.51	NS	NS	< 0.51	< 0.51	< 0.51	< 0.56	< 0.51	< 0.50
Chromium (Total)	mg/kg	NE	100	100	NS	NS	NS	**11**	NS	NS	**4.1**	**9.3**	**17**	**12**	**12**	**12**
Copper	mg/kg	NE	2500	76000	NS	NS	NS	**29**	NS	NS	**6.7**	**6.2**	**15**	**19**	**12**	**14**
Lead	mg/kg	NE	400	**1000**	NS	NS	NS	**230**	NS	NS	**2.7**	< 2.0	**74**	**43**	**22**	**32**
Mercury	mg/kg	NE	20	610	NS	NS	NS	< 0.13	NS	NS	< 0.13	< 0.13	< 0.13	< 0.14	< 0.13	< 0.13
Nickel	mg/kg	NE	1400	7500	NS	NS	NS	**7.4**	NS	NS	**2.8**	**5.1**	**5.5**	**10**	**7.6**	**7.3**
Vanadium	mg/kg	NE	470	14000	NS	NS	NS	**15**	NS	NS	**12**	**18**	**14**	**22**	**18**	**14**
Zinc	mg/kg	NE	20000	610000	NS	NS	NS	**110**	NS	NS	**20**	**26**	**47**	**48**	**33**	**28**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	< 0.0060	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060	< 0.0060	NS
Arsenic	mg/l	0.5	NE	NE	< 0.0090	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090	< 0.0090	NS
Barium	mg/l	10	NE	NE	**0.28**	**0.29**	**0.43**	NS	**0.32**	**0.18**	**0.15**	NS	**0.30**	**0.14**	**0.14**	NS
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	< 0.050	< 0.050	NS	< 0.050	< 0.050	< 0.050	NS	< 0.050	< 0.050	< 0.050	NS
Copper	mg/l	13	NE	NE	< 0.040	< 0.040	**0.11**	NS	< 0.040	< 0.040	< 0.040	NS	< 0.040	< 0.040	< 0.040	NS
Lead	mg/l	**0.15**	NE	NE	**0.15**	**0.35**	**1.1**	NS	**0.39**	< 0.013	< 0.013	NS	**0.21**	**0.050**	< 0.013	NS
Zinc	mg/l	50	NE	NE	**0.095**	**0.20**	**0.26**	NS	**0.35**	**0.092**	**0.051**	NS	**0.12**	**0.032**	**0.052**	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	**NS**	**NS**	**NS**	NS	**NS**	**NS**	**NS**	NS	**NS**	**NS**	**NS**	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.11	NS	NS	< 0.11	NS	NS	< 0.10	< 0.11	< 0.10	< 0.11	< 0.10	< 0.10
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	**1.4**	NS	NS	NS	NS	NS	NS	NS	NS	**1.4**	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	< 1.1	NS	NS	NS	NS	NS	NS	NS	NS	**2.3**	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	**2.4**	NS	NS	NS	NS	NS	NS	NS	NS	**16**	NS	NS
Dieldrin	ug/kg	7	38	360	< 1.1	NS	NS	NS	NS	NS	NS	NS	NS	< 1.1	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	< 5.4	NS	NS	NS	NS	NS	NS	NS	NS	< 5.6	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**92**	NS	NS	**93**	NS	NS	**96**	**90**	**95**	**89**	**97**	**97**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC20-B11 15 - 17 ft 6/16/2020 AOC20-B11 15-17FT_06/16/20 0060512	AOC20-B11 20 - 22 ft 6/16/2020 AOC20-B11 20-22FT_06/16/20 0060512	AOC20-B11 20 - 22 ft 6/16/2020 B-11 20-22FT DUPLICATE_0 0060512	AOC20-B11 25 - 27 ft 6/16/2020 AOC20-B11 25-27FT_06/16/20 0060512	AOC20-B12 0.5 - 2 ft 6/11/2020 AOC20-B12 0.5-2FT_06/11/20 0060414	AOC20-B12 5 - 7 ft 6/16/2020 AOC20-B12 5-7FT_06/16/20 0060512	AOC20-B12 10 - 12 ft 6/16/2020 AOC20-B12 10-12FT_06/16/20 0060512	AOC20-B12 15 - 17 ft 6/16/2020 AOC20-B12 15-17FT_06/16/20 0060512	AOC20-B12 25 - 27 ft 6/16/2020 AOC20-B12 25-27FT_06/16/20 0060512	AOC20-B6 (AOC20-B13) 0 - 2 ft 6/10/2020 AOC20-B6 0-2FT_06/10/20 0060378	AOC20-B6 (AOC20-B13) 0 - 2 ft 6/11/2020 AOC20-B6 0-2FT_06/11/20 0060414	AOC20-B6 (AOC20-B13) 2 - 4 ft 6/10/2020 AOC20-B6 2-4FT_06/10/20 0060378
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**62**	< 52	< 52	< 52	< 58	< 53	< 51	< 52	< 51	NS	< 53	NS
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.5	< 4.4	NS	< 4.0	< 3.9	< 5.5	< 4.2	< 4.3	< 4.8	NS	< 3.8	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.5	< 4.4	NS	< 4.0	< 3.9	< 5.5	< 4.2	< 4.3	< 4.8	NS	< 3.8	NS
Carbon disulfide	ug/kg	8000	500000	1000000	< 8.9	< 8.8	NS	< 7.9	< 7.8	< 11	< 8.5	< 8.6	< 9.6	NS	< 7.5	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 8.9	< 8.8	NS	< 7.9	< 7.8	< 11	< 8.5	< 8.6	< 9.6	NS	< 7.5	NS
Naphthalene	ug/kg	56000	1000000	2500000	< 8.9	< 8.8	NS	< 7.9	< 7.8	< 11	< 8.5	< 8.6	< 9.6	NS	< 7.5	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	< 4.5	< 4.4	NS	< 4.0	< 3.9	< 5.5	< 4.2	< 4.3	< 4.8	NS	< 3.8	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	< 4.5	< 4.4	NS	< 4.0	< 3.9	< 5.5	< 4.2	< 4.3	< 4.8	NS	< 3.8	NS
o-Xylene	ug/kg	NE	NE	NE	< 4.5	< 4.4	NS	< 4.0	< 3.9	< 5.5	< 4.2	< 4.3	< 4.8	NS	< 3.8	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 4.5	< 4.4	NS	< 4.0	< 3.9	< 5.5	< 4.2	< 4.3	< 4.8	NS	< 3.8	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 4.5	< 4.4	NS	< 4.0	< 3.9	< 5.5	< 4.2	< 4.3	< 4.8	NS	< 3.8	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 320	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 320	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Acenaphthylene	ug/kg	84000	1000000	2500000	**460**	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Anthracene	ug/kg	400000	1000000	2500000	< 320	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	**930**	< 310	< 320	< 310	**470**	**430**	< 310	< 310	< 310	NS	< 320	NS
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	**1200**	< 310	< 320	< 310	**680**	**580**	< 310	< 310	< 310	NS	< 320	NS
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	**1300**	< 310	< 320	< 310	**840**	**680**	**310**	**320**	< 310	NS	< 320	NS
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	**1100**	< 310	< 320	< 310	**530**	**530**	< 310	< 310	< 310	NS	< 320	NS
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	**430**	< 310	< 320	< 310	< 350	**320**	< 310	< 310	< 310	NS	< 320	NS
Chrysene	ug/kg	**1000**	**84000**	780000	**910**	< 310	< 320	< 310	**510**	**480**	< 310	< 310	< 310	NS	< 320	NS
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 320	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Fluoranthene	ug/kg	**56000**	1000000	2500000	**1600**	< 310	< 320	< 310	**580**	**570**	< 310	< 310	< 310	NS	< 320	NS
Fluorene	ug/kg	**56000**	1000000	2500000	< 320	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	**830**	< 310	< 320	< 310	**420**	**400**	< 310	< 310	< 310	NS	< 320	NS
Naphthalene	ug/kg	**56000**	1000000	2500000	< 320	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	**430**	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Pyrene	ug/kg	**40000**	1000000	2500000	**1700**	< 310	< 320	< 310	**620**	**620**	< 310	< 310	< 310	NS	< 320	NS
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 320	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 320	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Carbazole	ug/kg	1000	31000	290000	< 320	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Dibenzofuran	ug/kg	1400	68000	1000000	< 320	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 320	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 320	< 310	< 320	< 310	< 350	< 320	< 310	< 310	< 310	NS	< 320	NS
Metals																
Antimony	mg/kg	NE	27	8200	< 2.0	< 2.0	< 2.1	< 1.9	< 2.1	< 2.1	< 2.0	< 2.0	< 2.0	< 2.1	NS	< 2.3
Arsenic	mg/kg	NE	**10**	**10**	**3.0**	< 0.98	< 1.1	< 0.96	**6.4**	**4.9**	**2.6**	**3.4**	**1.0**	**3.8**	NS	**4.3**
Barium	mg/kg	NE	4700	140000	**43**	**26**	**15**	**19**	**41**	**38**	**27**	**36**	**29**	**51**	NS	**22**
Beryllium	mg/kg	NE	2	2	< 1.0	< 0.98	< 1.1	< 0.96	< 1.1	< 1.1	< 1.0	< 1.0	< 1.0	< 1.1	NS	< 1.1
Cadmium	mg/kg	NE	34	1000	< 0.51	< 0.49	< 0.53	< 0.48	< 0.54	< 0.54	< 0.50	< 0.50	< 0.51	< 0.53	NS	< 0.57
Chromium (Total)	mg/kg	NE	100	100	**18**	**7.7**	**5.6**	**4.1**	**14**	**13**	**8.7**	**17**	**6.2**	**10**	NS	**13**
Copper	mg/kg	NE	2500	76000	**15**	**5.3**	**5.7**	**6.0**	**29**	**19**	**15**	**15**	**8.8**	**14**	NS	**6.7**
Lead	mg/kg	NE	400	**1000**	**40**	< 2.0	**3.6**	**4.9**	**120**	**56**	**30**	**30**	**6.1**	**94**	NS	**5.3**
Mercury	mg/kg	NE	20	610	< 0.13	< 0.13	< 0.13	< 0.13	< 0.14	< 0.13	< 0.13	< 0.13	< 0.12	< 0.14	NS	< 0.14
Nickel	mg/kg	NE	1400	7500	**7.3**	**2.7**	**2.3**	**2.2**	**10**	**8.8**	**5.9**	**7.7**	**3.5**	**7.3**	NS	**8.1**
Vanadium	mg/kg	NE	470	14000	**16**	**6.9**	**5.9**	**5.6**	**24**	**19**	**14**	**17**	**7.5**	**19**	NS	**22**
Zinc	mg/kg	NE	20000	610000	**37**	**17**	**12**	**15**	**53**	**44**	**28**	**35**	**18**	**45**	NS	**19**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	< 0.0060	NS	NS	NS	< 0.0060	NS	< 0.0060	< 0.0060	NS	< 0.0060	NS	< 0.0060
Arsenic	mg/l	0.5	NE	NE	< 0.0090	NS	NS	NS	< 0.0090	NS	< 0.0090	< 0.0090	NS	< 0.0090	NS	< 0.0090
Barium	mg/l	10	NE	NE	**0.17**	NS	NS	NS	**0.17**	NS	**0.13**	**0.17**	NS	**0.25**	NS	**0.075**
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	NS	NS	NS	< 0.050	NS	< 0.050	< 0.050	NS	< 0.050	NS	< 0.050
Copper	mg/l	13	NE	NE	< 0.040	NS	NS	NS	< 0.040	NS	< 0.040	< 0.040	NS	< 0.040	NS	< 0.040
Lead	mg/l	**0.15**	NE	NE	**0.018**	NS	NS	NS	**0.029**	NS	< 0.013	< 0.013	NS	< 0.013	NS	**0.10**
Zinc	mg/l	50	NE	NE	**0.075**	NS	NS	NS	**0.037**	NS	**0.092**	**0.090**	NS	**0.11**	NS	**0.23**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	**NS**	NS	NS	NS	**NS**	NS	**NS**	**NS**	NS	**NS**	NS	**NS**
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.11	< 0.11	< 0.10	< 0.10	< 0.10	NS	< 0.11	NS
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	NS	< 1.1	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	NS	< 1.1	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	**2.4**	NS	NS	NS	NS	< 1.1	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	< 1.1	NS	NS	NS	NS	< 1.1	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	< 5.3	NS	NS	NS	NS	< 5.3	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**95**	**96**	**95**	**96**	**87**	**93**	**97**	**94**	**96**	**87**	**94**	**87**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC20-B6 (AOC20-B13) 4 - 6 ft 6/10/2020 AOC20-B6 4-6FT_06/10/20 0060378	AOC20-B6 (AOC20-B13) 4 - 6 ft 6/10/2020 AOC20-B6 4-6FT DUP_06/10/2 0060378	AOC20-B6 (AOC20-B13) 5 - 7 ft 6/15/2020 AOC20-B6 5-7FT_06/15/20 0060470	AOC20-B6(AOC20-B13) 6 - 8 ft 6/15/2020 AOC20-B6 6-8FT_06/15/20 0060470	AOC20-B6(AOC20-B13) 8 - 10 ft 6/15/2020 AOC20-B6 8-10FT_06/15/20 0060470	AOC20-B6(AOC20-B13) 10 - 12 ft 6/15/2020 AOC20-B6 10-12FT_06/15/20 0060470	AOC20-B6(AOC20-B13) 15 - 17 ft 6/15/2020 AOC20-B6 15-17FT_06/15/20 0060470	AOC20-B6(AOC20-B13) 20 - 22 ft 6/15/2020 AOC20-B6 20-22FT_06/15/20 0060470	AOC20-B6(AOC20-B13) 25 - 27 ft 6/15/2020 AOC20-B6 25-27FT_06/15/20 0060470	AOC20-B14 0.5 - 2 ft 8/10/2020 AOC20-B14 0.5-2FT_08/10/20 0080238	AOC20-B14 5 - 7 ft 8/18/2020 AOC20-B14 5-7FT_08/18/20 0080493	AOC20-B14 10 - 12 ft 8/18/2020 AOC20-B14 10-12FT_08/18/20 0080493
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	NS	NS	< 52	NS	NS	< 51	< 52	< 51	< 52	**720**	**330**	< 53
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	< 4.1	NS	NS	< 3.8	< 3.9	< 3.9	< 4.2	< 4.6	< 3.5	< 3.6
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	NS	< 4.1	NS	NS	< 3.8	< 3.9	< 3.9	< 4.2	< 4.6	< 3.5	< 3.6
Carbon disulfide	ug/kg	8000	500000	1000000	NS	NS	< 8.1	NS	NS	< 7.5	< 7.8	< 7.9	< 8.4	< 9.1	< 7.1	< 7.2
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	NS	< 8.1	NS	NS	< 7.5	< 7.8	< 7.9	< 8.4	< 9.1	< 7.1	< 7.2
Naphthalene	ug/kg	56000	1000000	2500000	NS	NS	< 8.1	NS	NS	< 7.5	< 7.8	< 7.9	< 8.4	< 9.1	< 7.1	< 7.2
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	< 4.1	NS	NS	< 3.8	< 3.9	< 3.9	< 4.2	< 4.6	< 3.5	< 3.6
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	NS	< 4.1	NS	NS	< 3.8	< 3.9	< 3.9	< 4.2	< 4.6	< 3.5	< 3.6
o-Xylene	ug/kg	NE	NE	NE	NS	NS	< 4.1	NS	NS	< 3.8	< 3.9	< 3.9	< 4.2	< 4.6	< 3.5	< 3.6
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	NS	< 4.1	NS	NS	< 3.8	< 3.9	< 3.9	< 4.2	< 4.6	< 3.5	< 3.6
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	NS	< 4.1	NS	NS	< 3.8	< 3.9	< 3.9	< 4.2	< 4.6	< 3.5	< 3.6
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	< 320	< 320	< 310
Acenaphthene	ug/kg	**84000**	1000000	2500000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	< 320	**320**	< 310
Acenaphthylene	ug/kg	84000	1000000	2500000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**700**	**820**	< 310
Anthracene	ug/kg	400000	1000000	2500000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**1100**	**1300**	< 310
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**4200**	**3200**	< 310
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**3800**	**2800**	< 310
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**3800**	**2500**	< 310
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**3500**	**2400**	< 310
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**1600**	**1200**	< 310
Chrysene	ug/kg	**1000**	**84000**	780000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**5000**	**3700**	< 310
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**690**	**480**	< 310
Fluoranthene	ug/kg	**56000**	1000000	2500000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**7900**	**7100**	< 310
Fluorene	ug/kg	**56000**	1000000	2500000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**490**	**710**	< 310
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**2400**	**1600**	< 310
Naphthalene	ug/kg	**56000**	1000000	2500000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	< 320	< 320	< 310
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**4900**	**7000**	< 310
Pyrene	ug/kg	**40000**	1000000	2500000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	**11000**	**9300**	< 310
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	< 320	< 320	< 310
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	< 320	< 320	< 310
Carbazole	ug/kg	1000	31000	290000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	< 320	**330**	< 310
Dibenzofuran	ug/kg	1400	68000	1000000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	< 320	< 320	< 310
Dimethyl phthalate	ug/kg	200000	1000000	2500000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	< 320	< 320	< 310
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	NS	NS	< 310	NS	NS	< 310	< 310	< 300	< 310	< 320	< 320	< 310
Metals																
Antimony	mg/kg	NE	27	8200	< 2.2	< 2.2	< 2.0	NS	NS	< 2.1	< 2.0	< 2.0	< 2.0	< 2.2	< 2.0	< 2.1
Arsenic	mg/kg	NE	**10**	**10**	**4.4**	**4.3**	**3.4**	NS	NS	**2.2**	**2.7**	**2.3**	**2.2**	**5.3**	**2.6**	**1.7**
Barium	mg/kg	NE	4700	140000	**20**	**21**	**46**	NS	NS	**35**	**40**	**36**	**33**	**31**	**22**	**34**
Beryllium	mg/kg	NE	2	2	< 1.1	< 1.1	< 1.0	NS	NS	< 1.0	< 1.0	< 1.0	< 0.99	< 1.1	< 1.0	< 1.0
Cadmium	mg/kg	NE	34	1000	< 0.54	< 0.55	< 0.50	NS	NS	< 0.52	< 0.50	< 0.50	< 0.50	< 0.55	< 0.51	< 0.52
Chromium (Total)	mg/kg	NE	100	100	**10**	**11**	**12**	NS	NS	**11**	**21**	**15**	**14**	**14**	**7.7**	**6.4**
Copper	mg/kg	NE	2500	76000	**10**	**11**	**11**	NS	NS	**8.1**	**9.1**	**8.1**	**7.0**	**8.7**	**6.8**	**10**
Lead	mg/kg	NE	400	**1000**	**4.5**	**5.2**	**9.5**	NS	NS	**12**	**8.2**	**9.8**	**5.1**	**21**	**8.6**	**13**
Mercury	mg/kg	NE	20	610	< 0.14	< 0.14	< 0.13	NS	NS	< 0.12	< 0.13	< 0.12	< 0.13	< 0.13	< 0.13	**0.28**
Nickel	mg/kg	NE	1400	7500	**9.2**	**10**	**7.8**	NS	NS	**5.4**	**6.3**	**5.4**	**4.6**	**7.5**	**5.4**	**3.6**
Vanadium	mg/kg	NE	470	14000	**17**	**17**	**21**	NS	NS	**15**	**17**	**14**	**13**	**29**	**14**	**11**
Zinc	mg/kg	NE	20000	610000	**15**	**15**	**28**	NS	NS	**22**	**23**	**24**	**21**	**31**	**21**	**25**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060	< 0.0060	< 0.0060	NS	NS	< 0.0060	NS	< 0.0060
Arsenic	mg/l	0.5	NE	NE	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090	< 0.0090	< 0.0090	NS	NS	< 0.0090	NS	< 0.0090
Barium	mg/l	10	NE	NE	**0.11**	**0.18**	NS	**0.072**	**0.14**	**0.19**	**0.22**	NS	NS	**0.18**	NS	**0.31**
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	< 0.050	NS	< 0.050	< 0.050	< 0.050	< 0.050	NS	NS	< 0.050	NS	< 0.050
Copper	mg/l	13	NE	NE	< 0.040	< 0.040	NS	< 0.040	< 0.040	< 0.040	< 0.040	NS	NS	< 0.040	NS	< 0.040
Lead	mg/l	**0.15**	NE	NE	**0.038**	< 0.013	NS	**0.015**	< 0.013	< 0.013	< 0.013	NS	NS	< 0.013	NS	< 0.013
Zinc	mg/l	50	NE	NE	**0.037**	**0.067**	NS	**0.032**	**0.039**	**0.050**	**0.074**	NS	NS	**0.067**	NS	**0.060**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	**NS**	**NS**	NS	**NS**	**NS**	**NS**	**NS**	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	NS	NS	< 0.10	NS	NS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.11	< 0.10	< 0.11
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 1.1	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 1.1	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 1.1	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 1.1	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 5.5	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**91**	**90**	**95**	NS	NS	**97**	**96**	**96**	**95**	**90**	**93**	**94**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC20-B14 15 - 17 ft 8/18/2020 AOC20-B14 15-17FT_08/18/20 0080493	AOC20-B14 20 - 22 ft 8/18/2020 AOC20-B14 20-22FT_08/18/20 0080493	AOC20-B15 0.5 - 2 ft 8/10/2020 AOC20-B15 0.5-2FT_08/10/20 0080238	AOC20-B15 5 - 7 ft 8/19/2020 AOC20-B15 5-7FT_08/19/20 0080548	AOC20-B15 10 - 12 ft 8/19/2020 AOC20-B15 10-12FT_08/19/20 0080548	AOC20-B15 15 - 17 ft 8/19/2020 AOC20-B15 15-17FT_08/19/20 0080548	AOC20-B15 20 - 22 ft 8/19/2020 AOC20-B15 20-22FT_08/19/20 0080548	AOC20-B15 25 - 27 ft 8/19/2020 AOC20-B15 25-27FT_08/19/20 0080548	AOC20-B16 0.5 - 2 ft 8/10/2020 AOC20-B16 0.5-2FT_08/10/20 0080238	AOC20-B16 5 - 7 ft 8/19/2020 AOC20-B16 5-7FT_08/19/20 0080548	AOC20-B16 10 - 12 ft 8/19/2020 AOC20-B16 10-12FT_08/19/20 0080548	AOC20-B16 15 - 17 ft 8/19/2020 AOC20-B16 15-17FT_08/19/20 0080548
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 53	< 58	< 51	< 53	< 54	< 53	< 51	< 55	< 52	< 51	< 51	< 50
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.3	< 3.4	< 3.5	< 4.0	< 4.2	< 4.1	< 3.2	< 3.4	< 2.9	< 3.4	< 3.3	< 3.5
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.3	< 3.4	< 3.5	< 4.0	< 4.2	< 4.1	< 3.2	< 3.4	< 2.9	< 3.4	< 3.3	< 3.5
Carbon disulfide	ug/kg	8000	500000	1000000	< 6.5	< 6.8	< 7.0	< 7.9	< 8.5	< 8.3	< 6.4	< 6.8	< 5.9	< 6.8	< 6.6	< 7.0
M,P-XYLENE (SUM OF ISO	ug/kg	NE	NE	NE	< 6.5	< 6.8	< 7.0	< 7.9	< 8.5	< 8.3	< 6.4	< 6.8	< 5.9	< 6.8	< 6.6	< 7.0
Naphthalene	ug/kg	56000	1000000	2500000	< 6.5	< 6.8	< 7.0	< 7.9	< 8.5	< 8.3	< 6.4	< 6.8	< 5.9	< 6.8	< 6.6	< 7.0
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.3	< 3.4	< 3.5	< 4.0	< 4.2	< 4.1	< 3.2	< 3.4	< 2.9	< 3.4	< 3.3	< 3.5
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.3	< 3.4	< 3.5	< 4.0	< 4.2	< 4.1	< 3.2	< 3.4	< 2.9	< 3.4	< 3.3	< 3.5
o-Xylene	ug/kg	NE	NE	NE	< 3.3	< 3.4	< 3.5	< 4.0	< 4.2	< 4.1	< 3.2	< 3.4	< 2.9	< 3.4	< 3.3	< 3.5
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.3	< 3.4	< 3.5	< 4.0	< 4.2	< 4.1	< 3.2	< 3.4	< 2.9	< 3.4	< 3.3	< 3.5
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.3	< 3.4	< 3.5	< 4.0	< 4.2	< 4.1	< 3.2	< 3.4	< 2.9	< 3.4	< 3.3	< 3.5
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Acenaphthylene	ug/kg	84000	1000000	2500000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Anthracene	ug/kg	400000	1000000	2500000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 310	< 350	**390**	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Chrysene	ug/kg	**1000**	**84000**	780000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Pyrene	ug/kg	**40000**	1000000	2500000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Carbazole	ug/kg	1000	31000	290000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Dibenzofuran	ug/kg	1400	68000	1000000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 310	< 350	< 310	< 320	< 320	< 320	< 310	< 330	< 310	< 300	< 310	< 300
Metals																
Antimony	mg/kg	NE	27	8200	< 2.1	< 2.2	< 2.1	< 2.2	< 2.2	< 2.2	< 2.1	< 2.2	< 2.1	< 2.0	< 2.1	< 2.0
Arsenic	mg/kg	NE	**10**	**10**	**1.9**	**2.7**	**2.4**	**1.4**	**2.3**	**4.2**	**1.6**	**2.2**	**3.1**	**1.2**	**1.3**	**1.2**
Barium	mg/kg	NE	4700	140000	**37**	**28**	**14**	**24**	**39**	**40**	**26**	**28**	**37**	**17**	**14**	**22**
Beryllium	mg/kg	NE	2	2	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.0	< 1.0	< 1.0
Cadmium	mg/kg	NE	34	1000	< 0.53	< 0.55	< 0.52	< 0.55	< 0.55	< 0.54	< 0.52	< 0.56	< 0.53	< 0.51	< 0.52	< 0.51
Chromium (Total)	mg/kg	NE	100	100	**8.1**	**7.9**	**4.9**	**18**	**7.8**	**8.5**	**5.4**	**6.3**	**11**	**4.4**	**3.8**	**2.7**
Copper	mg/kg	NE	2500	76000	**9.5**	**8.5**	**8.3**	**9.0**	**9.5**	**7.5**	**9.6**	**710**	**13**	**7.6**	**5.6**	**3.2**
Lead	mg/kg	NE	400	**1000**	**13**	**21**	**12**	**2.6**	< 2.2	< 2.2	**2.2**	**2.8**	**7.8**	**2.4**	**4.0**	< 2.0
Mercury	mg/kg	NE	20	610	**0.19**	**0.50**	< 0.13	< 0.13	< 0.14	< 0.14	< 0.13	< 0.14	< 0.13	< 0.12	< 0.12	< 0.13
Nickel	mg/kg	NE	1400	7500	**4.1**	**3.0**	**5.3**	**5.2**	**5.0**	**4.6**	**4.9**	**6.5**	**9.4**	**4.8**	**3.0**	**2.0**
Vanadium	mg/kg	NE	470	14000	**12**	**8.8**	**9.0**	**9.2**	**12**	**13**	**7.2**	**9.2**	**18**	**6.8**	**6.4**	**4.4**
Zinc	mg/kg	NE	20000	610000	**22**	**29**	**23**	**13**	**14**	**15**	**12**	**24**	**30**	**10**	**9.0**	**6.8**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	< 0.0060	NS	NS	< 0.0060	NS	NS	NS	NS	< 0.0060	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	< 0.0090	NS	NS	< 0.0090	NS	NS	NS	NS	< 0.0090	NS
Barium	mg/l	10	NE	NE	NS	NS	**0.28**	NS	NS	**0.24**	NS	NS	NS	NS	**0.26**	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	< 0.050	NS	NS	< 0.050	NS	NS	NS	NS	< 0.050	NS
Copper	mg/l	13	NE	NE	NS	NS	< 0.040	NS	NS	< 0.040	NS	NS	NS	NS	< 0.040	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	< 0.013	NS	NS	< 0.013	NS	NS	NS	NS	< 0.013	NS
Zinc	mg/l	50	NE	NE	NS	NS	**0.086**	NS	NS	**0.051**	NS	NS	NS	NS	**0.054**	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.11	< 0.12	< 0.10	< 0.11	< 0.11	< 0.11	< 0.10	< 0.11	< 0.10	< 0.10	< 0.10	< 0.10
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	< 1.1	NS	NS	NS	NS	< 1.0	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	< 1.1	NS	NS	NS	NS	< 1.0	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	< 1.1	NS	NS	NS	NS	< 1.0	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	< 1.1	NS	NS	NS	NS	< 1.0	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	< 5.4	NS	NS	NS	NS	< 5.2	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**94**	**85**	**96**	**91**	**91**	**92**	**97**	**90**	**94**	**98**	**96**	**99**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC20-B16 20 - 22 ft 8/19/2020 AOC20-B16 20-22FT_08/19/20 0080548	AOC20-B16 25 - 27 ft 8/19/2020 AOC20-B16 25-27FT_08/19/20 0080548	AOC20-B16 30 - 32 ft 8/19/2020 AOC20-B16 30-32FT_08/19/20 0080548	AOC20-B17 0.5 - 2 ft 8/11/2020 AOC20-B17 0.5-2FT_08/11/20 0080309	AOC20-B17 5 - 7 ft 8/19/2020 AOC20-B17 5-7FT_08/19/20 0080548	AOC20-B17 10 - 12 ft 8/19/2020 AOC20-B17 10-12FT_08/19/20 0080548	AOC20-B17 15 - 17 ft 8/19/2020 AOC20-B17 15-17FT_08/19/20 0080548	AOC20-B18 0.5 - 2 ft 8/11/2020 AOC20-B18 0.5-2FT_08/11/20 0080309	AOC20-B18 5 - 7 ft 8/19/2020 AOC20-B18 5-7FT_08/19/20 0080548	AOC20-B18 15 - 17 ft 8/19/2020 AOC20-B18 15-17FT_08/19/20 0080548	AOC20-B18 20 - 22 ft 8/19/2020 AOC20-B18 20-22FT_08/19/20 0080548	AOC20-B18 25 - 27 ft 8/19/2020 AOC20-B18 25-27FT_08/19/20 0080548
ETPH-CT																	
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 51	< 51	< 57	**230**	< 52	< 59	< 52	< 59	< 55	< 50	< 51	< 59
VOCs																	
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.7	< 3.9	< 3.7	< 3.8	< 3.6	< 3.4	< 3.4	< 3.9	< 3.9	< 3.6	< 3.5	< 4.1
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.7	< 3.9	< 3.7	< 3.8	< 3.6	< 3.4	< 3.4	< 3.9	< 3.9	< 3.6	< 3.5	< 4.1
Carbon disulfide	ug/kg	8000	500000	1000000	< 7.5	< 7.9	< 7.4	< 7.6	< 7.2	< 6.9	< 6.8	< 7.8	< 7.9	< 7.2	< 7.1	< 8.2
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 7.5	< 7.9	< 7.4	< 7.6	< 7.2	< 6.9	< 6.8	< 7.8	< 7.9	< 7.2	< 7.1	< 8.2
Naphthalene	ug/kg	56000	1000000	2500000	< 7.5	< 7.9	< 7.4	< 7.6	< 7.2	< 6.9	< 6.8	< 7.8	< 7.9	< 7.2	< 7.1	< 8.2
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.7	< 3.9	< 3.7	< 3.8	< 3.6	< 3.4	< 3.4	< 3.9	< 3.9	< 3.6	< 3.5	< 4.1
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.7	< 3.9	< 3.7	< 3.8	< 3.6	< 3.4	< 3.4	< 3.9	< 3.9	< 3.6	< 3.5	< 4.1
o-Xylene	ug/kg	NE	NE	NE	< 3.7	< 3.9	< 3.7	< 3.8	< 3.6	< 3.4	< 3.4	< 3.9	< 3.9	< 3.6	< 3.5	< 4.1
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.7	< 3.9	< 3.7	< 3.8	< 3.6	< 3.4	< 3.4	< 3.9	< 3.9	< 3.6	< 3.5	< 4.1
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.7	< 3.9	< 3.7	< 3.8	< 3.6	< 3.4	< 3.4	< 3.9	< 3.9	< 3.6	< 3.5	< 4.1
PAHs																	
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 310	< 340	< 330	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	< 310	< 340	< 330	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Acenaphthylene	ug/kg	84000	1000000	2500000	< 310	< 310	< 340	**690**	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Anthracene	ug/kg	400000	1000000	2500000	< 310	< 310	< 340	**330**	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 310	< 310	< 340	**350**	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 310	< 310	< 340	**1100**	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 310	< 310	< 340	**1100**	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 310	< 310	< 340	**1600**	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 310	< 310	< 340	**380**	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Chrysene	ug/kg	**1000**	**84000**	780000	< 310	< 310	< 340	**600**	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 310	< 310	< 340	**360**	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 310	< 310	< 340	**520**	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	< 310	< 340	< 330	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 310	< 310	< 340	**1300**	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 310	< 340	< 330	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 310	< 310	< 340	< 330	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Pyrene	ug/kg	**40000**	1000000	2500000	< 310	< 310	< 340	**540**	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
SVOCs																	
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 310	< 310	< 340	< 330	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 310	< 340	< 330	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Carbazole	ug/kg	1000	31000	290000	< 310	< 310	< 340	< 330	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Dibenzofuran	ug/kg	1400	68000	1000000	< 310	< 310	< 340	< 330	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 310	< 340	< 330	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 310	< 310	< 340	< 330	< 310	< 360	< 310	< 350	< 320	< 300	< 300	< 350
Metals																	
Antimony	mg/kg	NE	27	8200	< 2.1	< 2.0	< 2.1	< 2.1	< 2.0	< 2.3	< 2.0	**2.6**	< 2.1	< 1.9	< 1.9	< 2.3
Arsenic	mg/kg	NE	**10**	**10**	**2.2**	**3.4**	**1.7**	**4.9**	**2.7**	**3.3**	**3.0**	**8.4**	**1.7**	**1.7**	**1.2**	**4.8**
Barium	mg/kg	NE	4700	140000	**11**	**56**	**16**	**29**	**22**	**23**	**29**	**93**	**19**	**31**	**20**	**28**
Beryllium	mg/kg	NE	2	2	< 1.0	< 1.0	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	< 1.2	< 1.0	< 0.97	< 0.97	< 1.2
Cadmium	mg/kg	NE	34	1000	< 0.51	< 0.50	< 0.53	< 0.53	< 0.50	< 0.57	< 0.51	< 0.58	< 0.52	< 0.49	< 0.48	< 0.58
Chromium (Total)	mg/kg	NE	100	100	**3.2**	**8.4**	**3.7**	**9.0**	**16**	**6.3**	**6.0**	**15**	**5.5**	**8.7**	**3.7**	**7.9**
Copper	mg/kg	NE	2500	76000	**3.2**	**11**	**4.6**	**33**	**10**	**5.4**	**5.5**	**160**	**8.9**	**5.4**	**4.3**	**4.8**
Lead	mg/kg	NE	400	**1000**	< 2.1	**3.2**	< 2.1	**90**	**4.7**	**4.0**	**2.6**	**290**	**3.1**	**2.0**	< 1.9	< 2.3
Mercury	mg/kg	NE	20	610	< 0.13	< 0.13	< 0.14	**0.24**	< 0.12	< 0.14	< 0.12	**1.3**	< 0.13	< 0.12	< 0.13	< 0.15
Nickel	mg/kg	NE	1400	7500	< 2.1	**7.0**	**3.6**	**8.1**	**6.0**	**4.1**	**3.5**	**11**	**4.7**	**3.8**	**2.7**	**4.2**
Vanadium	mg/kg	NE	470	14000	**4.7**	**18**	**8.1**	**19**	**14**	**9.9**	**10**	**25**	**9.8**	**12**	**7.0**	**11**
Zinc	mg/kg	NE	20000	610000	**6.2**	**26**	**14**	**43**	**20**	**17**	**12**	**130**	**16**	**21**	**11**	**10**
Metals-SPLP																	
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	< 0.0060	NS	NS	< 0.0060	< 0.0060	NS	< 0.0060	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	< 0.0090	NS	NS	< 0.0090	< 0.0090	NS	< 0.0090	NS	NS
Barium	mg/l	10	NE	NE	NS	NS	NS	**0.24**	NS	NS	**0.11**	**0.69**	NS	**0.29**	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	< 0.050	NS	NS	< 0.050	< 0.050	NS	< 0.050	NS	NS
Copper	mg/l	13	NE	NE	NS	NS	NS	< 0.040	NS	NS	< 0.040	**0.29**	NS	< 0.040	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	< 0.013	NS	NS	< 0.013	**0.35**	NS	< 0.013	NS	NS
Zinc	mg/l	50	NE	NE	NS	NS	NS	**0.084**	NS	NS	**0.030**	**0.30**	NS	**0.078**	NS	NS
Cyanide																	
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																	
Total PCBs	mg/kg	NE	1	10	< 0.10	< 0.10	< 0.11	< 0.11	< 0.10	< 0.12	< 0.10	< 0.12	< 0.11	< 0.10	< 0.10	< 0.12
Pesticides																	
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	< 1.0	NS	NS	< 1.2	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	< 1.0	NS	NS	**1.6**	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	< 1.0	NS	NS	< 1.2	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	< 1.0	NS	NS	< 1.2	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	< 5.1	NS	NS	< 5.9	NS	NS	NS	NS
Herbicides																	
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																	
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																	
% Solids	%	NE	NE	NE	**97**	**96**	**87**	**90**	**96**	**84**	**95**	**84**	**90**	**98**	**98**	**84**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
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ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
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ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
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TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID					AOC20-B19	AOC20-B19	AOC20-B19	AOC20-B19	AOC20-B19	AOC20-B19	AOC20-B20	AOC20-B20	AOC20-B20	AOC20-B20	AOC20-B20	AOC20-B20
Depth Interval					0.5 - 2 ft	5 - 7 ft	10 - 12 ft	15 - 17 ft	20 - 22 ft	25 - 27 ft	0.5 - 2 ft	5 - 7 ft	10 - 12 ft	15 - 17 ft	20 - 22 ft	25 - 27 ft
Sample Date					8/11/2020	8/19/2020	8/19/2020	8/19/2020	8/19/2020	8/19/2020	8/17/2020	8/19/2020	8/19/2020	8/19/2020	8/19/2020	8/19/2020
Sample ID					AOC20-B19 0.5-2FT_08/11/20	AOC20-B19 5-7FT_08/19/20	AOC20-B19 10-12FT_08/19/20	AOC20-B19 15-17FT_08/19/20	AOC20-B19 20-22FT_08/19/20	AOC20-B19 25-27FT_08/19/20	AOC20-B20 0.5-2FT_08/17/20	AOC20-B20 5-7FT_08/19/20	AOC20-B20 10-12FT_08/19/20	AOC20-B20 15-17FT_08/19/20	AOC20-B20 20-22FT_08/19/20	AOC20-B20 25-27FT_08/19/20
SDG					0080309	0080548	0080548	0080548	0080548	0080548	0080442	0080548	0080548	0080548	0080548	0080548
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 53	**100**	< 50	< 50	< 50	< 53	< 52	< 51	< 51	< 51	< 52	< 52
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.5	< 3.7	< 3.8	< 3.5	< 4.0	< 3.1	< 3.5	< 5.0	< 4.8	< 4.9	< 5.3	< 5.1
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.5	< 3.7	< 3.8	< 3.5	< 4.0	< 3.1	< 3.5	< 5.0	< 4.8	< 4.9	< 5.3	< 5.1
Carbon disulfide	ug/kg	8000	500000	1000000	< 6.9	< 7.3	< 7.5	< 7.1	< 8.1	< 6.2	< 7.0	< 10	< 9.6	< 9.7	< 11	< 10
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 6.9	< 7.3	< 7.5	< 7.1	< 8.1	< 6.2	< 7.0	< 10	< 9.6	< 9.7	< 11	< 10
Naphthalene	ug/kg	56000	1000000	2500000	< 6.9	< 7.3	< 7.5	< 7.1	< 8.1	< 6.2	< 7.0	< 10	< 9.6	< 9.7	< 11	< 10
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.5	< 3.7	< 3.8	< 3.5	< 4.0	< 3.1	< 3.5	< 5.0	< 4.8	< 4.9	< 5.3	< 5.1
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.5	< 3.7	< 3.8	< 3.5	< 4.0	< 3.1	< 3.5	< 5.0	< 4.8	< 4.9	< 5.3	< 5.1
o-Xylene	ug/kg	NE	NE	NE	< 3.5	< 3.7	< 3.8	< 3.5	< 4.0	< 3.1	< 3.5	< 5.0	< 4.8	< 4.9	< 5.3	< 5.1
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.5	< 3.7	< 3.8	< 3.5	< 4.0	< 3.1	< 3.5	< 5.0	< 4.8	< 4.9	< 5.3	< 5.1
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.5	< 3.7	< 3.8	< 3.5	< 4.0	< 3.1	< 3.5	< 5.0	< 4.8	< 4.9	< 5.3	< 5.1
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Acenaphthylene	ug/kg	84000	1000000	2500000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Anthracene	ug/kg	400000	1000000	2500000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Chrysene	ug/kg	**1000**	**84000**	780000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Pyrene	ug/kg	**40000**	1000000	2500000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 310	< 320	< 300	< 300	< 300	< 320	**6700**	< 300	< 300	< 300	< 310	< 310
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 320	< 300	< 300	< 300	< 320	**380**	< 300	< 300	< 300	< 310	< 310
Carbazole	ug/kg	1000	31000	290000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Dibenzofuran	ug/kg	1400	68000	1000000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 320	< 300	< 300	< 300	< 320	< 310	< 300	< 300	< 300	< 310	< 310
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 310	< 320	< 300	< 300	< 300	< 320	**1300**	< 300	< 300	< 300	< 310	< 310
Metals																
Antimony	mg/kg	NE	27	8200	< 2.0	< 2.0	< 1.9	< 1.9	< 1.9	< 2.0	< 2.0	< 2.0	< 1.9	< 2.0	< 2.1	< 2.0
Arsenic	mg/kg	NE	**10**	**10**	**3.4**	**3.4**	**2.4**	**1.8**	**2.1**	**1.4**	**53**	**4.1**	**3.0**	**3.6**	**4.8**	**2.4**
Barium	mg/kg	NE	4700	140000	**23**	**21**	**55**	**68**	**26**	**33**	**29**	**47**	**27**	**16**	**23**	**57**
Beryllium	mg/kg	NE	2	2	< 0.99	< 1.0	< 0.95	< 0.95	< 0.93	< 1.0	< 1.0	< 1.0	< 0.97	< 1.0	< 1.0	< 0.98
Cadmium	mg/kg	NE	34	1000	< 0.50	< 0.50	< 0.48	< 0.48	< 0.46	< 0.50	< 0.51	< 0.50	< 0.48	< 0.50	< 0.52	< 0.49
Chromium (Total)	mg/kg	NE	100	100	**12**	**6.8**	**7.9**	**15**	**7.2**	**5.2**	**7.0**	**7.1**	**6.6**	**4.6**	**7.0**	**9.4**
Copper	mg/kg	NE	2500	76000	**8.0**	**5.4**	**3.9**	**4.2**	**10**	**5.4**	**1300**	**8.2**	**5.1**	**4.1**	**6.4**	**8.0**
Lead	mg/kg	NE	400	**1000**	**3.5**	**2.3**	**1.9**	< 1.9	< 1.9	< 2.0	**31**	**3.2**	**2.5**	**2.3**	< 2.1	**3.8**
Mercury	mg/kg	NE	20	610	< 0.13	< 0.13	< 0.13	< 0.13	< 0.12	< 0.13	**0.22**	< 0.13	< 0.12	< 0.13	< 0.13	< 0.12
Nickel	mg/kg	NE	1400	7500	**7.1**	**4.0**	**2.8**	**8.0**	**3.0**	**2.5**	**470**	**4.4**	**3.8**	**2.7**	**3.3**	**3.1**
Vanadium	mg/kg	NE	470	14000	**16**	**8.8**	**17**	**22**	**12**	**9.5**	**8.8**	**25**	**12**	**7.8**	**11**	**22**
Zinc	mg/kg	NE	20000	610000	**15**	**13**	**22**	**26**	**19**	**21**	**45**	**28**	**13**	**8.5**	**11**	**30**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	< 0.0060	NS	NS	NS	< 0.0060	NS	NS	< 0.0060	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	< 0.0090	NS	NS	NS	< 0.0090	NS	NS	< 0.0090	NS	NS
Barium	mg/l	10	NE	NE	NS	NS	**0.31**	NS	NS	NS	**0.15**	NS	NS	**0.26**	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	< 0.050	NS	NS	NS	< 0.050	NS	NS	< 0.050	NS	NS
Copper	mg/l	13	NE	NE	NS	NS	< 0.040	NS	NS	NS	< 0.040	NS	NS	< 0.040	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	< 0.013	NS	NS	NS	< 0.013	NS	NS	< 0.013	NS	NS
Zinc	mg/l	50	NE	NE	NS	NS	**0.070**	NS	NS	NS	**0.026**	NS	NS	**0.093**	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.11	< 0.11	< 0.10	< 0.10	< 0.10	< 0.11	< 0.11	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	< 1.1	NS	NS	NS	NS	< 1.0	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	< 1.1	NS	NS	NS	NS	< 1.0	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	< 1.1	NS	NS	NS	NS	< 1.0	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	< 1.1	NS	NS	NS	NS	< 1.0	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	< 5.3	NS	NS	NS	NS	< 5.2	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**95**	**94**	**99**	**99**	**99**	**93**	**95**	**98**	**97**	**97**	**94**	**95**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID					AOC20-B21	AOC20-B21	AOC20-B21	AOC20-B21	AOC20-B21	AOC20-B21	AOC20-B21	AOC20-B22	AOC20-B22	AOC20-B23	AOC20-B23	AOC20-B23
Depth Interval					0.5 - 2 ft	5 - 7 ft	10 - 12 ft	15 - 17 ft	20 - 22 ft	25 - 27 ft	30 - 32 ft	0.5 - 2 ft	5 - 7 ft	0.5 - 2 ft	5 - 7 ft	10 - 12 ft
Sample Date	Unit	GBPMC	RDEC	ICDEC	8/17/2020	8/21/2020	8/21/2020	8/21/2020	8/21/2020	8/21/2020	8/21/2020	8/17/2020	8/21/2020	8/18/2020	8/21/2020	8/21/2020
Sample ID					AOC20-B21 0.5-2FT_08/17/20	AOC20-B21 5-7FT_08/21/20	AOC20-B21 10-12FT_08/21/20	AOC20-B21 15-17FT_08/21/20	AOC20-B21 20-22FT_08/21/20	AOC20-B21 25-27FT_08/21/20	AOC20-B21 30-32FT_08/21/20	AOC20-B22 0.5-2FT_08/17/20	AOC20-B22 5-7FT_08/21/20	AOC20-B23 0.5-2FT_08/18/20	AOC20-B23 5-7FT_08/21/20	AOC20-B23 10-12FT_08/21/20
SDG					0080442	0080642	0080642	0080642	0080642	0080642	0080642	0080442	0080642	0080493	0080642	0080642
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**270**	< 56	< 54	< 51	< 51	< 50	< 58	< 53	< 52	**190**	< 51	< 51
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.5	< 5.3	< 5.8	< 5.2	< 4.9	< 5.0	< 4.1	< 3.1	< 5.4	< 3.5	< 5.2	< 4.5
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.5	< 5.3	< 5.8	< 5.2	< 4.9	< 5.0	< 4.1	< 3.1	< 5.4	< 3.5	< 5.2	< 4.5
Carbon disulfide	ug/kg	8000	500000	1000000	< 7.0	< 11	< 12	< 10	< 9.8	< 10	< 8.3	< 6.1	< 11	< 6.9	< 10	< 9.1
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 7.0	< 11	< 12	< 10	< 9.8	< 10	< 8.3	< 6.1	< 11	< 6.9	< 10	< 9.1
Naphthalene	ug/kg	56000	1000000	2500000	< 7.0	< 11	< 12	< 10	< 9.8	< 10	< 8.3	< 6.1	< 11	< 6.9	< 10	< 9.1
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.5	< 5.3	< 5.8	< 5.2	< 4.9	< 5.0	< 4.1	< 3.1	< 5.4	< 3.5	< 5.2	< 4.5
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.5	< 5.3	< 5.8	< 5.2	< 4.9	< 5.0	< 4.1	< 3.1	< 5.4	< 3.5	< 5.2	< 4.5
o-Xylene	ug/kg	NE	NE	NE	< 3.5	< 5.3	< 5.8	< 5.2	< 4.9	< 5.0	< 4.1	< 3.1	< 5.4	< 3.5	< 5.2	< 4.5
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.5	< 5.3	< 5.8	< 5.2	< 4.9	< 5.0	< 4.1	< 3.1	< 5.4	< 3.5	< 5.2	< 4.5
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.5	< 5.3	< 5.8	< 5.2	< 4.9	< 5.0	< 4.1	< 3.1	< 5.4	< 3.5	< 5.2	< 4.5
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	< 330	< 310	< 300
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	< 330	< 310	< 300
Acenaphthylene	ug/kg	84000	1000000	2500000	**630**	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	< 330	< 310	< 300
Anthracene	ug/kg	400000	1000000	2500000	**610**	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	< 330	< 310	< 300
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	**2200**	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	**1100**	< 310	< 300
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	**2200**	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	**1100**	< 310	< 300
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	**2200**	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	**1300**	< 310	< 300
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	**1800**	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	**920**	< 310	< 300
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	**1100**	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	**610**	< 310	< 300
Chrysene	ug/kg	**1000**	**84000**	780000	**2000**	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	**1100**	< 310	< 300
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	**380**	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	< 330	< 310	< 300
Fluoranthene	ug/kg	**56000**	1000000	2500000	**3900**	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	**1900**	< 310	< 300
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	< 330	< 310	< 300
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	**1400**	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	**740**	< 310	< 300
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	< 330	< 310	< 300
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	**1500**	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	**860**	< 310	< 300
Pyrene	ug/kg	**40000**	1000000	2500000	**3600**	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	**1700**	< 310	< 300
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	**330**	< 340	< 320	< 300	< 300	< 300	< 350	**690**	< 320	**780**	< 310	**690**
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	< 330	< 310	< 300
Carbazole	ug/kg	1000	31000	290000	< 310	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	< 330	< 310	< 300
Dibenzofuran	ug/kg	1400	68000	1000000	< 310	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	< 330	< 310	< 300
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	< 330	< 310	< 300
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 310	< 340	< 320	< 300	< 300	< 300	< 350	< 320	< 320	< 330	< 310	< 300
Metals																
Antimony	mg/kg	NE	27	8200	< 2.0	< 2.2	< 2.0	< 1.9	< 1.9	< 1.9	< 2.3	< 2.1	< 2.1	< 2.2	< 2.0	< 1.9
Arsenic	mg/kg	NE	**10**	**10**	**4.1**	**7.5**	**4.9**	**1.6**	**2.2**	**2.3**	**2.8**	**7.0**	**2.7**	**4.5**	**2.7**	**2.0**
Barium	mg/kg	NE	4700	140000	**33**	**250**	**28**	**28**	**30**	**66**	**33**	**45**	**30**	**62**	**48**	**25**
Beryllium	mg/kg	NE	2	2	< 1.0	< 1.1	< 1.0	< 0.97	< 0.96	< 0.96	< 1.2	< 1.0	< 1.0	< 1.1	< 1.0	< 0.94
Cadmium	mg/kg	NE	34	1000	< 0.50	**0.64**	< 0.51	< 0.48	< 0.48	< 0.48	< 0.58	< 0.52	< 0.52	< 0.55	< 0.51	< 0.47
Chromium (Total)	mg/kg	NE	100	100	**18**	**13**	**13**	**18**	**18**	**20**	**6.0**	**11**	**7.9**	**13**	**7.8**	**8.5**
Copper	mg/kg	NE	2500	76000	**18**	**31**	**11**	**9.9**	**16**	**11**	**5.6**	**34**	**6.6**	**19**	**7.3**	**6.5**
Lead	mg/kg	NE	400	**1000**	**6.0**	**480**	**30**	**4.5**	**2.1**	**2.9**	< 2.3	**83**	**35**	**120**	**4.2**	**2.5**
Mercury	mg/kg	NE	20	610	**0.20**	**0.35**	< 0.14	< 0.13	< 0.13	< 0.13	< 0.15	**0.28**	< 0.13	< 0.14	< 0.13	< 0.13
Nickel	mg/kg	NE	1400	7500	**9.9**	**6.6**	**7.0**	**6.4**	**9.0**	**7.3**	**3.1**	**8.9**	**5.2**	**8.6**	**4.7**	**3.6**
Vanadium	mg/kg	NE	470	14000	**25**	**19**	**13**	**14**	**15**	**23**	**13**	**17**	**16**	**20**	**17**	**9.7**
Zinc	mg/kg	NE	20000	610000	**23**	**500**	**29**	**31**	**32**	**34**	**14**	**36**	**27**	**72**	**35**	**16**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	< 0.0060	NS	< 0.0060	NS	NS	NS	NS	< 0.0060	< 0.0060	< 0.0060	NS	< 0.0060
Arsenic	mg/l	0.5	NE	NE	< 0.0090	NS	< 0.0090	NS	NS	NS	NS	< 0.0090	< 0.0090	< 0.0090	NS	< 0.0090
Barium	mg/l	10	NE	NE	**0.42**	NS	**0.31**	NS	NS	NS	NS	**0.30**	**0.27**	**0.30**	NS	**0.32**
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	NS	< 0.050	NS	NS	NS	NS	< 0.050	< 0.050	< 0.050	NS	< 0.050
Copper	mg/l	13	NE	NE	< 0.040	NS	< 0.040	NS	NS	NS	NS	< 0.040	< 0.040	< 0.040	NS	< 0.040
Lead	mg/l	**0.15**	NE	NE	**0.034**	NS	< 0.013	NS	NS	NS	NS	< 0.013	**0.013**	**0.14**	NS	< 0.013
Zinc	mg/l	50	NE	NE	**0.096**	NS	**0.090**	NS	NS	NS	NS	**0.074**	**0.11**	**0.10**	NS	**0.087**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.11	< 0.11	< 0.11	< 0.10	< 0.10	< 0.10	< 0.12	< 0.11	< 0.10	< 0.11	< 0.10	< 0.10
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	**270**	NS	NS	NS	NS	NS	< 1.1	NS	NS	< 1.0	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	**290**	NS	NS	NS	NS	NS	**2.0**	NS	NS	< 1.0	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	**1100**	NS	NS	NS	NS	NS	**4.2**	NS	NS	< 1.0	NS
Dieldrin	ug/kg	7	38	360	NS	< 1.1	NS	NS	NS	NS	NS	< 1.1	NS	NS	< 1.0	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	**17**	NS	NS	NS	NS	NS	< 5.3	NS	NS	< 5.1	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**94**	**89**	**92**	**98**	**98**	**98**	**85**	**93**	**95**	**91**	**97**	**97**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID					AOC20-B23	AOC20-B23	AOC20-B23	AOC20-B23	AOC21-B1	AOC22-B1	AOC22-B1	AOC22-B1	AOC22-B1	AOC22-B2	AOC22-B2	AOC22-B2
Depth Interval					15 - 17 ft	20 - 22 ft	25 - 27 ft	30 - 32 ft	0 - 2 ft	0 - 2 ft	2 - 4 ft	6 - 8 ft	8 - 10 ft	0 - 2 ft	2 - 4 ft	6 - 8 ft
Sample Date					8/21/2020	8/21/2020	8/21/2020	8/21/2020	3/17/2020	3/16/2020	3/16/2020	3/18/2020	3/18/2020	3/16/2020	3/16/2020	3/18/2020
Sample ID					AOC20-B23 15-17FT_08/21/20	AOC20-B23 20-22FT_08/21/20	AOC20-B23 25-27FT_08/21/20	AOC20-B23 30-32FT_08/21/20	AOC21 B-1 0-2FT_03/17/20	AOC22-B1 0-2FT_03/16/20	AOC22-B1 2-4FT_03/16/20	AOC22 B1 6-8FT_03/18/20	AOC22-B1 8-10FT_03/18/20	AOC22-B2 0-2FT_03/16/20	AOC22-B2 2-4FT_03/16/20	AOC22 B2 6-8FT_03/18/20
SDG	Unit	GBPMC	RDEC	ICDEC	0080642	0080642	0080642	0080642	0030476	0030467	0030467	0030543	0030543	0030467	0030467	0030543
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 52	< 51	< 51	< 54	< 53	< 54	< 56	< 56	< 55	< 52	< 51	< 53
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.2	< 5.0	< 5.0	< 3.3	< 5.0	NS	< 6.7	NS	NS	< 5.4	NS	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 4.2	< 5.0	< 5.0	< 3.3	< 5.0	NS	< 6.7	NS	NS	< 5.4	NS	NS
Carbon disulfide	ug/kg	8000	500000	1000000	< 8.4	< 10	< 10	< 6.6	< 10	NS	< 13	NS	NS	< 11	NS	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 8.4	< 10	< 10	< 6.6	< 10	NS	< 13	NS	NS	< 11	NS	NS
Naphthalene	ug/kg	56000	1000000	2500000	< 8.4	< 10	< 10	< 6.6	< 10	NS	< 13	NS	NS	< 11	NS	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	< 4.2	< 5.0	< 5.0	< 3.3	< 5.0	NS	< 6.7	NS	NS	< 5.4	NS	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	< 4.2	< 5.0	< 5.0	< 3.3	< 5.0	NS	< 6.7	NS	NS	< 5.4	NS	NS
o-Xylene	ug/kg	NE	NE	NE	< 4.2	< 5.0	< 5.0	< 3.3	< 5.0	NS	< 6.7	NS	NS	< 5.4	NS	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 4.2	< 5.0	< 5.0	< 3.3	< 5.0	NS	< 6.7	NS	NS	< 5.4	NS	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 4.2	< 5.0	< 5.0	< 3.3	< 5.0	NS	< 6.7	NS	NS	< 5.4	NS	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 300	< 300	< 320	< 320	< 320	< 330	< 340	< 330	< 310	< 300	< 320
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	< 300	< 300	< 320	< 320	< 320	< 330	< 340	< 330	< 310	< 300	< 320
Acenaphthylene	ug/kg	84000	1000000	2500000	< 310	< 300	< 300	< 320	< 320	< 320	< 330	< 340	< 330	< 310	< 300	< 320
Anthracene	ug/kg	400000	1000000	2500000	< 310	< 300	< 300	< 320	< 320	< 320	< 330	< 340	< 330	< 310	< 300	< 320
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 310	< 300	< 300	< 320	< 320	< 320	< 330	< 340	< 330	< 310	< 300	< 320
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 310	< 300	< 300	< 320	< 320	< 320	< 330	< 340	< 330	< 310	< 300	< 320
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 310	< 300	< 300	< 320	< 320	< 320	< 330	**500**	< 330	< 310	< 300	< 320
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 310	< 300	< 300	< 320	< 320	< 320	< 330	< 340	< 330	< 310	< 300	< 320
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 310	< 300	< 300	< 320	< 320	< 320	< 330	< 340	< 330	< 310	< 300	< 320
Chrysene	ug/kg	**1000**	**84000**	780000	< 310	< 300	< 300	< 320	< 320	< 320	< 330	**510**	< 330	< 310	< 300	< 320
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 310	< 300	< 300	< 320	< 320	< 320	< 330	< 340	< 330	< 310	< 300	< 320
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 310	< 300	< 300	< 320	< 320	< 320	< 330	**690**	< 330	< 310	< 300	< 320
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	< 300	< 300	< 320	< 320	< 320	< 330	< 340	< 330	< 310	< 300	< 320
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 310	< 300	< 300	< 320	< 320	< 320	< 330	< 340	< 330	< 310	< 300	< 320
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 300	< 300	< 320	< 320	< 320	< 330	< 340	< 330	< 310	< 300	< 320
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 310	< 300	< 300	< 320	< 320	< 320	< 330	**460**	< 330	< 310	< 300	< 320
Pyrene	ug/kg	**40000**	1000000	2500000	< 310	< 300	< 300	< 320	< 320	< 320	< 330	**580**	< 330	< 310	< 300	< 320
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	**1100**	**1100**	< 300	< 320	< 320	NS	NS	< 340	< 330	NS	NS	< 320
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 300	< 300	< 320	< 320	NS	NS	< 340	< 330	NS	NS	< 320
Carbazole	ug/kg	1000	31000	290000	< 310	< 300	< 300	< 320	< 320	NS	NS	< 340	< 330	NS	NS	< 320
Dibenzofuran	ug/kg	1400	68000	1000000	< 310	< 300	< 300	< 320	< 320	NS	NS	< 340	< 330	NS	NS	< 320
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 300	< 300	< 320	< 320	NS	NS	**480**	< 330	NS	NS	< 320
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 310	< 300	< 300	< 320	< 320	NS	NS	< 340	< 330	NS	NS	< 320
Metals																
Antimony	mg/kg	NE	27	8200	< 2.0	< 2.0	< 1.8	< 2.2	< 2.1	NS	< 2.2	**2.3**	< 2.1	< 1.9	NS	< 2.1
Arsenic	mg/kg	NE	**10**	**10**	**3.1**	**2.9**	**2.6**	**1.2**	**1.9**	NS	**19**	**19**	**15**	**5.5**	NS	**1.1**
Barium	mg/kg	NE	4700	140000	**42**	**44**	**37**	**34**	**32**	NS	**46**	**61**	**21**	**24**	NS	**42**
Beryllium	mg/kg	NE	2	2	< 1.0	< 0.99	< 0.92	< 1.1	< 1.1	NS	< 1.1	< 1.0	< 1.1	< 0.97	NS	< 1.0
Cadmium	mg/kg	NE	34	1000	< 0.51	< 0.49	< 0.46	< 0.54	< 0.53	NS	**0.57**	< 0.52	< 0.53	< 0.49	NS	< 0.52
Chromium (Total)	mg/kg	NE	100	100	**12**	**12**	**21**	**6.9**	**7.7**	NS	**13**	**13**	**9.1**	**5.6**	NS	**10**
Copper	mg/kg	NE	2500	76000	**8.3**	**8.5**	**16**	**10**	**20**	NS	**11**	**17**	**16**	**28**	NS	**16**
Lead	mg/kg	NE	400	**1000**	**2.4**	**2.2**	**2.7**	< 2.2	**18**	NS	**38**	**90**	**17**	**49**	NS	**12**
Mercury	mg/kg	NE	20	610	< 0.12	< 0.13	< 0.13	< 0.13	< 0.14	NS	< 0.14	< 0.14	**0.19**	**0.16**	NS	< 0.13
Nickel	mg/kg	NE	1400	7500	**4.9**	**5.1**	**5.8**	**3.7**	**8.9**	NS	**7.5**	**8.4**	**3.7**	**4.6**	NS	**7.8**
Vanadium	mg/kg	NE	470	14000	**17**	**19**	**21**	**12**	**15**	NS	**21**	**22**	**16**	**8.9**	NS	**14**
Zinc	mg/kg	NE	20000	610000	**22**	**28**	**25**	**18**	**30**	NS	**17**	**26**	**20**	**14**	NS	**23**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	< 0.0060	NS	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060	< 0.0060
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	< 0.0090	NS	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090	< 0.0090
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	**0.23**	NS	**0.25**	**0.21**	NS	**0.22**	**0.11**	**0.21**
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	< 0.050	NS	< 0.050	< 0.050	NS	< 0.050	< 0.050	< 0.050
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	< 0.040	NS	< 0.040	< 0.040	NS	< 0.040	< 0.040	< 0.040
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	< 0.013	NS	< 0.013	< 0.013	NS	< 0.013	< 0.013	< 0.013
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	**0.059**	NS	**0.051**	**0.066**	NS	**0.041**	**0.021**	**0.062**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.10	< 0.10	< 0.10	< 0.11	NS	NS	< 0.11	< 0.11	< 0.11	< 0.10	NS	< 0.11
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	< 1.1	NS	NS	< 1.0	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	< 1.1	NS	NS	< 1.0	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	< 1.1	NS	NS	**2.5**	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	< 1.1	NS	NS	< 1.0	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	< 5.6	NS	NS	< 5.1	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**96**	**99**	**99**	**91**	**92**	**92**	**89**	**89**	**91**	**96**	**97**	**93**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC22-B2 8 - 10 ft 3/18/2020 AOC22 B2 8-10FT_03/18/20 0030543	AOC23-B1 0 - 2 ft 3/16/2020 AOC23-B1 0-2FT_03/16/20 0030467	AOC23-B1 2 - 4 ft 3/16/2020 AOC23-B1 2-4FT_03/16/20 0030467	AOC23-B1 4 - 6 ft 3/16/2020 AOC23 B1 4-6FT_03/16/20 0030543	AOC23-B1 6 - 8 ft 3/18/2020 AOC23 B1 6-8FT_03/18/20 0030543	AOC23-B1 8 - 10 ft 3/18/2020 AOC23 B1 8-10FT_03/18/20 0030543	AOC24-B1 4 - 6 ft 3/24/2020 AOC24 B1 4-6FT_03/24/20 0030661	AOC24-B2 2 - 4 ft 3/24/2020 AOC24 B2 2-4FT_03/24/20 0030661	AOC24-B2 4 - 6 ft 3/24/2020 AOC24 B2 4-6FT_03/24/20 0030661	AOC24-B3 4 - 6 ft 3/24/2020 AOC24 B3 4-6FT_03/24/20 0030661	AOC25-B1 0 - 1 ft 3/19/2020 AOC25-B1 0-1FT_03/19/20 0030573	AOC25-B1 0 - 2 ft 3/19/2020 AOC25 B1 0-1FT_03/19/20 0030665
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 53	< 55	< 55	< 55	< 57	< 57	< 53	< 50	< 51	< 51	< 60	NS
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	< 7.6	NS	NS	NS	NS	< 4.5	< 4.6	< 5.7	< 4.8	< 3.8	NS
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	NS	< 7.6	NS	NS	NS	NS	< 4.5	< 4.6	< 5.7	< 4.8	< 3.8	NS
Carbon disulfide	ug/kg	8000	500000	1000000	NS	< 15	NS	NS	NS	NS	< 8.9	< 9.3	< 11	< 9.7	< 7.5	NS
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	NS	< 15	NS	NS	NS	NS	< 8.9	< 9.3	< 11	< 9.7	< 7.5	NS
Naphthalene	ug/kg	56000	1000000	2500000	NS	< 15	NS	NS	NS	NS	< 8.9	< 9.3	< 11	< 9.7	< 7.5	NS
n-Butylbenzene	ug/kg	70000	500000	1000000	NS	< 7.6	NS	NS	NS	NS	< 4.5	< 4.6	< 5.7	< 4.8	< 3.8	NS
n-Propylbenzene	ug/kg	10000	500000	1000000	NS	< 7.6	NS	NS	NS	NS	< 4.5	< 4.6	< 5.7	< 4.8	< 3.8	NS
o-Xylene	ug/kg	NE	NE	NE	NS	< 7.6	NS	NS	NS	NS	< 4.5	< 4.6	< 5.7	< 4.8	< 3.8	NS
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	NS	< 7.6	NS	NS	NS	NS	< 4.5	< 4.6	< 5.7	< 4.8	< 3.8	NS
sec-Butylbenzene	ug/kg	70000	500000	1000000	NS	< 7.6	NS	NS	NS	NS	< 4.5	< 4.6	< 5.7	< 4.8	< 3.8	NS
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Acenaphthylene	ug/kg	84000	1000000	2500000	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Anthracene	ug/kg	400000	1000000	2500000	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Chrysene	ug/kg	**1000**	**84000**	780000	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 320	< 330	< 320	< 340	< 350	< 350	**370**	< 310	< 300	< 310	< 360	NS
Fluorene	ug/kg	**56000**	1000000	2500000	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Naphthalene	ug/kg	**56000**	1000000	2500000	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 320	< 330	< 320	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Pyrene	ug/kg	**40000**	1000000	2500000	< 320	< 330	< 320	< 340	< 350	< 350	**340**	< 310	< 300	< 310	< 360	NS
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 320	NS	NS	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 320	NS	NS	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Carbazole	ug/kg	1000	31000	290000	< 320	NS	NS	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Dibenzofuran	ug/kg	1400	68000	1000000	< 320	NS	NS	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 320	NS	NS	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 320	NS	NS	< 340	< 350	< 350	< 320	< 310	< 300	< 310	< 360	NS
Metals																
Antimony	mg/kg	NE	27	8200	< 2.1	< 2.0	NS	< 2.2	< 2.3	< 2.3	< 2.1	< 1.9	< 2.0	< 2.0	NS	< 1.5
Arsenic	mg/kg	NE	**10**	**10**	< 1.1	**3.7**	NS	**1.4**	**1.7**	< 1.2	**2.7**	**3.2**	**1.5**	**1.1**	NS	**1.5**
Barium	mg/kg	NE	4700	140000	**20**	**36**	NS	**15**	**23**	**12**	**41**	**46**	**33**	**14**	NS	**28**
Beryllium	mg/kg	NE	2	2	< 1.1	< 1.0	NS	< 1.1	< 1.1	< 1.2	< 1.1	< 0.96	< 0.99	< 1.0	NS	< 0.73
Cadmium	mg/kg	NE	34	1000	< 0.54	< 0.51	NS	< 0.56	< 0.57	< 0.58	< 0.54	< 0.48	< 0.49	< 0.51	NS	< 0.36
Chromium (Total)	mg/kg	NE	100	100	**4.9**	**13**	NS	**10**	**10**	**5.2**	**11**	**17**	**9.8**	**3.1**	NS	**9.4**
Copper	mg/kg	NE	2500	76000	**7.8**	**31**	NS	**6.1**	**15**	**6.6**	**11**	**18**	**12**	**2.1**	NS	**20**
Lead	mg/kg	NE	400	**1000**	**2.6**	**81**	NS	**5.6**	**13**	< 2.3	**71**	**5.3**	**13**	**6.3**	NS	**20**
Mercury	mg/kg	NE	20	610	< 0.13	**0.25**	NS	< 0.14	< 0.15	< 0.14	< 0.14	< 0.13	< 0.12	< 0.13	NS	< 0.14
Nickel	mg/kg	NE	1400	7500	**3.5**	**8.8**	NS	**6.8**	**7.7**	**4.8**	**5.4**	**12**	**5.2**	< 2.0	NS	**5.8**
Vanadium	mg/kg	NE	470	14000	**8.1**	**21**	NS	**17**	**16**	**7.2**	**13**	**19**	**13**	**4.0**	NS	**15**
Zinc	mg/kg	NE	20000	610000	**19**	**26**	NS	**27**	**22**	**14**	**65**	**27**	**57**	**17**	NS	**40**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	< 0.0060	NS	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060	< 0.0060	< 0.0060	NS	< 0.0060
Arsenic	mg/l	0.5	NE	NE	NS	< 0.0090	NS	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090	< 0.0090	< 0.0090	NS	< 0.0090
Barium	mg/l	10	NE	NE	NS	**0.19**	NS	**0.18**	**0.24**	NS	**0.23**	**0.25**	**0.29**	**0.23**	NS	**0.30**
Chromium (Total)	mg/l	0.5	NE	NE	NS	< 0.050	NS	< 0.050	< 0.050	NS	< 0.050	< 0.050	< 0.050	< 0.050	NS	< 0.050
Copper	mg/l	13	NE	NE	NS	< 0.040	NS	< 0.040	< 0.040	NS	< 0.040	< 0.040	< 0.040	< 0.040	NS	< 0.040
Lead	mg/l	**0.15**	NE	NE	NS	< 0.013	NS	< 0.013	< 0.013	NS	< 0.013	< 0.013	< 0.013	< 0.013	NS	< 0.013
Zinc	mg/l	50	NE	NE	NS	**0.060**	NS	**0.053**	**0.066**	NS	**0.052**	**0.040**	**0.048**	**0.054**	NS	**0.079**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.11	< 0.11	NS	< 0.11	< 0.12	< 0.12	< 0.11	< 0.10	< 0.10	< 0.10	NS	< 0.11
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	< 1.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	**3.7**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	**5.8**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	< 1.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	< 5.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**93**	**90**	**91**	**89**	**86**	**86**	**92**	**97**	**98**	**97**	**83**	**92**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I II ESA
STATE PIER, NEW LONDON, CT

Location ID Depth Interval Sample Date Sample ID SDG	Unit	GBPMC	RDEC	ICDEC	AOC25-B1 5 - 7 ft 3/30/2020 AOC25-B1 5-7FT_03/30/20 0030806	AOC26-B1 0 - 2 ft 3/19/2020 AOC26-B1 0-2FT_03/19/20 0030573	AOC26-B1 5 - 7 ft 3/30/2020 AOC26-B1 5-7FT_03/30/20 0030806	AOC27-B1 1 - 3 ft 3/20/2020 AOC27 B1 1-3FT_03/20/20 0030593	AOC27-B1 3 - 5 ft 3/20/2020 AOC27 B1 3-5FT_03/20/20 0030593	AOC27-B2 0 - 2 ft 3/20/2020 AOC27 B2 0-2FT_03/20/20 0030593	AOC27-B3 0 - 2 ft 3/20/2020 AOC27 B3 0-2FT_03/20/20 0030593	AOC27-B3 2 - 4 ft 3/20/2020 AOC27 B3 2-4FT_03/20/20 0030593	AOC28-B1 5 - 7 ft 3/20/2020 AOC28 B1 5-7FT_03/20/20 0030593	AOC28-B1 7 - 9 ft 3/20/2020 AOC28 B1 7-9FT_03/20/20 0030593	AOC28-B2 3 - 5 ft 3/20/2020 AOC28 B2 3-5FT_03/20/20 0030593	AOC28-B2 6 - 8 ft 3/20/2020 AOC28 B2 6-8FT_03/20/20 0030593
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**60**	**100**	**71**	< 51	< 54	< 50	< 51	< 52	< 58	< 53	< 51	< 60
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.6	< 5.2	< 3.2	< 5.9	< 5.7	< 5.2	< 5.5	< 4.9	< 3.8	< 4.2	< 3.9	< 4.7
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.6	< 5.2	< 3.2	< 5.9	< 5.7	< 5.2	< 5.5	< 4.9	< 3.8	< 4.2	< 3.9	< 4.7
Carbon disulfide	ug/kg	8000	500000	1000000	< 7.2	< 10	< 6.4	< 12	< 11	< 10	< 11	< 9.9	< 7.6	< 8.4	< 7.8	< 9.5
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 7.2	< 10	< 6.4	< 12	< 11	< 10	< 11	< 9.9	< 7.6	< 8.4	< 7.8	< 9.5
Naphthalene	ug/kg	56000	1000000	2500000	< 7.2	< 10	< 6.4	< 12	< 11	< 10	< 11	< 9.9	< 7.6	< 8.4	< 7.8	< 9.5
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.6	< 5.2	< 3.2	< 5.9	< 5.7	< 5.2	< 5.5	< 4.9	< 3.8	< 4.2	< 3.9	< 4.7
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.6	< 5.2	< 3.2	< 5.9	< 5.7	< 5.2	< 5.5	< 4.9	< 3.8	< 4.2	< 3.9	< 4.7
o-Xylene	ug/kg	NE	NE	NE	< 3.6	< 5.2	< 3.2	< 5.9	< 5.7	< 5.2	< 5.5	< 4.9	< 3.8	< 4.2	< 3.9	< 4.7
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.6	< 5.2	< 3.2	< 5.9	< 5.7	< 5.2	< 5.5	< 4.9	< 3.8	< 4.2	< 3.9	< 4.7
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.6	< 5.2	< 3.2	< 5.9	< 5.7	< 5.2	< 5.5	< 4.9	< 3.8	< 4.2	< 3.9	< 4.7
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Acenaphthylene	ug/kg	84000	1000000	2500000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Anthracene	ug/kg	400000	1000000	2500000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 330	**330**	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 330	**380**	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 330	**700**	**350**	< 310	**350**	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Chrysene	ug/kg	**1000**	**84000**	780000	< 330	**390**	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 330	**940**	**370**	< 310	**400**	**330**	< 300	< 320	**390**	< 320	< 310	< 360
Fluorene	ug/kg	**56000**	1000000	2500000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Naphthalene	ug/kg	**56000**	1000000	2500000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 330	**510**	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Pyrene	ug/kg	**40000**	1000000	2500000	< 330	**770**	< 320	< 310	**370**	< 310	< 300	< 320	< 360	< 320	< 310	< 360
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Carbazole	ug/kg	1000	31000	290000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Dibenzofuran	ug/kg	1400	68000	1000000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 330	< 320	< 320	< 310	< 320	< 310	< 300	< 320	< 360	< 320	< 310	< 360
Metals																
Antimony	mg/kg	NE	27	8200	< 2.1	< 2.0	< 2.1	< 2.1	< 2.0	< 2.1	< 2.0	< 2.1	< 2.4	< 2.1	< 2.0	< 2.4
Arsenic	mg/kg	NE	**10**	**10**	< 1.1	**2.2**	< 1.1	**1.3**	**1.6**	**1.5**	< 1.0	< 1.0	**2.2**	< 1.0	**2.2**	**1.8**
Barium	mg/kg	NE	4700	140000	**40**	**45**	**32**	**68**	**75**	**50**	**47**	**73**	**51**	**67**	**25**	**120**
Beryllium	mg/kg	NE	2	2	< 1.1	< 1.0	< 1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.2	< 1.0	< 1.0	< 1.2
Cadmium	mg/kg	NE	34	1000	< 0.53	**4.2**	< 0.53	< 0.52	< 0.51	< 0.51	< 0.50	< 0.52	< 0.59	< 0.51	< 0.50	< 0.60
Chromium (Total)	mg/kg	NE	100	100	**9.3**	**10**	**22**	**7.4**	**7.4**	**6.7**	**3.9**	**5.2**	**7.2**	**4.7**	**6.5**	**12**
Copper	mg/kg	NE	2500	76000	**15**	**33**	**40**	**11**	**13**	**8.9**	**3.0**	**3.1**	**6.4**	**3.2**	**6.9**	**7.7**
Lead	mg/kg	NE	400	**1000**	**21**	**56**	**24**	**20**	**30**	**18**	< 2.0	< 2.1	**10**	< 2.1	**7.7**	**2.9**
Mercury	mg/kg	NE	20	610	< 0.13	< 0.14	< 0.14	< 0.13	< 0.14	< 0.13	< 0.13	< 0.13	< 0.15	< 0.13	< 0.13	< 0.14
Nickel	mg/kg	NE	1400	7500	**7.2**	**6.6**	**14**	**4.7**	**4.4**	**4.0**	**2.0**	**3.0**	**3.4**	**2.8**	**4.3**	**6.9**
Vanadium	mg/kg	NE	470	14000	**15**	**19**	**15**	**15**	**15**	**10**	**6.9**	**10**	**11**	**11**	**11**	**24**
Zinc	mg/kg	NE	20000	610000	**42**	**49**	**75**	**37**	**37**	**27**	**17**	**23**	**68**	**36**	**30**	**44**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	< 0.0060	< 0.0060	NS	NS	< 0.0060	NS	NS	< 0.0060	< 0.0060	NS	< 0.0060	< 0.0060
Arsenic	mg/l	0.5	NE	NE	< 0.0090	< 0.0090	NS	NS	< 0.0090	NS	NS	< 0.0090	< 0.0090	NS	< 0.0090	< 0.0090
Barium	mg/l	10	NE	NE	**0.64**	**0.30**	NS	NS	**0.29**	NS	NS	**0.20**	**0.15**	NS	**0.18**	**0.21**
Chromium (Total)	mg/l	0.5	NE	NE	< 0.050	< 0.050	NS	NS	< 0.050	NS	NS	< 0.050	< 0.050	NS	< 0.050	< 0.050
Copper	mg/l	13	NE	NE	< 0.040	< 0.040	NS	NS	**0.072**	NS	NS	< 0.040	< 0.040	NS	< 0.040	< 0.040
Lead	mg/l	**0.15**	NE	NE	**0.060**	**0.037**	NS	NS	< 0.013	NS	NS	< 0.013	< 0.013	NS	< 0.013	< 0.013
Zinc	mg/l	50	NE	NE	**0.13**	**0.12**	NS	NS	**0.099**	NS	NS	**0.047**	**0.074**	NS	**0.080**	**0.076**
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.11	< 0.11	< 0.11	< 0.10	< 0.11	< 0.10	< 0.10	< 0.11	< 0.12	< 0.11	< 0.10	< 0.12
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**92**	**92**	**91**	**95**	**92**	**96**	**98**	**93**	**83**	**93**	**96**	**83**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID					NRB-B1	NRB-B1	NRB-B1	SRB-B1	NRB-B1	TRC-B1	TRC-B1	TRC-B1	TRC-B2	TRC-B2	TRC-B2	TRC-B2
Depth Interval					0 - 4 ft	0 - 4 ft	6 - 10 ft	0 - 4 ft	6 - 10 ft	0 - 2 ft	5 - 7 ft	7 - 9 ft	0 - 2 ft	5 - 7 ft	7 - 9 ft	18 - 20 ft
Sample Date	Unit	GBPMC	RDEC	ICDEC	6/10/2020	6/10/2020	6/12/2020	6/10/2020	6/12/2020	8/12/2020	8/14/2020	8/14/2020	8/12/2020	8/14/2020	8/14/2020	8/14/2020
Sample ID					NRB-B1 0-4FT_06/10/20	NRB-B1 0-4FT DUP_06/10/20	NRB-B1 6-10FT_06/12/20	SRB-B1 0-4FT_06/10/20	SRB-B1 6-10FT_06/12/20	TRC-B1 0-2FT_08/12/20	TRC-B1 5-7FT_08/14/20	TRC-B1 7-9FT_08/14/20	TRC-B2 0-2FT_08/12/20	TRC-B2 5-7FT_08/14/20	TRC-B2 7-9FT_08/14/20	TRC-B2 18-20FT_08/14/20
SDG					0060377	0060377	0060466	0060377	0060466	0080310	0080404	0080404	0080310	0080404	0080404	0080404
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 51	< 51	< 56	< 55	< 57	< 52	< 55	< 55	< 52	< 56	< 56	**350**
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.2	< 3.6	< 3.4	< 3.6	< 3.7	< 3.0	< 3.0	< 3.2	< 3.2	< 3.7	< 3.3	< 3.0
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.2	< 3.6	< 3.4	< 3.6	< 3.7	< 3.0	< 3.0	< 3.2	< 3.2	< 3.7	< 3.3	< 3.0
Carbon disulfide	ug/kg	8000	500000	1000000	< 6.4	< 7.2	< 6.9	< 7.2	< 7.3	< 6.1	< 5.9	< 6.4	< 6.4	< 7.3	< 6.6	< 6.1
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 6.4	< 7.2	< 6.9	< 7.2	< 7.3	< 6.1	< 5.9	< 6.4	< 6.4	< 7.3	< 6.6	< 6.1
Naphthalene	ug/kg	56000	1000000	2500000	< 6.4	< 7.2	< 6.9	< 7.2	< 7.3	< 6.1	< 5.9	< 6.4	< 6.4	< 7.3	< 6.6	< 6.1
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.2	< 3.6	< 3.4	< 3.6	< 3.7	< 3.0	< 3.0	< 3.2	< 3.2	< 3.7	< 3.3	< 3.0
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.2	< 3.6	< 3.4	< 3.6	< 3.7	< 3.0	< 3.0	< 3.2	< 3.2	< 3.7	< 3.3	< 3.0
o-Xylene	ug/kg	NE	NE	NE	< 3.2	< 3.6	< 3.4	< 3.6	< 3.7	< 3.0	< 3.0	< 3.2	< 3.2	< 3.7	< 3.3	< 3.0
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.2	< 3.6	< 3.4	< 3.6	< 3.7	< 3.0	< 3.0	< 3.2	< 3.2	< 3.7	< 3.3	< 3.0
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.2	< 3.6	< 3.4	< 3.6	< 3.7	< 3.0	< 3.0	< 3.2	< 3.2	< 3.7	< 3.3	< 3.0
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Acenaphthylene	ug/kg	84000	1000000	2500000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Anthracene	ug/kg	400000	1000000	2500000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Chrysene	ug/kg	**1000**	**84000**	780000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Pyrene	ug/kg	**40000**	1000000	2500000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Carbazole	ug/kg	1000	31000	290000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Dibenzofuran	ug/kg	1400	68000	1000000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 310	< 310	< 340	< 330	< 340	< 310	< 320	< 330	< 310	< 340	< 340	< 330
Metals																
Antimony	mg/kg	NE	27	8200	< 2.0	< 2.1	< 2.3	< 2.1	< 2.3	< 2.0	< 2.2	< 2.0	< 2.1	< 2.3	< 2.2	< 2.0
Arsenic	mg/kg	NE	**10**	**10**	**1.1**	**1.2**	**1.4**	**2.8**	**2.1**	**4.1**	**3.5**	**2.4**	**3.1**	**4.4**	**3.6**	**3.9**
Barium	mg/kg	NE	4700	140000	**16**	**20**	**30**	**30**	**29**	**91**	**50**	**29**	**28**	**55**	**54**	**29**
Beryllium	mg/kg	NE	2	2	< 0.99	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	< 1.0	< 1.1	< 1.1	< 1.0
Cadmium	mg/kg	NE	34	1000	< 0.49	< 0.52	< 0.57	< 0.53	< 0.56	< 0.51	< 0.54	< 0.51	< 0.52	< 0.56	< 0.54	< 0.51
Chromium (Total)	mg/kg	NE	100	100	**4.3**	**4.2**	**5.1**	**6.9**	**5.1**	**14**	**16**	**12**	**14**	**15**	**18**	**9.5**
Copper	mg/kg	NE	2500	76000	**7.1**	**8.7**	**5.2**	**11**	**8.3**	**16**	**17**	**9.0**	**18**	**19**	**13**	**9.1**
Lead	mg/kg	NE	400	**1000**	**3.8**	**5.6**	< 2.3	**14**	**4.2**	**9.8**	**21**	< 2.0	**7.7**	**60**	**2.6**	**4.6**
Mercury	mg/kg	NE	20	610	< 0.13	< 0.12	< 0.14	< 0.14	< 0.14	< 0.13	< 0.14	< 0.14	< 0.13	**0.32**	< 0.14	< 0.14
Nickel	mg/kg	NE	1400	7500	**2.9**	**3.0**	**2.9**	**4.6**	**4.1**	**9.5**	**13**	**8.5**	**11**	**12**	**14**	**7.4**
Vanadium	mg/kg	NE	470	14000	**8.2**	**9.9**	**9.7**	**11**	**9.3**	**20**	**21**	**15**	**20**	**21**	**23**	**13**
Zinc	mg/kg	NE	20000	610000	**13**	**16**	**20**	**25**	**16**	**22**	**27**	**13**	**23**	**51**	**22**	**18**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.10	< 0.10	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	NS	NS	NS	NS	NS	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
4-4'-DDE	ug/kg	10**	1200	16800	NS	NS	NS	NS	NS	< 1.1	< 1.1	< 1.1	< 1.1	**1.8**	< 1.1	< 1.1
4-4'-DDT	ug/kg	**10****	1200	16800	NS	NS	NS	NS	NS	< 1.1	< 1.1	< 1.1	< 1.1	**6.2**	< 1.1	< 1.1
Dieldrin	ug/kg	7	38	360	NS	NS	NS	NS	NS	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Lindane (gamma BHC)	ug/kg	40	20000	610000	NS	NS	NS	NS	NS	< 5.3	< 5.4	< 5.4	< 5.3	< 5.6	< 5.6	< 5.5
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	NS	NS	NS	NS	NS	< 210	< 220	< 220	< 210	< 230	< 230	< 230
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**97**	**97**	**88**	**90**	**88**	**94**	**91**	**90**	**94**	**89**	**88**	**89**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID					TRC-B3	TRC-B3	TRC-B5	TRC-B5	TRC-B6	TRC-B6	TRC-B7	TRC-B7	TRC-B8	TRC-B8	TRC-B9	TRC-B9
Depth Interval					1 - 3 ft	5 - 10 ft	1 - 3 ft	5 - 10 ft	2 - 4 ft	6 - 8 ft	1 - 3 ft	7 - 9 ft	1 - 3 ft	3 - 5 ft	0 - 0 ft	2 - 4 ft
Sample Date	Unit	GBPMC	RDEC	ICDEC	8/12/2020	8/17/2020	8/12/2020	8/14/2020	8/12/2020	8/14/2020	8/12/2020	8/14/2020	8/13/2020	8/13/2020	8/13/2020	8/13/2020
Sample ID					TRC-B3 1-3FT_08/12/20	TRC-B3 5-10FT_08/17/20	TRC-B5 1-3FT_08/12/20	TRC-B5 5-10FT_08/14/20	TRC-B6 2-4FT_08/12/20	TRC-B6 6-8FT_08/14/20	TRC-B7 1-3FT_08/12/20	TRC-B7 7-9FT_08/14/20	TRC-B8 1-3FT_08/13/20	TRC-B8 3-5FT_08/13/20	TRC-B9_08/13/20	TRC-B9 2-4FT_08/13/20
SDG					0080310	0080443	0080310	0080404	0080310	0080404	0080310	0080404	0080346	0080346	0080346	0080346
ETPH-CT																
ETPH-CT	mg/kg	**2500**	**500**	**2500**	< 53	< 59	< 52	< 56	< 51	< 51	**120**	< 51	**83**	< 53	**400**	< 51
VOCs																
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.4	< 3.2	< 3.3	< 3.1	< 3.8	< 3.1	< 3.4	< 3.1	< 3.4	< 3.8	< 3.6	< 3.6
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.4	< 3.2	< 3.3	< 3.1	< 3.8	< 3.1	< 3.4	< 3.1	< 3.4	< 3.8	< 3.6	< 3.6
Carbon disulfide	ug/kg	8000	500000	1000000	< 6.9	< 6.3	< 6.7	< 6.3	< 7.6	< 6.3	< 6.7	< 6.2	< 6.8	< 7.5	< 7.1	< 7.2
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 6.9	< 6.3	< 6.7	< 6.3	< 7.6	< 6.3	< 6.7	< 6.2	< 6.8	< 7.5	< 7.1	< 7.2
Naphthalene	ug/kg	56000	1000000	2500000	< 6.9	< 6.3	< 6.7	< 6.3	< 7.6	< 6.3	< 6.7	< 6.2	< 6.8	< 7.5	< 7.1	< 7.2
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.4	< 3.2	< 3.3	< 3.1	< 3.8	< 3.1	< 3.4	< 3.1	< 3.4	< 3.8	< 3.6	< 3.6
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.4	< 3.2	< 3.3	< 3.1	< 3.8	< 3.1	< 3.4	< 3.1	< 3.4	< 3.8	< 3.6	< 3.6
o-Xylene	ug/kg	NE	NE	NE	< 3.4	< 3.2	< 3.3	< 3.1	< 3.8	< 3.1	< 3.4	< 3.1	< 3.4	< 3.8	< 3.6	< 3.6
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.4	< 3.2	< 3.3	< 3.1	< 3.8	< 3.1	< 3.4	< 3.1	< 3.4	< 3.8	< 3.6	< 3.6
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.4	< 3.2	< 3.3	< 3.1	< 3.8	< 3.1	< 3.4	< 3.1	< 3.4	< 3.8	< 3.6	< 3.6
PAHs																
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Acenaphthylene	ug/kg	84000	1000000	2500000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Anthracene	ug/kg	400000	1000000	2500000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	**330**	< 320	< 330	**340**
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	**420**	< 320	< 330	**420**
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	**320**	< 320	< 330	< 300
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Chrysene	ug/kg	**1000**	**84000**	780000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	**330**	< 320	< 330	**300**
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Fluoranthene	ug/kg	**56000**	1000000	2500000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	**490**	< 320	< 330	**360**
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Pyrene	ug/kg	**40000**	1000000	2500000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	**460**	< 320	< 330	**400**
SVOCs																
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Carbazole	ug/kg	1000	31000	290000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Dibenzofuran	ug/kg	1400	68000	1000000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 310	< 350	< 310	< 330	< 310	< 310	< 310	< 310	< 310	< 320	< 330	< 300
Metals																
Antimony	mg/kg	NE	27	8200	< 2.1	< 2.2	< 2.1	< 2.0	< 1.9	< 1.9	< 2.0	< 1.9	< 2.1	< 2.1	< 2.2	< 2.0
Arsenic	mg/kg	NE	**10**	**10**	**3.1**	**2.9**	**1.8**	**1.6**	**1.8**	**1.5**	**2.6**	**1.6**	**3.8**	**1.2**	**2.0**	**1.5**
Barium	mg/kg	NE	4700	140000	**33**	**45**	**39**	**31**	**20**	**35**	**26**	**53**	**34**	**19**	**22**	**23**
Beryllium	mg/kg	NE	2	2	< 1.0	< 1.1	< 1.0	< 1.0	< 0.96	< 0.97	< 1.0	< 0.96	< 1.0	< 1.1	< 1.1	< 0.99
Cadmium	mg/kg	NE	34	1000	< 0.51	< 0.54	< 0.52	< 0.51	< 0.48	< 0.49	< 0.50	< 0.48	< 0.52	< 0.53	< 0.54	< 0.50
Chromium (Total)	mg/kg	NE	100	100	**7.5**	**7.2**	**10**	**6.3**	**2.7**	**5.8**	**6.1**	**7.3**	**9.3**	**6.2**	**7.3**	**5.3**
Copper	mg/kg	NE	2500	76000	**11**	**26**	**7.1**	**7.7**	**7.8**	**25**	**11**	**18**	**17**	**5.3**	**6.7**	**12**
Lead	mg/kg	NE	400	**1000**	**33**	**200**	**4.4**	**4.7**	**3.2**	**2.3**	**32**	**2.4**	**37**	**3.1**	**6.4**	**19**
Mercury	mg/kg	NE	20	610	< 0.13	**0.37**	< 0.13	< 0.13	< 0.13	< 0.13	< 0.12	< 0.13	< 0.13	< 0.13	< 0.13	< 0.12
Nickel	mg/kg	NE	1400	7500	**5.4**	**4.6**	**5.5**	**4.0**	**2.4**	**5.5**	**5.4**	**8.0**	**6.8**	**3.6**	**5.0**	**5.1**
Vanadium	mg/kg	NE	470	14000	**13**	**12**	**15**	**11**	**10**	**11**	**12**	**14**	**15**	**8.5**	**8.7**	**9.7**
Zinc	mg/kg	NE	20000	610000	**31**	**46**	**19**	**18**	**13**	**22**	**32**	**24**	**30**	**12**	**17**	**22**
Metals-SPLP																
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide																
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs																
Total PCBs	mg/kg	NE	1	10	< 0.11	< 0.12	< 0.10	< 0.11	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.11	< 0.11	< 0.10
Pesticides																
4-4'-DDD	ug/kg	10**	1700	23800	< 1.1	< 1.2	< 1.0	< 1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.1	< 1.1	< 1.0
4-4'-DDE	ug/kg	10**	1200	16800	< 1.1	< 1.2	< 1.0	< 1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.1	< 1.1	< 1.0
4-4'-DDT	ug/kg	**10****	1200	16800	< 1.1	< 1.2	< 1.0	< 1.1	< 1.0	< 1.0	< 1.0	< 1.0	**7.6**	< 1.1	< 1.1	**3.1**
Dieldrin	ug/kg	7	38	360	< 1.1	< 1.2	< 1.0	< 1.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.1	< 1.1	< 1.0
Lindane (gamma BHC)	ug/kg	40	20000	610000	< 5.3	< 5.8	< 5.2	< 5.5	< 5.1	< 5.0	< 5.2	< 5.1	< 5.2	< 5.3	< 5.4	< 5.1
Herbicides																
Total Herbiceds	ug/kg	NE	NE	NE	< 210	< 230	< 210	< 220	< 210	< 200	< 210	< 210	< 210	< 210	< 220	< 200
Reactivity																
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other																
% Solids	%	NE	NE	NE	**94**	**85**	**96**	**89**	**97**	**98**	**97**	**97**	**95**	**93**	**92**	**98**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 2
SOIL ANALYTICAL RESULTS
PHASE I I I ESA
STATE PIER, NEW LONDON, CT

Location ID					TRC-B10	TRC-B10	TRC-B11	WH1-B1	WH1-B1	WH1-B2	WH1-B3	WH1-B3	WH1-B4	WH2-B2
Depth Interval					0 - 2 ft	5 - 10 ft	0 - 2 ft	0 - 4 ft	4 - 8 ft	5 - 9 ft	0 - 4 ft	5 - 9 ft	0 - 4 ft	0 - 4 ft
Sample Date	Unit	GBPMC	RDEC	ICDEC	8/13/2020	8/14/2020	8/13/2020	6/5/2020	6/12/2020	6/12/2020	6/10/2020	6/12/2020	6/15/2020	6/11/2020
Sample ID					TRC-B10 0-2FT_08/13/20	TRC-B10 5-10FT_08/14/20	TRC-B11 0-2FT_08/13/20	WH1-B1 0-4FT_06/05/20	WH1-B1 4-8FT_06/12/20	WH1-B2 5-9FT_06/12/20	WH1-B3 0-4FT_06/10/20	WH1-B3 5-9FT_06/12/20	WH1-B4 0-4FT_06/15/20	WH2-B2 0-4FT_06/11/20
SDG					0080346	0080404	0080346	0060232	0060466	0060466	0060377	0060466	0060467	0060413
ETPH-CT														
ETPH-CT	mg/kg	**2500**	**500**	**2500**	**230**	**550**	< 54	< 51	< 53	< 53	< 52	< 55	< 52	< 51
VOCs														
1,2,4-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.6	< 3.1	< 3.2	< 3.6	< 4.1	< 4.2	< 3.3	< 4.0	< 3.8	< 3.4
1,3,5-Trimethylbenzene	ug/kg	28000	500000	1000000	< 3.6	< 3.1	< 3.2	< 3.6	< 4.1	< 4.2	< 3.3	< 4.0	< 3.8	< 3.4
Carbon disulfide	ug/kg	8000	500000	1000000	< 7.1	< 6.2	< 6.5	< 7.3	< 8.3	< 8.4	< 6.5	< 8.1	< 7.5	< 6.9
M,P-XYLENE (SUM OF ISC	ug/kg	NE	NE	NE	< 7.1	< 6.2	< 6.5	< 7.3	< 8.3	< 8.4	< 6.5	< 8.1	< 7.5	< 6.9
Naphthalene	ug/kg	56000	1000000	2500000	< 7.1	< 6.2	< 6.5	< 7.3	< 8.3	< 8.4	< 6.5	< 8.1	< 7.5	< 6.9
n-Butylbenzene	ug/kg	70000	500000	1000000	< 3.6	< 3.1	< 3.2	< 3.6	< 4.1	< 4.2	< 3.3	< 4.0	< 3.8	< 3.4
n-Propylbenzene	ug/kg	10000	500000	1000000	< 3.6	< 3.1	< 3.2	< 3.6	< 4.1	< 4.2	< 3.3	< 4.0	< 3.8	< 3.4
o-Xylene	ug/kg	NE	NE	NE	< 3.6	< 3.1	< 3.2	< 3.6	< 4.1	< 4.2	< 3.3	< 4.0	< 3.8	< 3.4
p-Isopropyl toluene (p-Cymen	ug/kg	5000	500000	1000000	< 3.6	< 3.1	< 3.2	< 3.6	< 4.1	< 4.2	< 3.3	< 4.0	< 3.8	< 3.4
sec-Butylbenzene	ug/kg	70000	500000	1000000	< 3.6	< 3.1	< 3.2	< 3.6	< 4.1	< 4.2	< 3.3	< 4.0	< 3.8	< 3.4
PAHs														
2-Methylnaphthalene	ug/kg	**5600**	**270000**	1000000	< 310	< 320	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Acenaphthene	ug/kg	**84000**	1000000	2500000	< 310	< 320	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Acenaphthylene	ug/kg	84000	1000000	2500000	< 310	< 320	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Anthracene	ug/kg	400000	1000000	2500000	< 310	**360**	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Benzo(a)anthracene	ug/kg	**1000**	**1000**	**7800**	**330**	**890**	< 320	< 300	< 310	**330**	< 310	< 330	< 310	< 310
Benzo(a)pyrene	ug/kg	**1000**	**1000**	**1000**	**400**	**990**	< 320	< 300	< 310	**350**	< 310	< 330	< 310	< 310
Benzo(b)fluoranthene	ug/kg	**1000**	**1000**	**7800**	**560**	**990**	**440**	< 300	**390**	**430**	< 310	< 330	< 310	< 310
Benzo(g,h,i)perylene	ug/kg	**1000**	**8400**	78000	**370**	**810**	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Benzo(k)fluoranthene	ug/kg	**1000**	8400	78000	< 310	**540**	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Chrysene	ug/kg	**1000**	**84000**	780000	**370**	**920**	< 320	< 300	**320**	**350**	< 310	< 330	< 310	< 310
Dibenzo(a,h)anthracene	ug/kg	**1000**	**1000**	**1000**	< 310	< 320	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Fluoranthene	ug/kg	**56000**	1000000	2500000	**540**	**1800**	< 320	< 300	**530**	**660**	< 310	< 330	< 310	< 310
Fluorene	ug/kg	**56000**	1000000	2500000	< 310	< 320	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Indeno(1,2,3-c,d)pyrene	ug/kg	**1000**	**1000**	**7800**	< 310	**600**	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Naphthalene	ug/kg	**56000**	1000000	2500000	< 310	< 320	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Phenanthrene	ug/kg	**40000**	**1000000**	2500000	< 310	**1200**	< 320	< 300	**340**	**530**	< 310	< 330	< 310	< 310
Pyrene	ug/kg	**40000**	1000000	2500000	**590**	**1700**	< 320	< 300	**410**	**570**	< 310	< 330	< 310	< 310
SVOCs														
Bis(2-ethylhexyl)phthalate	ug/kg	11000	44000	410000	< 310	< 320	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Butyl benzyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 320	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Carbazole	ug/kg	1000	31000	290000	< 310	< 320	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Dibenzofuran	ug/kg	1400	68000	1000000	< 310	< 320	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Dimethyl phthalate	ug/kg	200000	1000000	2500000	< 310	< 320	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Di-n-octyl phthalate	ug/kg	20000	1000000	2500000	< 310	< 320	< 320	< 300	< 310	< 310	< 310	< 330	< 310	< 310
Metals														
Antimony	mg/kg	NE	27	8200	< 2.0	< 2.1	< 2.1	< 1.9	< 2.0	< 2.1	< 2.0	< 2.1	< 2.0	< 2.0
Arsenic	mg/kg	NE	**10**	**10**	**2.4**	**2.1**	**3.5**	**4.0**	**3.9**	**3.2**	**3.4**	**3.5**	**5.3**	**4.1**
Barium	mg/kg	NE	4700	140000	**30**	**37**	**25**	**38**	**72**	**61**	**48**	**42**	**39**	**41**
Beryllium	mg/kg	NE	2	2	< 1.0	< 1.1	< 1.1	< 0.97	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cadmium	mg/kg	NE	34	1000	< 0.50	< 0.53	< 0.53	< 0.49	< 0.50	< 0.52	< 0.51	< 0.51	< 0.51	< 0.51
Chromium (Total)	mg/kg	NE	100	100	**6.0**	**11**	**9.0**	**11**	**11**	**9.5**	**22**	**10**	**11**	**13**
Copper	mg/kg	NE	2500	76000	**8.9**	**12**	**16**	**10**	**15**	**38**	**10**	**15**	**13**	**15**
Lead	mg/kg	NE	400	**1000**	**22**	**17**	**39**	**3.2**	**57**	**110**	**3.6**	**8.6**	**4.3**	**3.7**
Mercury	mg/kg	NE	20	610	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.12	< 0.14	< 0.13	< 0.13
Nickel	mg/kg	NE	1400	7500	**4.6**	**8.4**	**5.7**	**8.0**	**6.3**	**7.2**	**16**	**7.2**	**8.5**	**10**
Vanadium	mg/kg	NE	470	14000	**12**	**21**	**15**	**14**	**15**	**26**	**16**	**16**	**16**	**17**
Zinc	mg/kg	NE	20000	610000	**32**	**32**	**35**	**22**	**64**	**160**	**24**	**22**	**23**	**31**
Metals-SPLP														
Antimony	mg/l	0.06	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/l	10	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Total)	mg/l	0.5	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/l	13	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/l	**0.15**	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/l	50	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyanide														
Cyanide	mg/kg	NE	1400	41000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs														
Total PCBs	mg/kg	NE	1	10	< 0.10	< 0.11	< 0.11	< 0.10	< 0.10	< 0.11	< 0.10	< 0.11	< 0.10	< 0.10
Pesticides														
4-4'-DDD	ug/kg	10**	1700	23800	< 1.0	< 1.1	< 1.1	NS	NS	NS	NS	NS	NS	NS
4-4'-DDE	ug/kg	10**	1200	16800	< 1.0	< 1.1	< 1.1	NS	NS	NS	NS	NS	NS	NS
4-4'-DDT	ug/kg	**10****	1200	16800	**6.1**	**7.8**	**2.7**	NS	NS	NS	NS	NS	NS	NS
Dieldrin	ug/kg	7	38	360	< 1.0	< 1.1	< 1.1	NS	NS	NS	NS	NS	NS	NS
Lindane (gamma BHC)	ug/kg	40	20000	610000	< 5.1	< 5.3	< 5.3	NS	NS	NS	NS	NS	NS	NS
Herbicides														
Total Herbiceds	ug/kg	NE	NE	NE	< 210	< 220	< 220	NS	NS	NS	NS	NS	NS	NS
Reactivity														
CYANIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SULFIDE, REACTIVE	mg/kg	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Other														
% Solids	%	NE	NE	NE	**96**	**92**	**93**	**98**	**94**	**95**	**96**	**92**	**96**	**97**
pH	su	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Flash Point	°F	NE	NE	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
GBPMC = Pollution Mobiliy Criteria
RDEC = Residential Direct Exposure Criteria
ICDEC = Industrial/Commercial Direct Exposure Criteria
Yellow highlighted values exceed GBPMC
Blue highlighted values exceed RDEC
Green highlighted values exceed ICDEC
ug/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
< = Constituent not detected at listed concentration
NA = Not analyzed for this constituent
NE = Not Established
** - indicated criteria is from the CT DEEP Draft Proposed RSRs dated August 11, 2008.

TABLE 3
Groundwater Analytical Data
Phase III ESA
State Pier New London, CT
September 2020

Location ID Sample Date Sample ID SDG	RGWVC	ICGWVC	SWPC	MW-01 4/9/2020 MW-1_04/09/20 0040242	MW-01 6/25/2020 MW-1_06/25/20 0060717	MW-03 4/9/2020 MW-3_04/09/20 0040242	MW-03 6/26/2020 MW-3_06/26/20 0060752	MW-04 4/9/2020 MW-4_04/09/20 0040242	MW-04 6/26/2020 MW-4_06/26/20 0060752	MW-05 4/14/2020 MW-5_04/14/20 0040348	MW-05 6/26/2020 MW-5_06/26/20 0060752	MW-06 4/9/2020 MW-6_04/09/20 0040242	MW-06 6/29/2020 MW-6_06/29/20 0060780	MW-07 4/14/2020 MW-7_04/14/20 0040348	MW-07 6/26/2020 MW-7_06/26/20 0060752	MW-08 4/14/2020 MW-8_04/14/20 0040348	MW-08 4/14/2020 MW-8 DUP_04/14/20 0040348
CT ETPH (mg/l)																	
ETPH-CT	NE	NE	0.25	**0.78**	**1.3**	**5.8**	**4.1**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	**0.14**	< 0.10	**0.64**	**0.72**
VOCs (ug/l)																	
1,2,4-Trimethylbenzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	50000	50000	580000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropyl benzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
M,P-XYLENE (SUM OF ISOMERS)	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	NE	NE	NE	< 1.0	< 1.0	**350**	**140**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Butylbenzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyl toluene (p-Cymene)	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	1500	3820	88	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
SVOCs (ug/l)																	
2-Methylnaphthalene	NE	NE	62 *	< 1.0	< 1.0	**280**	**430**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Acenaphthene	NE	NE	150 *	**2.6**	**3.2**	**470**	**590**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**1.3**	**1.2**
Acenaphthylene	NE	NE	0.3	< 0.30	< 0.30	**8.7**	**8.1**	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30
Anthracene	NE	NE	1100000	< 1.0	< 1.0	**26**	**32**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzo(a)anthracene	NE	NE	0.3	< 0.060	**0.25**	**2.0**	**1.4**	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060
Benzo(a)pyrene	NE	NE	0.3	< 0.20	< 0.20	**0.43**	**0.33**	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Benzo(b)fluoranthene	NE	NE	0.3	< 0.080	< 0.080	**0.66**	**0.53**	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080
Benzo(k)fluoranthene	NE	NE	0.3	< 0.30	< 0.30	**0.38**	**0.35**	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30
Carbazole	NE	NE	53 *	< 1.0	< 1.0	**170**	**240**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chrysene	NE	NE	0.54 *	< 0.50	< 0.50	**1.2**	**1.2**	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran	NE	NE	40 *	< 4.0	< 4.0	**350**	**450**	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Fluoranthene	NE	NE	3700	< 1.0	< 1.0	**34**	**36**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Fluorene	NE	NE	140000	**1.3**	**1.4**	**220**	**260**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**2.1**	**2.0**
Indeno(1,2,3-c,d)pyrene	NE	NE	0.54 *	< 0.10	< 0.10	**0.16**	**0.13**	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Naphthalene	NE	NE	210 *	< 1.0	< 1.0	**120**	**94**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Phenanthrene	NE	NE	14 *	**0.44**	**0.67**	**260**	**310**	< 0.077	< 0.077	< 0.077	< 0.077	< 0.077	< 0.077	< 0.077	< 0.077	< 0.077	< 0.077
Pyrene	NE	NE	110000	< 1.0	< 1.0	**17**	**19**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Metals (mg/l)																	
Arsenic	NE	NE	**0.004**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	**0.017**	< 0.0040	< 0.0040
Barium	NE	NE	NE	**0.80**	**1.4**	**0.052**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Lead	NE	NE	0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013
Zinc	NE	NE	**0.123**	< 0.020	< 0.020	**0.033**	< 0.020	< 0.020	< 0.020	**0.030**	**0.16**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
PCBs (ug/l)																	
Total PCBs	NE	NE	0.5	< 0.10	NS	< 0.10	NS	< 0.10	NS	< 0.10	NS	< 0.10	NS	< 0.10	NS	< 0.10	< 0.10

Notes:
RGWVC = 2013 Residential Volatilization Criteria for Ground water
ICGWVC = 2013 Industrial/Commercial Volatilization Criteria
SWPC = 2013 Surface-Water ProtectionCriteria
Blue highlighted values exceed RES VC
Green highlighted values exceed IC VC
Orange highlighted values exceed SWPC
ug/l = Micrograms per liter
mg/l= Milligrams per liter
< = Constituent not detected at listed concentration
NE = Not Established
* SWPC include criteria from the CT DEEP Request For Approval of Criteria For Additonal Polluting Substances and Certain Alternative Criteria, CT DEEP Form DEEP-REM-FASTAPS.

TABLE 3
Groundwater Analytical Data
Phase III ESA
State Pier New London, CT
September 2020

Location ID Sample Date Sample ID SDG	RGWVC	ICGWVC	SWPC	MW-08 6/26/2020 MW-8_06/26/20 0060752	MW-09 6/26/2020 MW-9_06/26/20 0060752	MW-10 6/29/2020 MW-10_06/29/20 0060780	MW-11 6/26/2020 MW-11_06/26/20 0060752	MW-12 6/26/2020 MW-12_06/26/20 0060752	MW-13 6/26/2020 MW-13_06/26/20 0060752	MW-14 6/25/2020 MW-14_06/25/20 0060717	MW-14 6/25/2020 MW-14 DUP_06/25/20 0060717	MW-15 6/25/2020 MW-15_06/25/20 0060717	MW-16 6/25/2020 MW-16_06/25/20 0060717	MW-17 6/25/2020 MW-17_06/25/20 0060717	MW-18 6/25/2020 MW-18_06/25/20 0060717	MW-19 6/24/2020 MW-19_06/24/20 0060673	MW-20 6/24/2020 MW-20_06/24/20 0060673
CT ETPH (mg/l)																	
ETPH-CT	NE	NE	0.25	**0.41**	< 0.10	< 0.10	**0.44**	< 0.10	< 0.10	**0.53**	**0.55**	**3.4**	**0.70**	< 0.10	< 0.10	< 0.10	< 0.10
VOCs (ug/l)																	
1,2,4-Trimethylbenzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**34**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	50000	50000	580000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**26**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropyl benzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**3.2**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
M,P-XYLENE (SUM OF ISOMERS)	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**230**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Butylbenzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**3.1**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**7.8**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**1.5**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyl toluene (p-Cymene)	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**1.7**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**1.7**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	1500	3820	88	< 1.0	< 1.0	**4.8**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
SVOCs (ug/l)																	
2-Methylnaphthalene	NE	NE	62 *	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**250**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Acenaphthene	NE	NE	150 *	**1.4**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**2.2**	**2.8**	**7.4**	**2.6**	< 1.0	< 1.0	< 1.0	< 1.0
Acenaphthylene	NE	NE	0.3	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	**1.2**	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30
Anthracene	NE	NE	1100000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**1.2**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzo(a)anthracene	NE	NE	0.3	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060
Benzo(a)pyrene	NE	NE	0.3	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Benzo(b)fluoranthene	NE	NE	0.3	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080
Benzo(k)fluoranthene	NE	NE	0.3	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30
Carbazole	NE	NE	53 *	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**2.4**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chrysene	NE	NE	0.54 *	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran	NE	NE	40 *	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Fluoranthene	NE	NE	3700	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Fluorene	NE	NE	140000	**2.3**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**1.7**	**1.9**	**7.3**	**2.8**	< 1.0	< 1.0	< 1.0	< 1.0
Indeno(1,2,3-c,d)pyrene	NE	NE	0.54 *	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Naphthalene	NE	NE	210 *	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**170**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Phenanthrene	NE	NE	14 *	< 0.077	< 0.077	< 0.077	< 0.077	< 0.077	< 0.077	**0.85**	**1.0**	**8.1**	**0.93**	< 0.077	< 0.077	< 0.077	< 0.077
Pyrene	NE	NE	110000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Metals (mg/l)																	
Arsenic	NE	NE	**0.004**	**0.0074**	< 0.0040	< 0.0040	**0.0089**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Barium	NE	NE	NE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.34**	**0.34**	**0.43**	**1.1**	< 0.050	**0.070**	**0.091**	**0.40**
Lead	NE	NE	0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013
Zinc	NE	NE	**0.123**	< 0.020	< 0.020	**0.17**	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**0.044**	< 0.020	**0.039**
PCBs (ug/l)																	
Total PCBs	NE	NE	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
RGWVC = 2013 Residential Volatilization Criteria for Ground water
ICGWVC = 2013 Industrial/Commercial Volatilization Criteria
SWPC = 2013 Surface-Water ProtectionCriteria
Blue highlighted values exceed RES VC
Green highlighted values exceed IC VC
Orange highlighted values exceed SWPC
ug/l = Micrograms per liter
mg/l= Milligrams per liter
< = Constituent not detected at listed concentration
NE = Not Established
* SWPC include criteria from the CT DEEP Request For Approval of Criteria For Additonal Polluting Substances and Certain Alternative Criteria, CT DEEP Form DEEP-REM-FASTAPS.

TABLE 3
Groundwater Analytical Data
Phase III ESA
State Pier New London, CT
September 2020

Location ID **Sample Date** **Sample ID** **SDG**	**RGWVC**	**ICGWVC**	**SWPC**	**MW-21** **6/25/2020** **MW-21_06/25/20** **0060717**	**MW-22** **6/24/2020** **MW-22_06/24/20** **0060673**	**MW-23** **8/25/2020** **MW-23_08/25/20** **0080703**	**MW-24** **8/25/2020** **MW-24_08/25/20** **0080703**
CT ETPH (mg/l)							
ETPH-CT	NE	NE	0.25	< 0.10	< 0.10	**0.25**	**1.4**
VOCs (ug/l)							
1,2,4-Trimethylbenzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	50000	50000	580000	< 1.0	< 1.0	< 1.0	< 1.0
Isopropyl benzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0
M,P-XYLENE (SUM OF ISOMERS)	NE	NE	NE	**1.6**	< 1.0	< 1.0	< 1.0
Naphthalene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0
n-Butylbenzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	NE	NE	NE	**2.6**	< 1.0	< 1.0	< 1.0
p-Isopropyl toluene (p-Cymene)	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NE	NE	NE	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	1500	3820	88	< 1.0	< 1.0	< 1.0	< 1.0
SVOCs (ug/l)							
2-Methylnaphthalene	NE	NE	62 *	< 1.0	< 1.0	< 1.0	< 1.0
Acenaphthene	NE	NE	150 *	< 1.0	< 1.0	< 1.0	< 1.0
Acenaphthylene	NE	NE	0.3	< 0.30	< 0.30	< 0.30	< 0.30
Anthracene	NE	NE	1100000	< 1.0	< 1.0	< 1.0	< 1.0
Benzo(a)anthracene	NE	NE	0.3	< 0.060	< 0.060	< 0.060	< 0.060
Benzo(a)pyrene	NE	NE	0.3	< 0.20	< 0.20	< 0.20	< 0.20
Benzo(b)fluoranthene	NE	NE	0.3	< 0.080	< 0.080	< 0.080	< 0.080
Benzo(k)fluoranthene	NE	NE	0.3	< 0.30	< 0.30	< 0.30	< 0.30
Carbazole	NE	NE	53 *	< 1.0	< 1.0	< 1.0	< 1.0
Chrysene	NE	NE	0.54 *	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran	NE	NE	40 *	< 4.0	< 4.0	< 4.0	< 4.0
Fluoranthene	NE	NE	3700	< 1.0	< 1.0	< 1.0	< 1.0
Fluorene	NE	NE	140000	< 1.0	< 1.0	**1.0**	< 1.0
Indeno(1,2,3-c,d)pyrene	NE	NE	0.54 *	< 0.10	< 0.10	< 0.10	< 0.10
Naphthalene	NE	NE	210 *	< 1.0	< 1.0	< 1.0	< 1.0
Phenanthrene	NE	NE	14 *	< 0.077	< 0.077	**0.69**	< 0.077
Pyrene	NE	NE	110000	< 1.0	< 1.0	< 1.0	< 1.0
Metals (mg/l)							
Arsenic	NE	NE	**0.004**	**0.0069**	**0.0087**	**0.0097**	**0.018**
Barium	NE	NE	NE	**1.8**	**0.16**	**0.26**	**0.29**
Lead	NE	NE	0.013	< 0.013	< 0.013	< 0.013	**0.026**
Zinc	NE	NE	**0.123**	< 0.020	**0.030**	**0.088**	**0.081**
PCBs (ug/l)							
Total PCBs	NE	NE	0.5	NS	NS	NS	NS

Notes:
RGWVC = 2013 Residential Volatilization Criteria for Ground water
ICGWVC = 2013 Industrial/Commercial Volatilization Criteria
SWPC = 2013 Surface-Water ProtectionCriteria
Blue highlighted values exceed RES VC
Green highlighted values exceed IC VC
Orange highlighted values exceed SWPC
ug/l = Micrograms per liter
mg/l= Milligrams per liter
< = Constituent not detected at listed concentration
NE = Not Established
* SWPC include criteria from the CT DEEP Request For Approval of Criteria For Additonal Polluting Substances and Certain Alternative Criteria, CT DEEP Form DEEP-REM-FASTAPS.

APPENDIX C

AECOM Phase II/III Investigation Boring Logs

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC1-B5A Well ID No.: Sheet 1 of 1

Boring Location:	AOC1-B5A: 41° 21' 41.137" N, 72° 05' 24.908" W		AECOM Project Manager:	Mike Garbolski	Project Number:	60579714
Ground Elevation:			Date Started:	6/9/2020	Date Completed:	6/12/2020
Depth to First Water:	8	feet BGS	Drill Type:	Hand Cleared/Direct Push		
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT		
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical		
Sampler		Notes:	Driller's Name:	Rob, Ryan, Dan, Frank		
Type: Geoprobe		Sample for total and SPLP lead, no VOCs	AECOM Representative:	Jordan Trezinski, Max Meadows, Dan Kielbanea		
Hammer: NA			Owner/Client Rep.:			
Fall: NA						

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	3" Asphalt, 2" processed gravel		
-1-			AOC1-B5A (0.5-2)	2.7	Medium brown graded SAND, trace coarse gravel, some silt, moist	Fill	
-2-				3.6	Medium brown graded SAND, some coarse gravel, some silt, moist	Fill	
-3-		Vacuum/ Hand Clear	AOC1-B5A (2-4)	5.9	Medium brown medium SAND, trace coarse sand with gravel, some silt, moist	Fill	
-4-				7.1	Medium gray graded SAND, trace coarse gravel, trace silt, moist	Fill	
-5-			AOC1-B5A (4-6)	1.7	Medium brown graded SAND, trace fine gravel, trace silt, moist	SW	
-6-				2.1			
-7-		36/48"	AOC1-B5A (6-8)	1.7	Medium brown graded SAND, trace fine gravel, trace silt, saturated	SW	
-8-							
-9-			AOC1-B5A (8-10)	225.2	Medium brown graded SAND, trace fine gravel, trace silt, weathered petroleum odor, saturated	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC1-B7 Well ID No.: Sheet 1 of 1

Boring Location: AOC1-B7: 41° 21' 43.827 " N, 72° 05' 22.467" W	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/5/2020	Date Completed: 6/10/2020
Depth to First Water: 7 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Ryan, Dan, Frank	
Notes: Samples mislabeled as AOC6, corrected to AOC1	AECOM Representative:	Max Meadows, Dan Kielbanea	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	3" Asphalt, 2" processed gravel		
-1-				0.0	6" Asphalt	Fill	
-2-		Vacuum/ Hand Clear	AOC1-B7 (1-2)	1.1	Dark brown fine to medium graded rounded SAND with fine to coarse angular gravel, some brick, trace silt, dry	Fill	
-3-			AOC1-B7 (2-4)	1.0	Medium to dark brown fine to coarse graded rounded SAND and full size BRICKS, some fine angular gravel, trace silt, moist	Fill	
-4-				1.1			
-5-			AOC1-B7 (4-6)	3.2	Medium to dark brown fine to coarse graded rounded SAND, some fine angular gravel, trace silt, trace bricks, moist	Fill	
-6-		36/48"					
-7-			AOC1-B7 (6-8)	2.7	Light brown fine SAND, trace silt, trace sub-rounded gravel, saturated	SP	▼
-8-							
-9-					End of boring at 8ft		
-10-							
-11-							
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: AOC1-B8
Well ID No.: MW-14
Sheet 1 of 1

Boring Location: AOC1-B8: 41° 21' 43.845" N, 72° 05' 23.574" W		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/8/2020
Depth to First Water:	12.5 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	11.5 feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Rob, Ryan, Dan, Frank
Type: Geoprobe	Set well on 6/10/20	AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

Project Number: 60579714
Date Completed: 6/10/2020

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	3" Asphalt, 2" asphalt base (processed gravel)		
-1-		Vacuum/ Hand Clear	AOC1-B8 (0.5-2)	0.6	Medium brown fine to coarse graded rounded SAND, some fine to coarse graded rounded gravel, some silt, moist	Fill	
-2-				1.0	Medium brown fine to medium graded rounded SAND, some fine to coarse graded rounded gravel, little silt, trace glass, moist	Fill	
-3-			AOC1-B8 (2-4)	0.5	Medium brown fine to medium graded rounded SAND, some fine to coarse gravel, trace silt, dry	Fill	
-4-				0.8	Medium brown fine to medium graded rounded SAND, some fine to coarse gravel, trace silt, moist	Fill	
-5-			AOC1-B8 (4-6)	0.5			
-6-				0.6	Light brown fine to coarse graded rounded SAND, some fine to coarse gravel, moist	SW	
-7-		48/48"	AOC1-B8 (6-8)	5.7	Dark brown silty SAND, trace sub-rounded gravel, moist	SM	
-8-							
-9-			AOC1-B8 (8-10)	3.7	Light brown SAND and GRAVEL, trace cobbles, moist	SW	
-10-							
-11-		48/48"	AOC1-B8 (10-12)	4.3	Dark brown silty SAND, trace sub-rounded gravel, moist	SM	
-12-							
-13-			AOC1-B8 (12-14)	3.7			
-14-							
-15-		48/48"		2.4	Pulverized granite, saturated, sheen test positive		
-16-							
-17-				350			
-18-					End of boring at 18ft		
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC1-B9 Well ID No.: Sheet 1 of 1

Boring Location: AOC1-B9: 41° 21' 43.030" N, 72° 05' 24.114" W			AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:			Date Started:	6/8/2020	Date Completed: 6/11/2020
Depth to First Water:	9	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes: AOC1-B9 (4-6) collected with geoprobe		Driller's Name:	Rob, Ryan, Dan, Frank	
			AECOM Representative:	Max Meadows, Dan Kielbanea	
			Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	3" Asphalt, 2" processed gravel		
-1-			AOC1-B9 (0.5-1)	1.1	Medium dark brown fine to coarse graded SAND with sub-angular with fine to coarse subangular gravel, trace silt, trace nails, dry	Fill	
-2-		Vacuum/ Hand Clear		0	Concrete		
-3-			AOC1-B9 (2-4)	0.8	Medium brown medium to coarse graded rounded SAND with fine to coarse gravel, trace silt, dry	Fill	
-4-				0.9			
-5-		24/24"	AOC1-B9 (4-6)	0.2	Medium brown medium to coarse graded rounded SAND with fine to coarse gravel, trace silt, moist	Fill	
-6-							
-7-			AOC1-B9 (6-8)	0.7			
-8-		48/48"					
-9-			AOC1-B9 (8-10)	2.8	Light brown silty SAND, some sub-rounded gravel, saturated	SM	▼
-10-							
-11-			AOC1-B9 (10-12)	2	Dark brown silty SAND, some sub-rounded gravel, saturated	SM	
-12-		48/48"					
-13-			AOC1-B9 (12-14)		Dark brown silty SAND, some sub-rounded gravel, saturated, petroleum odor, sheen test negative	SM	
-14-							
-15-					End of boring at 14ft		
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC1-B10 Well ID No.: Sheet 1 of 1

Boring Location: AOC1-B10: 41° 21' 42.640" N, 72° 05' 23.237" W			AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:			Date Started:	6/9/2020	Date Completed: 6/11/2020
Depth to First Water:	7	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes: Second VOC sample collected with geoprobe		Driller's Name:	Rob, Ryan, Dan, Frank	
			AECOM Representative:	Max Meadows, Dan Kielbanea	
			Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	3" Asphalt, 2" processed gravel		
-1-		Vacuum/ Hand Clear	AOC1-B10 (0.5-2)	0.8	Medium brown medium SAND, trace coarse sand, some fine sand with gravel, moist	Fill	
-2-				0.9	Dark brown medium SAND, trace coarse sand, some fine sand, trace fine to coarse gravel, some silt, trace asphalt, moist	Fill	
-3-			AOC1-B10 (2-4)	0.8		Fill	
-4-				0.6	Light to medium brown gravelly SAND, some silt, some fill (asphalt, concrete) pieces ~1cm, moist	Fill	
-5-			AOC1-B10 (4-6)	4.1			
-6-				4.6		Fill	
-7-		48/48"	AOC1-B10 (6-8)	0.7	Dark brown silty SAND, trace sub-rounded gravel, saturated	SM	▼
-8-							
-9-			AOC1-B10 (8-10)	15.6	Dark brown silty SAND, trace sub-rounded gravel, petroleum staining and odor, saturated	SM	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC1-B11 Well ID No.: Sheet 1 of 1

Boring Location: AOC1-B11: 41° 21' 41.738" N, 72° 05' 23.877" W			AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:			Date Started:	6/8/2020	Date Completed: 6/11/2020
Depth to First Water:	7	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes: Need second VOC sample at deeper interval		Driller's Name:	Rob, Ryan, Dan, Frank	
			AECOM Representative:	Max Meadows, Dan Kielbanea	
			Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	3" Asphalt, 2" processed gravel		
-1-		Vacuum/ Hand Clear	AOC1-B11 (0.5-2) VOCs Duplicate	3.3	Medium brown fine to medium SAND, some fine to coarse gravel, trace silt, trace brick, moist	Fill	
-2-				0.4		Fill	
-3-			AOC1-B11 (2-4)	2.4	Medium brown medium SAND, some fine gravel, trace coarse gravel, moist	Fill	
-4-				3.6 1.8	Medium brown/ black graded SAND, some fine gravel, trace fill (crushed asphalt, brick), moist	Fill	
-5-			AOC1-B11 (4-6) MS/MSD	1.9 2.5			
-6-				2.2	Medium brown medium SAND, trace fine gravel, trace silt, moist	Fill	
-7-		24/48"			No recovery		
-8-							
-9-			AOC1-B11 (8-10)	11.7	Dark brown fine to medium graded SAND, trace sub-angular gravel, trace silt, moist	SW	
-10-							
-11-		48/48"	AOC1-B11 (10-12)	95	Dark brown SAND and GRAVEL, weathered petroleum staining and odor, saturated	SW	
-12-							
-13-				5.7			
-14-							
-15-					End of boring at 14ft		
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: AOC1-B12
Well ID No.: MW-15
Sheet 1 of 1

Boring Location: AOC1-B12: 41° 21' 42.105" N, 72° 05' 24.676" W	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/8/2020	Date Completed: 6/11/2020
Depth to First Water: 9 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: 9 feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler	Driller's Name:	Rob, Ryan, Dan, Frank	
Type: Geoprobe	AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski	
Hammer: NA	Owner/Client Rep.:		
Fall: NA			

Notes:

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	3" Asphalt, 2" asphalt base (processed gravel)		
-1-		Vacuum/ Hand Clear	AOC1-B12 (0.5-2)	1.5	Medium brown graded SAND with fine gravel, trace coarse gravel, trace brick, trace silt, moist	Fill	
-2-				1.4			
-3-			AOC1-B12 (2-4) VOCs Duplicate MS/MSD	25.7	Dark brown medium to coarse SAND with fine to coarse gravel, trace silt, moist, weathered petroleum odor	Fill	
-4-				20.3			
-5-			AOC1-B12 (4-6)	24.6			
-6-				28.7			
-7-		38/48"			No recovery		
-8-							
-9-			AOC1-B12 (8-10)	19.5	Dark brown fine to medium graded SAND, some coarse sand, trace subangular gravel, saturated	Fill	
-10-							
-11-		40/48"	AOC1-B12 (10-12)	100.2			
-12-							
-13-			AOC1-B12 (12-14)	516.2	Gray coarse SAND, trace sub-angular gravel, weathered petroleum odor, saturated, sheen test positive	SP	
-14-							
-15-					End of boring at 14ft		
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: AOC1-B13
Well ID No.: MW-16
Sheet 1 of 1

Boring Location: AOC1-B13: 41° 21' 40.823" N, 72° 05' 25.430" W		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/8/2020
Depth to First Water:	8 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Rob, Ryan, Dan, Frank
Type: Geoprobe		AECOM Representative:	Jordan Trezinski, Max Meadows, Dan Kielbanea
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

Project Number: 60579714
Date Completed: 6/11/2020

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	3" Asphalt, 2" processed gravel		
-1-		Vacuum/ Hand Clear	AOC1-B13 (0.5-2)	2.3	Medium brown medium SAND, some fine gravel, trace coarse gravel, moist, trace silt	Fill	
-2-				2	Medium brown medium SAND, some fine gravel, trace coarse gravel, moist, trace silt, moist	Fill	
-3-			AOC1-B13 (2-4)	2.5	Dark brown medium SAND, some fine gravel, some coarse gravel, trace brick, trace coal, moist	Fill	
-4-				1.7	Light/ medium brown SAND, some fine gravel, some coarse gravel, trace brick, trace coal, moist	Fill	
-5-			AOC1-B13 (4-6)	2.2	Medium brown graded SAND, trace coarse gravel, trace fine gravel, moist	Fill	
-6-				2.2			
-7-		24/48"			No recovery		
-8-							
-9-			AOC1-B13 (8-10) VOCs Duplicate	5.9	Dark brown silty SAND, some sub-angular gravel, saturated	SM	
-10-							
-11-		30/48"	AOC1-B13 (10-12) MS/MSD	170.2	Dark brown silty SAND, some sub-angular gravel, weathered petroleum stains visible saturated	SM	
-12-							
-13-				370.2	Gray fine SAND, trace sub-angular gravel, saturated, weathered petroleum staining and odor, sheen test positive	SP	
-14-							
-15-					End of boring at 14ft		
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC1-B14 Well ID No.: Sheet 1 of 1

Boring Location: AOC1-B14: 41° 21' 40.372" N, 72° 05' 24.372" W			AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:			Date Started:	6/8/2020	Date Completed: 6/11/2020
Depth to First Water:	6	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes:		Driller's Name:	Rob, Ryan	
			AECOM Representative:	Jordan Trezinski, Max Meadows, Dan Kielbania	
			Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
0				0.0	3" Asphalt, 2" processed gravel		
-1-		Vacuum/ Hand Clear	AOC1-B14 (0.5-2)	2.6	Light brown fine to medium silty SAND, trace fine gravel, moist	SM	
-2-				2.4			
-3-			AOC1-B14 (2-4)	0.4	Medium/ dark brown silty SAND, trace fine gravel, moist	SM	
-4-				0.6			
-5-			AOC1-B14 (4-6)	0.7	Medium brown sandy SILT, trace fine gravel, moist	SM	
-6-				0.5			
-7-		48/48"	AOC1-B14 (6-8) Duplicate for VOCs	0.5	Medium brown sandy SILT, trace fine gravel, saturated	SM	
-8-							
-9-				0.4			
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC1-B15 Well ID No.: Sheet 1 of 1

Boring Location: 211329.54 m N, 360001.90 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/11/2020	Date Completed: 8/21/2020
Depth to First Water:		feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat, Dan, Avery	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (4") Asphalt Base (2")		
-1-				5.5			
-2-				5.3	Medium brown fine - medium SAND, little gravel, trace silt, moist	SP	
-3-		Vacuum/ Hand Clear		2.6			
-4-				1.3	Medium gray fine - medium SAND, trace gravel, trace silt, moist. End of vacuum boing, pre-cleared to 5'	SP	
-5-				5.7			
-6-				4.0	Medium gray silty and gravelly graded SAND, little pulverized rock, moist	SW	
-7-				3.0	CONCRETE. Refusal at 7', boring terminated at 7'		
-8-		14/57"					
-9-							
-10-							
-11-							
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC1-B16 Well ID No.: MW-23 Sheet 1 of 2

Boring Location:	211297.15 m N, 359980.72 m E		AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/11/2020	Date Completed: 8/18/2020
Depth to First Water:	26	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat, Dan	
Type: Geoprobe			AECOM Representative:	Max Meadows	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (4") Asphalt Base (2")		
-1-				3.9	Medium brown silty fine - medium SAND, little gravel, moist	FILL	
-2-				4.4	Medium brown silty fine - medium SAND, trace gravel, moist	FILL	
-3-		Vacuum/ Hand Clear		2.2	Medium brown silty fine - medium SAND, trace gravel, moist	FILL	
-4-				1.4	Medium brown silty graded SAND, trace gravel, moist	SW-SM	
-5-				4.3	Medium brown silty graded SAND, trace gravel, moist. End of vacuum boring. Pre-cleared to 5'		
-6-				0.9	Medium brown fine - medium SAND, little silt, trace gravel, moist		
-7-				1.8	Medium brown/ gray graded SAND, little gravel, trace silt, moist		
-8-		36/57"		2.5	Medium brown/ gray graded SAND, little gravel, trace silt, moist	SP	
-9-				2.3	Light/ medium brown graded SAND, some gravel, trace silt, moist		
-10-							
-11-				4.2	Medium gray graded SAND, trace gravel, trace silt, moist		
-12-				3.4			
-13-		32/57"		1.2	Light gray graded SAND, trace gravel, trace silt, moist	SW	
-14-				3.5	Medium gray silty graded SAND, trace silt, moist		
-15-				3.4	Light brown/ gray graded SAND, little gravel, moist		
-16-			AOC1-B16 (15-17) 10:30				
-17-							
-18-		24/57"	AOC1-B16 (17-19) 10:35	2.2	Light brown gravelly graded SAND, trace silt, moist	SW	
-19-							
-20-			AOC1-B16 (19-21) 10:40				

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC1-B16 Well ID No.: MW-23 Sheet 2 of 2

Boring Location: 211297.15 m N, 359980.72 m E		AECOM Project Manager: Mike Garbolski	Project Number: 60637932
Ground Elevation:		Date Started: 8/11/2020	Date Completed: 8/18/2020
Depth to First Water: 26	feet BGS	Drill Type: Hand Cleared/Direct Push	
Depth to Static Water: N/A	feet BGS	Drill Rig and Model Number: Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A		Drilling Company: Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes:	Driller's Name: Julio, Pat, Dan AECOM Representative: Max Meadows Owner/Client Rep.:	

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-							
-22-		29/57"	AOC1-B16 (21-23) 10:45	2.9	Light brown gravelly graded SAND, trace silt, moist	SW	
-23-							
-24-			AOC1-B16 (23-25) 10:50	2.8			
-25-							
-26-		30/57"	AOC1-B16 (25-27) 11:10 MS/MSD	99.1	Medium brown medium SAND, trace gravel, trace silt, wet at 26', petroleum odor	SP	
-27-				195.7	Medium brown/ dark gray medium SAND, trace silt, wet, petroleum stained appearance, petroleum odor	SP	
-28-			AOC1-B16 (27-29) 11:15 11:20 DUP	402.3	Dark gray medium SAND, wet, petroleum stained appearance, petroleum odor	SP	
-29-				590.4			
-30-			AOC1-B16 (29-31) 11:25	0.0	Medium brown gravelly coarse SAND, trace silt, saturated, petroleum odor	SP	
-31-		8/57"			Medium brown gravelly coarse SAND, trace silt, saturated, petroleum odor	SP	
-32-							
-33-							
-34-							
-35-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Construction Notes

Well set at 33' bgs
20 Slot Screen
Screened 23'-33'
No. 2 sand: 21'-33'
Bentonite: 19'-21'
material: 1'-19'
& road box: grade-1'

Native
Concrete

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC1-B17 Well ID No.: Sheet 1 of 1

Boring Location: 211267.28 m N, 359968.95 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/11/2020	Date Completed: 8/21/2020
Depth to First Water:	29.5	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat, Dan, Avery	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (3") Asphalt Base (3")		
-1-				2.8	Dark brown fine - medium SAND, little silt, with gravel, moist	SP	
-2-				2.7	Medium/ dark brown silty SAND, trace gravel, moist	SP	
-3-		Vacuum/ Hand Clear		1.0	Medium brown graded SAND, little gravel, little silt, moist	SW	
-4-				0.6	Medium gray/brown graded SAND, little gravel, trace silt, moist	SW	
-5-				0.2	Medium gray/brown graded SAND, little gravel, trace silt, moist. End of vacuum boring. Pre-cleared to 5'		
-6-							
-7-							
-8-		38/57"		0.2	Medium brown gray gravelly graded SAND, trace silt, little pulverized rock, moist	GW	
-9-							
-10-							
-11-							
-12-							
-13-		43/57"		0.1	Medium brown gray gravelly graded SAND, trace silt, little pulverized rock, moist	GW	
-14-							
-15-							
-16-			AOC1-B17 (15-17) 11:10	0.5			
-17-							
-18-		42/57"	AOC1-B17 (17-19) 11:15	0.1	Medium brown gray gravelly graded SAND, trace silt, little pulverized rock, moist	GW	
-19-							
-20-			AOC1-B17 (19-21) 11:20	0.1			

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC1-B17 Well ID No.: Sheet 2 of 2

Boring Location: 211267.28 m N, 359968.95 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/11/2020	Date Completed: 8/21/2020
Depth to First Water:	29.5	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat, Dan, Avery	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-							
-22-		38/57"	AOC1-B17 (21-23) 11:25	0.4	Medium brown gray gravelly graded SAND, trace silt, little pulverized rock, moist	GW	
-23-							
-24-			AOC1-B17 (23-25) 11:30	0.4			
-25-							
-26-			AOC1-B17 (25-27) 11:35	0.1	Light brown silty graded SAND, trace gravel, moist	SW-SM	
-27-							
-28-		28/57"	AOC1-B17 (27-29) 11:40	0.0	Light brown silty fine - medium SAND, trace gravel, moist	SM	
-29-							
-30-			AOC1-B17 (29-31) 11:50	0.3	Light brown graded SAND, little silt, with gravel, wet at 29.5'	SW	▼
-31-							
-32-		28/57"			Light/medium brown gravelly medium - coarse SAND, trace fine sand, saturated. Boring terminated at 35'	GP	
-33-							
-34-							
-35-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: AOC2-B2
Well ID No.: MW-17
Sheet 1 of 1

Boring Location: AOC2-B2: 41° 21' 36.667" N, 72° 05' 32.344" W	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/9/2020	Date Completed: 6/11/2020
Depth to First Water: 9 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: 9 feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler	Driller's Name:	Rob, Ryan, Dan, Frank	
Type: Geoprobe	AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski	
Hammer: NA	Owner/Client Rep.:		
Fall: NA			

Notes:
Well set on 6/11/20

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	6" concrete		
-1-		Vacuum/ Hand Clear	AOC2-B2 (0.5-1)	3.5	Light brown fine to medium SAND, some coarse sand, some gravel, trace silt, moist	Fill	
-2-				5.9			
-3-			AOC2-B2 (2-4)	2.7	Light brown fine to medium SAND, some coarse sand, some gravel, trace silt, little coarse gravel, moist	Fill	
-4-				6.1	Dark brown/ black graded SAND, trace brick with crushed asphalt or coal, some gravel, moist	Fill	
-5-			AOC2-B2 (4-6)	4.8	Dark brown/ black graded SAND, trace brick with crushed asphalt or coal, some gravel, trace slag moist	Fill	
-6-				5.0			
-7-		38/48"	AOC2-B2 (6-8)	1.1	Light brown silty SAND, trace coarse sand, trace gravel, moist	SM	
-8-							
-9-			AOC2-B2 (8.0-10)	1.1			
-10-							
-11-		40/48"		1.3	Light brown fine to medium graded SAND, trace silt, trace sub-angular gravel, saturated, sheen test negative	SW	
-12-							
-13-				2.3			
-14-							
-15-					End of boring at 16ft		
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: AOC2-B3
Well ID No.:
Sheet 1 of 1

Boring Location: AOC2-B3: 41° 21' 36.907" N, 72° 05' 31.621" W		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/9/2020
Depth to First Water:	10 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Rob, Ryan, Andrew, Dan
Type: Geoprobe		AECOM Representative:	Jordan Trezinski, Max Meadows, Dan Kielbania
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

Project Number: 60579714
Date Completed: 6/12/2020

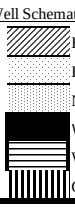
Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	6" concrete		
-1-		Vacuum/ Hand Clear	AOC2-B3 (0.5-2)	6.6	Medium brown graded SAND, some gravel, little silt, moist	Fill	
-2-				7.9			
-3-			AOC2-B3 (2-4)	4.9			
-4-				3.5	Black graded SAND with crushed asphalt or coal, trace slag, trace gravel, moist	Fill	
-5-			AOC2-B3 (4-6)	5.6	Dark brown graded SAND, trace silt, some gravel, moist	SW	
-6-							
-7-		48/48"	AOC2-B3 (6-8)	1.9	Dark brown SAND and GRAVEL, some silt, moist	SW or SP	
-8-							
-9-			AOC2-B3 (8-10)	1.7	Dark brown fine to medium graded SAND, some silt, trace sub-angular gravel, moist	SW	
-10-							▼
-11-		48/48"	AOC2-B3 (10-12)		Dark brown fine to medium graded SAND, some silt, trace sub-angular gravel, saturated	SW	
-12-							
-13-			AOC2-B3 (12-14) Duplicate	32.1	Dark brown fine to medium graded SAND, some coarse sand, trace sub-rounded gravel, weathered petroleum staining and odor, saturated, sheen test positive	SW	
-14-							
-15-					End of boring at 14ft		
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic



Bentonite/Grout
Filter Sand Pack
Natural Backfill
Well Riser
Well Screen
Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: AOC2-B4
Well ID No.: MW-18
Sheet 1 of 1

Boring Location: AOC2-B4: GPS coordinates unavailable		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/10/2020
Depth to First Water:	10 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Ryan, Pat, Dan, Andrew
Type: Geoprobe	Well set on 6/12/20. Unable to collect GPS coordinates inside warehouse.	AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

Project Number: 60579714
Date Completed: 6/12/2020

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	6" concrete		
-1-		Vacuum/ Hand Clear	AOC2-B4 (0.5-2)	2.5	Medium brown graded SAND with gravel, some silt, moist	Fill	
-2-				2.7			
-3-			AOC2-B4 (2-4)	1.8			
-4-				1.9	Dark brown/ black medium SAND and crushed asphallt, some silt, moist	Fill	
-5-			AOC2-B4 (4-6)	1.7			
-6-				1.6			
-7-		48/48"	AOC2-B4 (6-8)	1.7	Dark brown silty SAND, some graded gravel, moist	Fill	
-8-							
-9-			AOC2-B4 (8-10)	1.5	Dark brown silty SAND, some graded gravel, saturated	Fill	
-10-							
-11-		48/48"		1.2	Light brown fine to medium graded SAND, some silt, trace sub-rounded gravel, saturated, sheen test negative	SW	
-12-							
-13-							
-14-				1.9			
-15-					End of boring at 15ft		
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: AOC2-B5
Well ID No.: MW-20
Sheet 1 of 1

Boring Location: AOC2-B5: 41° 21' 39.240" N, 72° 05' 30.538" W		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/15/2020
Depth to First Water:	6.5 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Rob, Jim
Type: Geoprobe	No 0-2' Sample collected, entire interval was asphalt	AECOM Representative:	Dan Keilbania, Jordan Trezinski
Hammer: NA	Well set on 6/17/20	Owner/Client Rep.:	
Fall: NA			

Project Number: 60579714
Date Completed: 6/17/2020

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear		0.0	Asphalt		
-2-			AOC2-B5 (2-4)	2.7	Asphalt dust, dark brown/ black graded SAND and gravel, trace silt, moist	Fill	
-3-				2.2			
-4-			AOC2-B5 (4-6)	1.5	Medium brown fine to medium poorly graded SAND, trace fine gravel, moist	Fill	
-5-				1.4			
-6-		46/46"	AOC2-B5 (6-8) MS/MSD	0.0	Medium brown coarse sandy SILT, trace gravel, saturated at 6.5'	SM	
-7-							
-8-					End of boring at 8ft		
-9-							
-10-							
-11-							
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC13-B5 Well ID No.: Sheet 1 of 1

Boring Location: AOC13-B5: 41° 21' 50.932" N, 72° 05' 25.251" W	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/16/2020	Date Completed: 6/16/2020
Depth to First Water: N/A feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Drum vac/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Avery	
Notes: 0-2 interval sample skipped, no material to sample	AECOM Representative:	Max Meadows	
	Owner/Client Rep.:		

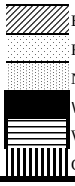
Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear		0.0	Asphalt		
-2-				0.0	Concrete		
-3-			AOC13-B5 (2-4) Duplicate	3.0	Medium brown fine to medium SAND, some gravel, some silt, moist	Fill	
-4-				3.1			
-5-		8/46"	AOC13-B5 (4-6) MS/MSD	5.1	Medium brown graded SAND, some gravel, some silt, moist	Fill	
-6-				5.4			
-7-			AOC13-B5 (6-8)	6.2	Mediumbrown graded SAND with pulverized rock, some silt, moist	Fill	
-8-							
-9-		10/46"	AOC13-B5 (8-10)	7.0	Dark brown graded SAND, some gravel, some silt, moist	Fill	
-10-							
-11-			AOC13-B5 (10-12)	5.7			
-12-							
-13-					End of boring 12ft		
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic



Bentonite/Grout
Filter Sand Pack
Natural Backfill
Well Riser
Well Screen
Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC13-B6 Well ID No.: Sheet 1 of 1

Boring Location: AOC13-B6: 41° 21' 51.910" N, 72° 05' 26.075" W	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/16/2020	Date Completed: 6/16/2020
Depth to First Water: 10 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Drum vac/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Dan, Avery	
Notes: 0-2 interval sample skipped, no material to sample	AECOM Representative:	Max Meadows	
	Owner/Client Rep.:		

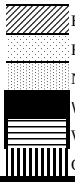
Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear		0.0	Asphalt		
-2-				0.0	Concrete		
-3-			AOC13-B6 (2-4)	2.6	Medium brown graded SAND, little gravel, some silt	Fill	
-4-				2.8	Medium brown graded SAND, little gravel, some silt, moist	Fill	
-5-		30/46"	AOC13-B6 (4-6)	5.1	Medium brown graded SAND with gravel, little silt, moist	Fill	
-6-				5.6	Medium brown graded SAND, little gravel, some silt, pulverized rock	Fill	
-7-			AOC13-B6 (6-8)	3.5	Gray graded SAND with gravel and pulverized rock with silt, moist	Fill	
-8-				2.2	Dark gray gravelly SILT, trace sand, wet	Fill	
-9-		33/46"	AOC13-B6 (8-10)	2.6	Medium brown gravelly fine SAND, some pulverized rock with silt, moist	Fill	
-10-				2.5	Gray graded gravelly SAND with silt with pulverized rock, moist	Fill	
-11-			AOC13-B6 (10-12)	3.0	Brown gravelly graded SAND with 2" gravel pieces, trace silt, wet at 10'	Fill	
-12-				3.9	Light brown medium SAND, trace silt, saturated, sheen test negative	SW	
-13-					End of boring 12ft		
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic



Bentonite/Grout
Filter Sand Pack
Natural Backfill
Well Riser
Well Screen
Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B2 Well ID No.: MW-9 Sheet 1 of 1

Boring Location: AOC14-B2: 692320.19 'N, 1179933.34 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/1/2020	Date Completed: 6/8/2020
Depth to First Water: 6 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes: Well set on 6/8/20	AECOM Representative:	Dan Keilbania, Max Meadows, Ann Bogucki	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
					???		
-1-					???		
			AOC14-B2 (0-2)		Dark brown fine to medium SAND, fine to coarse gravel, trace silt, dry	Fill	
-2-							
					Medium/ dark brown fine to medium SAND with fine to coarse gravel (2"), trace silt, coal, dry	Fill	
-3-		Vacuum/ Hand Clear	AOC14-B2 (2-4)				
-4-							
				1.4	Dark brown fine to medium SAND with trace coarse sand, fine to coarse gravel (2"), trace silt, moist	Fill	
-5-			AOC14-B2 (4-6)				
-6-							
-7-							
				0.2	Dark brown fine to medium poorly sorted SAND, trace sub-angular gravel, saturated	Fill	
-8-		30/48"					
-9-			AOC14-B2 (8.5-10)				
				0.2	Dark brown well sorted SAND and GRAVEL, sheen test negative	Fill	
-10-							
-11-				0.1			
-12-		60/60"			Light brown medium to coarse SAND, some gravel, saturated	SW	
-13-							
-14-				0.3			
-15-							
					End of boring at 15ft		
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B3 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B3: 692304.54 'N, 1180024.96 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/1/2020	Date Completed: 6/8/2020
Depth to First Water: 7 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes:	AECOM Representative:	Ann Bogucki, Max Meadows, Dan Kielbania	
	Owner/Client Rep.:		

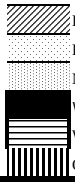
Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC14-B3 (0-2)		Urban fill, fine to medium dark brown SAND with fine to coarse gravel, fine to coarse coal fragments, trace silt dry	Fill	
-2-					Dark brown fine to medium SAND, fine to coarse gravel with 1" gravel clasts, trace silt, dry	Fill	
-3-			AOC14-B3 (2-4)		Medium brown fine to coarse SAND with fine to coarse gravel, trace silt, moist	Fill	
-4-							
-5-			AOC14-B3 (4-6)		Medium brown fine to coarse SAND with fine to coarse gravel, trace silt, wet, coal pieces	Fill	
-6-							
-7-		30/48"	AOC14-B3 (6-8.5)	0.1	Medium brown fine to coarse SAND with fine to coarse gravel, trace silt, coal pieces, saturated	Fill	
-8-							
-9-				0.3	Medium brown fine to coarse SAND with fine to coarse gravel, trace silt, coal pieces, saturated sheen test negative	Fill	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic



Bentonite/Grout
Filter Sand Pack
Natural Backfill
Well Riser
Well Screen
Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B4 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B4: 692295.72 'N, 1180119.00 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/1/2020	Date Completed: 6/8/2020
Depth to First Water: 7 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes:	AECOM Representative:	Ann Bogucki, Max Meadows, Dan Kielbania	
	Owner/Client Rep.:		

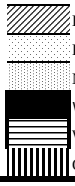
Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC14-B4 (0-2)		Dark brown/ black fine to coarse SAND with fine to coarse gravel, fine crushed coal (~0.5"), some silt, dry	Fill	
-2-							
-3-			AOC14-B4 (2-4)		Light brown, fine to medium SAND with fine to coarse gravel, trace silt	Fill	
-4-				55			
-5-			AOC14-B4 (4-6)	100	Light brown/ gray fine to coarse SAND with fine to coarse gravel (fine to 2"), some silt, moist, petroleum odor (weathered product)	Fill	
-6-							
-7-		20/48"	AOC14-B4 (6-8.5)	4.7	Dark brown silty SAND, trace sub-angular gravel, saturated, petroleum odor (weathered product)	SM	
-8-							
-9-				190	Light brown fine to coarse well graded SAND, trace sub-angular gravel, saturated, petroleum odor (weathered product) sheen test positive	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic



Bentonite/Grout
Filter Sand Pack
Natural Backfill
Well Riser
Well Screen
Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B5 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B5: 692285.79 'N, 1180209.13 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/1/2020	Date Completed: 6/8/2020
Depth to First Water: 7 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes:	AECOM Representative:	Ann Bogucki, Max Meadows, Dan Kielbania	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC14-B5 (0-2)		Light gray fine to coarse SAND and crushed STONE, trace silt, dry	Fill	
-2-					Dark brown fine to coarse SAND and fine to coarse GRAVEL, trace silt, coal fragments, 2" crushed stone dry	Fill	
-3-			AOC14-B5 (2-4)	0.4	Dark brown/ black fine to medium SAND with fine to coarse gravel, some silt, chunks of anthracite coal (~1"), glass fragments, dry	Fill	
-4-					Dark brown fine to coarse SAND and fine to coarse 2" GRAVEL, trace silt, dry	Fill	
-5-			AOC14-B5 (4-6)		Brown/ orange fine to coarse SAND with fine to coarse gravel, trace silt, slight moisture	Fill	
-6-							
-7-		30/48"	AOC14-B5 (6-8.5)	2.3	Crushed GRANITE, some coal ash, trace sub-angular gravel, saturated	Fill	▼
-8-							
-9-				3.6	Orange fine to medium well graded SAND, some gravel, trace coal ash, saturated. sheen test negative	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B6 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B6: 692275.65 'N, 1180302.45 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/1/2020	Date Completed: 6/8/2020
Depth to First Water: 8.5 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes:	AECOM Representative:	Ann Bogucki, Max Meadows, Dan Kielbania	
	Owner/Client Rep.:		

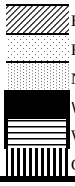
Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC14-B6 (0-2)		Light gray fine to coarse SAND and crushed stone, trace silt, dry	Fill	
-2-					Black/Light gray fine to coarse SAND, crushed asphalt with fine to coarse gravel, trace silt, dry	Fill	
-3-			AOC14-B6 (2-4)		Light gray fine to coarse SAND with fine to coarse gravel, some silt, moist	Fill	
-4-							
-5-			AOC14-B6 (4-6)		Light gray fine to coarse SAND with fine to coarse gravel, some silt, 2" metal spike, moist	Fill	
-6-							
-7-		30/48"		3	Crushed GRANITE, some silt, trace coal ash, moist	Fill	
-8-							
-9-			AOC14-B6 (8.5-10)	2.1	Light brown fine to coarse well graded SAND, some coal ash, trace cobbles, saturated, sheen test negative	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic



AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B7 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B7: 692267.49 'N, 1180416.05 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/1/2020	Date Completed: 6/8/2020
Depth to First Water: 8 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes:	AECOM Representative:	Ann Bogucki, Max Meadows, Dan Kielbania	
	Owner/Client Rep.:		

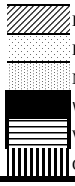
Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
					2"Asphalt pavement		
-1-			AOC14-B7 (0.5-2)		Brown fine to medium SAND and fine to coarse GRAVEL, trace silt, asphalt chunks, dry	Fill	
-2-					Light brown fine to coarse SAND with fine to coarse gravel, trace silt, dry	Fill	
-3-		Vacuum/ Hand Clear	AOC14-B7 (2-4)				
-4-					Light brown fine to coarse SAND with fine to coarse gravel, trace silt, slightly moist	Fill	
-5-			AOC14-B7 (4-6)		Light brown medium to coarse SAND, some coarse gravel, tracer silt, slightly moist	Fill	
-6-							
-7-				2	Light brown medium to coarse SAND, some coarse gravel, tracer silt, some crushed granite, moist	SP or SW	
-8-							
-9-		48/48"	AOC14-B7 (8.5-10)	0	Light brown sandy GRAVEL, some crushed granite, trace silt, saturated sheen test negative	SP or SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic



AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B8 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B8: 692257.69 'N, 1180485.20 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/2/2020	Date Completed: 6/8/2020
Depth to First Water: 7.5 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes:	AECOM Representative:	Ann Bogucki, Max Meadows, Dan Kielbania	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
					2"Asphalt, processed gravel asphalt base		
-1-			AOC14-B8 (0.5-2)		Processed gravel asphalt base: 3/4" crushed GRAVEL, fine to coarse sand, fine gravel	Fill	
-2-					Processed gravel asphalt base: dark brown 3/4" crushed GRAVEL, fine to coarse sand, fine gravel, dry	Fill	
-3-		Vacuum/ Hand Clear	AOC14-B8 (2-4) MS/MSD		Processed gravel asphalt base: dark brown 3/4" crushed GRAVEL, fine to coarse sand, fine gravel, trace silt, slightly moist	Fill	
-4-							
-5-			AOC14-B8 (4-6)		Light brown medium to coarse SAND with fine gravel, some coarse gravel, trace silt, slightly moist	Fill	
-6-							
-7-			AOC14-B8 (6-8)	0.7	Dark brown medium to coarse graded SAND, some silt, some sub-angular gravel, saturated	Fill	
-8-		48/48"					▼
-9-			AOC14-B8 (8-10)	0	Light brown fine SAND, trace gravel, saturated sheen test negative	SP	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B9 Well ID No.: MW-10 Sheet 1 of 1

Boring Location: AOC14-B9: 692260.27 'N, 1180573.68 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/2/2020	Date Completed: 6/8/2020
Depth to First Water: 7 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes: Well set on 6/8/20	AECOM Representative:	Dan Keilbania, Max Meadows, Ann Bogucki	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
					Asphalt		
-1-		Vacuum/ Hand Clear	AOC14-B9 (0.5-2)	0	Medium brown fine to coarse SAND, some gravel, little silt	Fill	
-2-					Black fine to coarse SAND, some gravel, little silt, cinders	Fill	
-3-			AOC14-B9 (2-4)		Black fine to coarse SAND, some gravel, little silt, cinders	Fill	
-4-					Dark brown fine to coarse SAND and fine to coarse GRAVEL with silt, very moist, some 0.5" gravel	SW	
-5-			AOC14-B9 (4-6)		Dark brown fine to coarse SAND and fine to coarse GRAVEL with silt, some 0.5" gravel, saturated	SW	
-6-				1.4	Dark brown fine to coarse SAND and fine to coarse GRAVEL with silt, some 0.5" gravel, saturated, sheen test negative	SW	
-7-		48/48"			Black SILT, some fine to coarse graded sand, saturated	ML	
-8-							
-9-			AOC14-B9 (8-10)	0.8	Dark brown fine to coarse graded SAND, saturated	SW	
-10-							
-11-		48/48"		2.6	Dark brown fine to coarse graded SAND, trace brick fragments, saturated	SW	
-12-							
-13-					Dark brown fine SAND, saturated	SP	
-14-							
-15-					End of boring at 14 ft		
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B10 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B10: 692319.84 'N, 1180581.67 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/2/2020	Date Completed: 6/9/2020
Depth to First Water: 7 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio	
Notes:	AECOM Representative:	Ann Bogucki, Max Meadows, Dan Kielbania	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
					Asphalt		
-1-		Vacuum/ Hand Clear	AOC14-B10 (0.5-2)	0	Dark brown fine to coarse SAND, some fine to coarse gravel, little silt, trace debris	Fill	
-2-					Dark brown fine to coarse SAND with fine to coarse gravel, little silt, coal	Fill	
-3-			AOC14-B10 (2-4)		Medium brown fine to medium SAND, some coarse sand, some gravel, trace silt	Fill	
-4-					Medium brown fine to coarse SAND with fine to coarse gravel, trace silt	Fill	
-5-			AOC14-B10 (4-6)		Light brown fine to medium SAND, some fine to coarse gravel, little silt, slightly moist	SW	
-6-					Light brown fine to medium SAND, some fine to coarse gravel, littlw silt, slightly moist	SW	
-7-		48/48"	AOC14-B10 (6-8)	0.2	Light brown fine to medium SAND, some fine to coarse gravel, little silt, saturated	SW	▼
-8-							
-9-			AOC14-B10 (8-10)	0.8	Light brown fine to medium graded SAND, saturated, sheen test negative	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B11 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B11: 692332.60 'N, 1180492.79 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/2/2020	Date Completed: 6/9/2020
Depth to First Water: 7 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio	
Notes:	AECOM Representative:	Ann Bogucki, Max Meadows, Dan Kielbania	
	Owner/Client Rep.:		

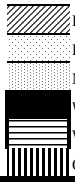
Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
					Asphalt		
-1-		Vacuum/ Hand Clear	AOC14-B11 (0.5-2)		Dark brown fine to medium SAND with fine to coarse gravel, little silt, slight moisture	Fill	
-2-					Dark brown fine to medium SAND with fine to coarse gravel, little silt, slight moisture	Fill	
-3-			AOC14-B11 (2-4)		Light brown, fine to medium SAND with fine to coarse gravel, trace silt, slight moisture	Fill	
-4-					Light brown, fine to medium SAND with fine to coarse gravel, trace silt, slight moisture	Fill	
-5-			AOC14-B11 (4-6)		Medium brown medium to coarse SAND with fine to coarse gravel, trace silt, slight moisture	Fill	
-6-					Medium brown medium to coarse SAND with fine to coarse gravel, trace silt, slight moisture	Fill	
-7-		48/48"	AOC14-B11 (6-8)	0.2	Medium brown medium to coarse SAND with fine to coarse gravel, trace silt, saturated	Fill	
-8-							
-9-			AOC14-B11 (8-10)	2.1	Light brown fine graded SAND, saturated, sheen test negative	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic



Bentonite/Grout
Filter Sand Pack
Natural Backfill
Well Riser
Well Screen
Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B12 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B12: 692338.19 'N, 1180403.44 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/2/2020	Date Completed: 6/8/2020
Depth to First Water: 8 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes: AOC14-B12 4-6 sample collected from Geoprobe.	AECOM Representative:	Ann Bogucki, Max Meadows	
	Owner/Client Rep.:		

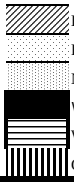
Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC14-B12 (0-2)		Dark brown/ black fine to medium SAND with fine to coarse gravel, some silt, moist	Fill	
-2-					Dark brown/ black fine to course GRAVEL with medium to coarse sand, trace silt, moist	Fill	
-3-			AOC14-B12 (2-4)		Dark brown/ black fine to course GRAVEL with medium to coarse sand, trace silt, moist	Fill	
-4-					Light brown/ dark brown fine to coarse angular GRAVEL, some medium to coarse sand, trace fine sand, trace silt, moist	Fill	
-5-			AOC14-B12 (4-6) Duplicate		COBBLES, little sand and gravel	Fill	
-6-					COBBLES, little sand and gravel	Fill	
-7-		48/48"	AOC14-B12 (6-8.5) MS/MSD	0.3	Dark brown medium to coarse SAND, some sub-angular gravel, saturated	SW	▼
-8-							
-9-				0.5	Light brown SAND and GRAVEL, some crushed granite, saturated	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic



Bentonite/Grout
Filter Sand Pack
Natural Backfill
Well Riser
Well Screen
Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B13 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B13: 692343.08 'N, 1180309.72 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/2/2020	Date Completed: 6/8/2020
Depth to First Water: 8 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes:	AECOM Representative:	Ann Bogucki, Max Meadows, Dan Kielbania	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC14-B13 (0-2)		Medium brown fine to coarse SAND with fine to coarse gravel, gray clay, cobbles, dry	Fill	
-2-					Medium/dark brown medium to coarse SAND with fine to coarse gravel, some silt, dry	Fill	
-3-			AOC14-B13 (2-4)		Medium brown/black fine to coarse SAND and fine to coarse GRAVEL, trace silt, dry 50/50 coal sand	Fill	
-4-					Medium brown fine to medium SAND with fine to coarse gravel, trace silt, moist	Fill	
-5-			AOC14-B13 (4-6)		Medium brown fine to coarse rounded SAND fine to coarse rounded gravel with silt, moist	Fill	
-6-					Medium brown medium to coarse rounded SAND, fine to coarse rounded gravel, trace silt, wet, sheen test negative	SW	
-7-		48/48"	AOC14-B13 (6-8.5)	1.8	Dark brown silty SAND, trace gravel, saturated, sheen test negative	SM	▼
-8-							
-9-				1.5	Brown fine to coarse graded SAND, some sub-angular gravel, saturated	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B14 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B14: 692353.75 'N, 1180217.79 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/2/2020	Date Completed: 6/9/2020
Depth to First Water: 7 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes:	AECOM Representative:	Ann Bogucki/Max Meadows	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC14-B14 (0-2)		Medium brown fine to coarse angular SAND with fine to coarse angular gravel, some silt, trace coal fragments, dry	Fill	
-2-				8.5	50/50 medium brown/black fine to medium rounded SAND, some fine to coarse gravel, some silt, crushed coal, dry	Fill	
-3-			AOC14-B14 (2-4)	59	Medium brown/orange fine to coarse rounded SAND with fine to carse rounded gravel, trace silt, moist, solvent odor	Fill	
-4-				39	Light brown medium to coarse SAND with fine to coarse rounded gravel, trace silt, moist, weateherd petroleum odor	SW	
-5-			AOC14-B14 (4-6)	45	Light/medium brown fine to coarse rounded SAND with fine to coarse rounded gravel, trace silt, moist, weathered petroleum odor	SW	
-6-		48/48"		45	Light gray fine to coarse rounded SAND, moist	SW	
-7-			AOC14-B14 (6-8)	23.2	Dark brown SILT, trace clay, trace subrounded gravel, saturated	ML	
-8-							▼
-9-			AOC14-B14 (6-8)	80.2	Dark brown SILT, some clay, trace coal ash, trace fine to medium sand, saturated, visible petroleum staining and odor, sheen test positive	ML	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B15 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B15: 692365.19 'N, 1180122.03 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/3/2020	Date Completed: 6/9/2020
Depth to First Water: 6 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes: Utility found at 4'. Boring moved 3' West along transect.	AECOM Representative:	Dan Keilbania/Max Meadows	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC14-B15 (0-2)		Processed 2" gravel and light gray fine to coarse SAND	Fill	
				0	Light brown fine to medium rounded SAND, some poorly sorted coal ash, with fine to coarse gravel, dry	Fill	
-2-				0	Medium dark brown fine to coarse SAND, some fine to coarse gravel, some coal, some silt, moist.	Fill	
-3-			AOC14-B15 (2-4)	0	Medium brown fine to coarse subangular SAND with fine to coarse subangular gravel, trace slag, some silt, moist.	Fill	
-4-				0	Light brown medium to coarse rounded SAND with fine to coarse rounded gravel, graded, trace silt, moist.	SW	
-5-			AOC14-B15 (4-6)	0			
-6-		30/48"		0	Light brown medium to coarse rounded SAND with fine to coarse rounded gravel, graded, trace silt, moist, saturated at 6', sheen test negative	SW	
-7-			AOC14-B15 (6-8)	1.3	Light brown medium to coarse rounded SAND, with fine to coarse rounded gravel, graded, trace silt, saturated at 6', sheen test negative	SW	
-8-							▼
-9-				2.4	Light brown silty SAND, some subrounded gravel, trace cobbles, saturated, sheen test negative	SM	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B16 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B16: 692374.39 'N, 1180037.63 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/3/2020	Date Completed: 6/9/2020
Depth to First Water: 6 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes:	AECOM Representative:	Dan Keilbania/Max Meadows	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
					Gravel and SAND	Fill	
-1-			AOC14-B16 (0-2)	0	Dark brown fine SAND, trace silt, trace gravel, poorly sorted, dry	Fill	
-2-				0	Light brown medium to coarse SAND, trace gravel, poorly sorted, dry	Fill	
-3-		Vacuum/ Hand Clear	AOC14-B16 (2-4)	0	Medium brown medium to coarse rounded SAND with fine to coarse rounded gravel, some silt and clay, moist	Fill	
-4-				0	Medium brown medium to coarse rounded SAND with fine to coarse rounded gravel, some silt and clay, moist	Fill	
-5-			AOC14-B16 (4-6)	0	Medium brown medium to coarse rounded SAND with fine to coarse rounded gravel, some silt and clay, moist	Fill	
-6-				0	Medium brown medium to coarse rounded SAND with fine to coarse rounded gravel, some silt and clay, moist, saturated at 6'	Fill	
-7-			AOC14-B16 (6-8)	2	Dark brown fine to medium graded SAND, trace coarse sand, trace silt, saturated	SW	
-8-		35/48"					▼
-9-				6.2	Light brown fine to medium graded SAND, some coarse sand, traces subrounded gravel saturated, sheen test negative	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B17 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B17: 692384.15 'N, 1179948.76 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/3/2020	Date Completed: 6/9/2020
Depth to First Water: 5 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Pat, Dan	
Notes:	AECOM Representative:	Dan Keilbania/Max Meadows	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC14-B17 (0-2)	0	Medium brown/black fine rounded SAND, with coal ash, with fine to coarse rounded and graded gravel, trace silt	Fill	
-2-							
-3-			AOC14-B17 (2-4)	0	Medium brown fine to coarse rounded SAND, with fine to coarse graded and subangular gravel, trace silt, dry	Fill	
-4-				0	Coarse GRAVEL, cobbles, dry	Fill	
-5-			AOC14-B17 (4-6)	0	Fine to coarse GRAVEL with finde to coarse graded and angular dark brown sand, sheen	Fill	
-6-		30/48"		0	Fine to coarse GRAVEL with finde to coarse graded and angular dark brown sand, sheen test positive	Fill	
-7-			AOC14-B17 (6-8)		Dark brown fine to coarse graded SAND, some sub-angular gravel, trace silt, saturated	SW	
-8-							
-9-				4.4	Light brown SAND and GRAVEL, trace fine sand, saturated, sheen test negative	SW	
-10-							
-11-					End of boring at 11ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: AOC14-B18
Well ID No.: MW-11
Sheet 1 of 1

Boring Location: AOC14-B18: 692425.17 'N, 1180137.51 'E	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/3/2020	Date Completed: 6/9/2020
Depth to First Water: 6 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: 5.5 feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler	Driller's Name:	Rob, Julio, Pat, Dan	
Type: Geoprobe	AECOM Representative:	Dan Keilbania, Max Meadows	
Hammer: NA	Owner/Client Rep.:		
Fall: NA			

Notes:
AOC14-B18 (4-6) sample collected from geoprobe

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC14-B18 (0-2)	0.7	Dark brown fine to coarse angular graded SAND with fine to coarse sub-angular graded gravel, some silt, dry	Fill	
-2-				0.9			
-3-			AOC14-B18 (2-4)	0.3	Dark brown poorly sorted silty SAND, slightly whesile and plastic, dry	Fill	
-4-				0.1	Dark brown poorly sorted silty SAND, slightly whesile and plastic, trace cobbles, dry	Fill	
-5-			AOC14-B18 (4-6)		Cobbles	Fill	
-6-		60/60"	AOC14-B18 (6-8)	4.3	Pulverized granite, saturated	Fill	
-7-							
-8-							
-9-			AOC14-B18 (8-10)	4.0	Light brown/orange fine to medium SAND, trace silt, trace sub-rounded gravel, saturated	SW or SP	
-10-							
-11-		48/48"		8.4	Light brown fine SAND, oxidation observed, saturated	SP	
-12-							
-13-				7.2	Light brown fine SAND, oxidation observed, some subrounded gravel, saturated, sheen test negative	SP	
-14-							
-15-					End of boring at 14ft		
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: AOC14-B19
Well ID No.: MW-12
Sheet 1 of 1

Boring Location: AOC14-B19: 692422.04 'N, 1180229.21 'E		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/3/2020
Depth to First Water:	6 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	6 feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Rob, Julio, Pat, Dan
Type: Geoprobe	MS/MSD collected at , DUP collected at	AECOM Representative:	Dan Keilbania, Max Meadows
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

Project Number: 60579714
Date Completed: 6/9/2020

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
0		Vacuum/ Hand Clear		0.0	Processed 2" gravel with fine to coarse SAND	Fill	
-1-			AOC14-B19 (0-2) MS/MSD	0.2	Dark brown fine SAND, some silt, trace gravel, dry	Fill	
-2-				0.2			
-3-			AOC14-B19 (2-4)	0.4	Medium brown/orange fine to medium graded SAND, trace fine to coarse gravel, some silt, moist	Fill	
-4-				0.2			
-5-			AOC14-B19 (4-6) Duplicate	0.1	Brown/ orange medium to coarse SAND, trace gravel, trace silt, moist	Fill	
-6-				0.2			
-7-		48/48"	AOC14-B19 (6-8) Duplicate	2.1	Brown/ orange medium to coarse SAND, trace gravel, trace silt, saturated	Fill	
-8-							
-9-			AOC14-B19 (8-10) MS/MSD	1.5			
-10-							
-11-		48/48"			Light brown/orange fine to medium SAND, trace silt, trace sub-rounded gravel, saturated	SP	
-12-							
-13-							
-14-							
-15-					End of boring at 14ft		
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B20 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B20: 692420.01 'N, 1180317.75 'E			AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:			Date Started:	6/3/2020	Date Completed: 6/10/2020
Depth to First Water:	7	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes:		Driller's Name:	Rob, Julio, Dan, Frank	
			AECOM Representative:	Max Meadows, Dan Kielbanea	
			Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	Processed 2" GRAVEL with fine to coarse sand	Fill	
-1-				1.8	Light gray fine SAND and CLAY trace fine to coarse gravel	SP	
			AOC14-B20 (0.5-2)	0.3	Medium/ dark brown silty SAND with fine to coarse graded gravel, moist	SM	
-2-							
-3-		Vacuum/ Hand Clear	AOC14-B20 (2-4)	0.3	Medium brown fine to coarse silty SAND with fine to coarse graded gravel, moist,	SM	
-4-				0.3			
-5-			AOC14-B20 (4-6)	0.5	Light brown medium to coarse graded SAND, some fine to coarse graded gravel, trace silt, moist	SW	
-6-				0.9			
-7-			AOC14-B20 (6-8)	2.4	Light brown medium to coarse graded SAND, some fine to coarse graded gravel, trace silt, saturated	SW	
-8-		48/48"					
-9-				3.5	Light fine to coarse graded SAND, trace sub-angular gravel, saturated, sheen test negative	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B21 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B21: 41° 21' 34.268" N, 72° 05' 34.165" W			AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:			Date Started:	6/4/2020	Date Completed: 6/10/2020
Depth to First Water:	8	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Rob, Julio, Dan, Frank	
Type: Geoprobe			AECOM Representative:	Max Meadows, Dan Kielbanea	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	3" Asphalt, pavement base (crushed stone, sand, and silt)		
-1-		Vacuum/ Hand Clear	AOC14-B21 (0.5-2)	1.8	Dark brown fine to coarse subangularSAND with fine to coarse graded subangular gravel, trace silt, dry	Fill	
-2-				0.2			
-3-			AOC14-B21 (2-4)	0.4			
-4-				0.4	Light brown fine well graded SAND, some graded subangular gravel, dry	SW	
-5-			AOC14-B21 (4-6)				
-6-				0.2	Light brown fine well graded SAND, some graded subangular gravel, moist	SW	
-7-		48/48"	AOC14-B21 (6-8)	1.1	Light brown fine well graded SAND, some graded subangular gravel, saturated	SW	
-8-							
-9-			AOC14-B21 (8-10)	2.5	Dark brown fine to medium graded SAND, trace subrounded gravel, saturated	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: AOC14-B22
Well ID No.:
Sheet 1 of 1

Boring Location: AOC14-B22: 41° 21' 34.226" N, 72° 05' 33.040" W		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/4/2020
Depth to First Water:	8 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Rob, Julio, Dan, Frank
Type: Geoprobe		AECOM Representative:	Max Meadows, Dan Kielbanea
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

Project Number: 60579714
Date Completed: 6/10/2020

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	GRAVEL and SAND, some cobbles	Fill	
-1-			AOC14-B22 (0.5-2)	1.0	Dark brown fine to coarse graded rounded SAND with fine to coarse rounded gravel, trace coal chips, trace brick, trace silt, dry	Fill	
-2-				1.1	Medium brown fine to coarse graded rounded SAND, with fine to coarse gravel, trace silt, dry	SW	
-3-		Vacuum/ Hand Clear	AOC14-B22 (2-4)	1.4	Dark brown fine to medium SAND with fine to coarse graded gravel, trace silt, moist	SW	
-4-				1.6			
-5-			AOC14-B22 (4-6)	1.8	Light brown fine to medium SAND, some coarse sand, trace subrounded gravel, moist	SW	
-6-				1.8			
-7-		48/48"	AOC14-B22 (6-8)	2	Light brown fine to medium SAND, some coarse sand, trace subrounded gravel, saturated	SW	
-8-							
-9-			AOC14-B22 (8-10)	1.7	Light brown fine to medium graded SAND, trace silt, saturated, sheen test negative	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment State Pier New London, CT		Boring ID No.: AOC14-B23 Well ID No.: Sheet 1 of 1	
Boring Location: AOC14-B23: 41° 21' 34.127" N, 72° 05' 31.915" W		AECOM Project Manager: Mike Garbolski	Project Number: 60579714
Ground Elevation:		Date Started: 6/4/2020	Date Completed: 6/10/2020
Depth to First Water: 7 feet BGS		Drill Type: Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS		Drill Rig and Model Number: Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A		Drilling Company: Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes:	Driller's Name: Rob, Julio, Dan, Frank AECOM Representative: Max Meadows, Dan Kielbanea Owner/Client Rep.:	

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	???		
-1-		Vacuum/ Hand Clear	AOC14-B23 (0.5-2)	0.7	Dark brown silty SAND, trace coarse sand, trace subrounded gravel, dry	SM	
-2-				0.7	Dark brown graded silty SAND, dry	SM	
-3-			AOC14-B23 (2-4)	1.3	Dark brown graded silty SAND, trace subrounded gravel, moist	SM	
-4-				0.0	Light brown fine to medium SAND, trace coarse graded sand, trace sub-angular gravel, moist	SP or SW?	
-5-			AOC14-B23 (4-6)	0.1			
-6-		48/48"	AOC14-B23 (6-8)	4.5	Light brown fine to medium SAND, trace coarse graded sand, trace sub-angular gravel, saturated	SP or SW?	
-7-							
-8-							
-9-			AOC14-B23 (8-10)	3.4	Light brown fine to medium graded SAND, trace subrounded gravel, trace silt, saturated, sheen test negative	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B24 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B24: 41° 21' 34.508" N, 72° 05' 31.859" W			AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:			Date Started:	6/4/2020	Date Completed: 6/10/2020
Depth to First Water:	8	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes: Vacmaster rig broken; will resume boring on 6/5		Driller's Name:	Rob, Julio, Dan, Frank	
			AECOM Representative:	Max Meadows, Dan Kielbanea	
			Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC14-B24 (0-2)	0.4	Medium brown/ gray fine to coarse rounded graded SAND with fine to coarse rounded graded gravel, trace cobbles, trace silt, dry	Fill	
-2-				0.1	Medium brown fine to medium SAND, trace coarse sand with fine to coarse gravel, trace silt, trace coal chips, dry	Fill	
-3-			AOC14-B24 (2-4)	0.2	Light gray fine to medium silty SAND with some fine to coarse gravel, fine to medium sandy silt at 3', moist	SM	
-4-				0.8			
-5-			AOC14-B24 (4-6)	0.9	Light gray fine to medium sandy SILT, trace fine gravel, moist	SC	
-6-				1.1			
-7-		48/48"	AOC14-B24 (6-8)	3.8	Light gray fine to medium sandy SILT, trace fine gravel, saturated	SC	
-8-							
-9-			AOC14-B24 (8-10)	3	Light brown fine to medium graded SAND, some silt, saturated, sheen test negative	SW	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC14-B25 Well ID No.: Sheet 1 of 1

Boring Location: AOC14-B25: 41° 21' 34.943" N, 72° 05 32.989" W	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/4/2020	Date Completed: 6/10/2020
Depth to First Water: 8 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio, Dan, Frank	
Notes: Vacmaster rig broken; will resume boring on 6/5	AECOM Representative:	Max Meadows, Dan Kielbanea	
	Owner/Client Rep.:		

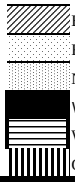
Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	3" Asphalt, 2" processed gravel		
-1-		Vacuum/ Hand Clear	AOC14-B25 (0.5-2)	0.5	Dark brown medium to coarse poorly sorted SAND, some sub-angular gravel, trace fine sand, dry	SP	
-2-					Light brown fine to medium poorly sorted SAND, some sub-angular gravel, dry	SP	
-3-			AOC14-B25 (2-4) Duplicate	0.8	Light brown fine poorly sorted SAND, some sub-angular and sub-rounded gravel, trace coarse SAND, dry	SP	
-4-							
-5-			AOC14-B25 (4-6) MS/MSD	1.7	Light brown fine poorly sorted SAND, trace sub-rounded gravel, dry	SP	
-6-							
-7-		48/48"	AOC14-B25 (6-8)	4.6	Dark brown silty SAND, trace sub-angular gravel, saturated	SM	
-8-							
-9-			AOC14-B25 (8-10)	3.3	Light brown fine SAND, saturated, sheen test negative	SP	
-10-							
-11-					End of boring at 10ft		
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic



Bentonite/Grout
Filter Sand Pack
Natural Backfill
Well Riser
Well Screen
Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC16-B5 Well ID No.: Sheet 1 of 1

Boring Location: AOC16-B5:	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/1/2020	Date Completed: 6/8/2020
Depth to First Water: 6 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: feet BGS	Drill Rig and Model Number:	Vacmaster	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Julio	
Notes:	AECOM Representative:	Dan Kielbania	
	Owner/Client Rep.:		

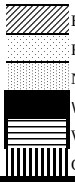
Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
					3" Asphalt, 2" asphalt base		
-1-		Vacuum/ Hand Clear	AOC16-B5 (0.5-2)		Dark brown silty SAND, trace coarse sand, trace sub-angular gravel, dry	Fill	
-2-				0.5	Dark brown silty SAND, some sub-angular gravel, trace coal ash, dry	Fill	
-3-			AOC16-B5 (2-4)	0.1	Light brown fine SAND, trace silt, trace subruounded poorly sorted gravel, dry	Fill	
-4-					Dark brown medium to coarse poorly sorted SAND, some subrounded gravel, dry	Fill	
-5-				0.1	Dark brown medium to coarse poorly sorted SAND, some subrounded gravel, saturated	Fill	
-6-					End of boring at 6ft		
-7-							
-8-							
-9-							
-10-							
-11-							
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic



Bentonite/Grout
Filter Sand Pack
Natural Backfill
Well Riser
Well Screen
Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC17-B4 Well ID No.: MW-13 Sheet 1 of 1

Boring Location: AOC17-B4: 41° 21' 36.121" N, 72° 05' 33.816" W			AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:			Date Started:	6/5/2020	Date Completed: 6/10/2020
Depth to First Water:	6	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes: Set well on 6/10/20		Driller's Name:	Rob, Ryan, Dan, Frank	
			AECOM Representative:	Dan Keilbania	
			Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
					3" Asphalt, 2" asphalt base (processed gravel)		
-1-		Vacuum/ Hand Clear	AOC17-B4 (0.5-2)	1.0	Light brown fine to medium poorly sorted SAND, trace coarse sand, dry	SP	
-2-							
-3-			AOC17-B4 (2-4)	1.3	Light brown fine to medium poorly sorted SAND, trace coarse sand, trace sub-rounded graded gravel, dry	SP	
-4-							
-5-			AOC17-B4 (4-6)	1.0			
-6-							
-7-		48/48"	AOC17-B4 (6-8)		Light brown fine to medium graded SAND, some coarse sand, trace sub-rounded gravel, saturated	SW	
-8-							
-9-					Dark brown medium to coarse graded SAND, some fine sand, oxidation staining, saturated	SW	
-10-							
-11-		24/48"			No revovery		
-12-							
-13-				3.8	Dark brown medium to coarse graded SAND, some fine sand, oxidation staining, saturated	SW	
-14-							
-15-					End of boring at 14ft		
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: AOC17-B5
Well ID No.:
Sheet 1 of 1

Boring Location: AOC17-B5: 41° 21' 35.733" N, 72° 05' 34.504" W		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/15/2020
Depth to First Water:	7 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Drumvac/ Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Rob, Jim
Type: Geoprobe		AECOM Representative:	Max Meadows
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

Project Number: 60579714
Date Completed: 6/16/2020

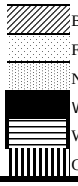
Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC17-B5 (0-2)	6.0	Dark brown graded SAND, some gravel, some cobbles, little silt, moist		
-2-				6.8	Dark brown graded SAND, some gravel, some cobbles, little silt, moist	SW	
-3-			AOC17-B5 (2-4)	8.4	Medium brown medium SAND, with gravel, trace silt, moist		
-4-				5.2	Medium brown medium SAND, with gravel, trace silt, moist	SW	
-5-		20/46"	AOC17-B5 (4-6)	0.1	Dark brown gravelly graded SAND, pulverized rock, little silt, moist		
-6-				0.0	Dark brown gravelly graded SAND, some pulverized rock, little silt, moist		
-7-			AOC17-B5 (6-8)	0.1	Medium brown medium SAND, with pulverized, rock, trace silt, moist. Wet at 7 ft.	SW	
-8-				0.0	Medium brown medium SAND, with pulverized, rock, trace silt, moist. Saturated at 8 ft. Sheen test: negative.		
-9-		21/46"		0.0	Medium brown coarse SAND, with gravel and pulverized rock, some silt, saturated	SW	
-10-				0.0	Medium brown coarse SAND, with gravel and pulverized rock, some silt, saturated		
-11-				0.0	Medium brown coarse SAND, with gravel and pulverized rock, some silt, saturated. Boring terminated at 12 ft.	SW	
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic



Bentonite/Grout
Filter Sand Pack
Natural Backfill
Well Riser
Well Screen
Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: AOC20-B7
Well ID No.:
Sheet 1 of 1

Boring Location: AOC20-B7: 41°21'38.070" N, 72°05'29.221"W		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/10/2020
Depth to First Water:	29 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Rob, Ryan, Andrew, Dan
Type: Geoprobe		AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

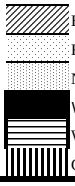
Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC20-B7 (0-2)	10.3	Medium brown medium SAND, with coarse SAND, some gravel, trace silt, moist	Fill	
-2-				3.9			
-3-			AOC20-B7 (2-4)	9.1	Medium brown/ orange fine SAND, trace fine gravel, some silt, moist	Fill	
-4-				4.6	Medium brown graded SAND, some gravel, moist	Fill	
-5-			AOC20-B7 (4-6)	4.6			
-6-				4.7			
-7-		48/48"	AOC20-B7 (5-7)	2.0	Pulverized GRANITE, some fine sand	Fill	
-8-			AOC20-B7 (6-8)				
-9-			AOC20-B7 (8-10)	2.2	Light brown fine to medium graded SAND, trace coarse sand, trace subrounded gravel, dry	SW	
-10-							
-11-		60/60"	AOC20-B7 (10-12)	5.7	Light brown fine to medium graded SAND, some sub-angular gravel	SW	
-12-							
-13-				2.2			
-14-							
-15-							
-16-		60/60"	AOC20-B7 (15-17)	2.3	Dark brown silty SAND, trace subrounded gravel, dry	SM	
-17-							
-18-				3.4	Light brown fine to medium graded SAND, some coarse sand, trace subrounded gravel, dry	SP	
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic



Bentonite/Grout
Filter Sand Pack
Natural Backfill
Well Riser
Well Screen
Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B7 Well ID No.: Sheet 1 of 1

Boring Location: AOC20-B7: 41°21'38.070" N, 72°05'29.221"W	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/10/2020	Date Completed: 6/16/2020
Depth to First Water: 29 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Ryan, Andrew, Dan	
Notes:	AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-		60/60"		2.3	Light brown fine to medium graded SAND, some subrounded graded gravel, dry	SW	
-22-							
-23-				1.7	Light brown fine to medium graded SAND, some subrounded graded gravel, trace silt, moist	SW	
-24-							
-25-							
-26-		60/60"	AOC20-B7 (25-27)	3.1	Dark brown fine to medium graded SAND, some subrounded gravel, moist	SW	
-27-							
-28-				0.3	Dark brown fine to medium graded SAND, some subrounded gravel, trace silt, sheen test negative moist	SW	▼
-29-							
-30-							
-31-					End of boring 30ft		
-32-							
-33-							
-34-							
-35-							
-36-							
-37-							
-38-							
-39-							
-40-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B8 Well ID No.: Sheet 1 of 1

Boring Location: AOC20-B8:		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/11/2020
Depth to First Water:	30 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Ryan, Pat, Dan, Andrew
Type: Geoprobe		AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC20-B8 (0-2)	0.9	Medium/ dark brown graded SAND, trace gravel, some silt, moist	Fill	
-2-				1.7			
-3-			AOC20-B8 (2-4)	1.5	Medium brown medium SAND, trace fine sand, trace gravel, moist	Fill	
-4-				2.8			
-5-			AOC20-B8 (4-6)	1.2	Medium brown gravelly SAND, moist	Fill	
-6-		60/60"		1.2			
-7-			AOC20-B8 (5-7)	0.9	Medium brown gravelly SAND, dry	Fill	
-8-			AOC20-B8 (6-8)				
-9-			AOC20-B8 (8-10)	0.8			
-10-							
-11-		60/60"	AOC20-B8 (10-12)	1.8	Light brown fine to medium graded SAND, some sub-angular gravel	SW	
-12-							
-13-				0.9	Dark brown medium to coarse graded SAND, some fine sand, some subrounded/angular gravel, moist	SW	
-14-							
-15-		60/60"	AOC20-B8 (15-17)	1.4			
-16-							
-17-							
-18-				0.9			
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

Bentonite/Grout
Filter Sand Pack
Natural Backfill
Well Riser
Well Screen
Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B8 Well ID No.: Sheet 1 of 1

Boring Location: AOC20-B8:		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/11/2020
Depth to First Water:	30 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Ryan, Pat, Dan, Andrew
Type: Geoprobe		AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-					No recovery		
-22-							
-23-		10/60"					
-24-				0.8	Dark brown fine to medium graded SAND, trace silt, moist	SW	
-25-							
-26-					No recovery		
-27-							
-28-		30/60"					
-29-				0.3	Dark brown fine to medium graded SAND, trace coarse sand, moist	SW	
-30-							▼
-31-					No recovery, saturated		
-32-							
-33-		??					
-34-				0.2	Dark brown silty SAND, saturated, sheen test negative	SM	
-35-					End of boring 35ft		
-36-							
-37-							
-38-							
-39-							
-40-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B9 Well ID No.: Sheet 1 of 1

Boring Location: AOC20-B9: 41°21'88.559" N, 72°05'28.267" W	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/10/2020	Date Completed: 6/16/2020
Depth to First Water: 29.5 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Ryan, Pat, Dan, Andrew	
Notes:	AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC20-B9 (0-2)	10.7	Medium brown medium SAND, little silt, trace gravel, moist	Fill	
-2-				10.5	Dark brown graded SAND, some gravel, trace silt, moist	Fill	
-3-			AOC20-B9 (2-4)	12.3	Medium brown graded SAND, littlw gravel, trace silt, moist	Fill	
-4-				11.6			
-5-			AOC20-B9 (4-6)	10.5	Light brown graded SAND, little gravel, trace silt, moist	Fill	
-6-		60/60"		16.0			
-7-			AOC20-B9 (5-7)	2.2	Light brown fine graded SAND, trace silt, trace subrounded gravel, moist	Fill	
-8-			AOC20-B9 (6-8)				
-9-			AOC20-B9 (8-10)	2.0	Light brown fine to medium graded SAND, some subrounded gravel, trace silt, moist	Fill	
-10-							
-11-		60/60"	AOC20-B9 (10-12)	4.7	Light brown fine to medium graded SAND, some coarse sand, some subrounded gravel, trace silt, dry	SW	
-12-							
-13-				3.5			
-14-							
-15-		10/60"			No recovery		
-16-							
-17-				5.4	Light brown fine to medium graded SAND, some coarse sand, some subrounded gravel, trace silt, dry	SW	
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B9 Well ID No.: Sheet 1 of 1

Boring Location: AOC20-B9: 41°21'88.559" N, 72°05'28.267" W	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/10/2020	Date Completed: 6/16/2020
Depth to First Water: 29.5 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes:	Driller's Name:	Ryan, Pat, Dan, Andrew
		AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski
		Owner/Client Rep.:	

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-		60/60	AOC20-B9 (20-22)	0.7	Brown silty SAND, some sub-angular gravel, moist	SM	
-22-							
-23-				0.9			
-24-							
-25-							
-26-		60/60"	AOC20-B11 (25-27)	1.3	Brown silty SAND, some sub-angular gravel, trace gravel, moist	SM	
-27-							
-28-				3.2	Light/ dark brown fine to medium graded SAND, trace silt, trace subrounded gravel, saturated, sheen test negative	SW	▼
-29-							
-30-							
-31-					End of boring at 30ft		
-32-							
-33-							
-34-							
-35-							
-36-							
-37-							
-38-							
-39-							
-40-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B10 Well ID No.: Sheet 1 of 1

Boring Location: AOC20-B10: 41°21'38.391" N, 72°05'28.816" W		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/11/2020
Depth to First Water:	30 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Ryan, Pat, Dan, Andrew
Type: Geoprobe		AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC20-B10 (0-2)	0.5	Gray/ brown fine to medium SAND, some gravel, some silt, moist	Fill	
-2-				2.5	Dark brown graded SAND with gravel, little silt, moist	Fill	
-3-			AOC20-B10 (2-4)	3.6	Medium brown graded SAND, some gravel, littlw silt, moist, trace plastic	Fill	
-4-				1.8	Dark brown fine SAND, some coarse sand, trace wood, trace brick with silt, moist	Fill	
-5-			AOC20-B10 (4-6)	1.8	Dark brown fine SAND, some coarse sand, some wood, some insulation, some plastic, trace brick with silt, moist	Fill	
-6-		48/48"		1.9			
-7-			AOC20-B10 (5-7)	1.4	Dark brown fine SAND, some coarse sand, some wood, some insulation, some plastic, trace brick with silt, dry	Fill	
-8-							
-9-			AOC20-B10 (8-10)	0.1	Light brown fine to medium graded SAND, some subrounded gravel, trace coarse sand, dry	Fill	
-10-							
-11-		0/60"			No recovery - all gravel		
-12-							
-13-							
-14-							
-15-							
-16-		50/60"	AOC20-B10 (15-17)	1.6	Light brown medium to coarse graded SAND, some silt, trace subrounded gravel, dry	SW	
-17-							
-18-				2.8	Dark brown SAND and GRAVEL, some silt, dry	SW	
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B10 Well ID No.: Sheet 1 of 1

Boring Location: AOC20-B10: 41°21'38.391" N, 72°05'28.816" W		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/11/2020
Depth to First Water:	30 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Ryan, Pat, Dan, Andrew
Type: Geoprobe		AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-		60/60"	AOC20-B10 (20-22) Duplicate	0.7	Brown fine SAND, some silt, dry	SP	
-22-							
-23-				0.1	Dark brown/ black SAND and GRAVEL, some silt, dry	SW	
-24-							
-25-							
-26-		???	AOC20-B11 (25-27)		No recovery - all gravel		
-27-							
-28-							
-29-		48/48"		3.2	Dark brown silty SAND, trace subrounded gravel, moist	SM	
-30-							
-31-				5.1	Light brown fine SAND, some silt, saturated, sheen test negative	SM	
-32-							
-33-					End of boring at 32ft		
-34-							
-35-							
-36-							
-37-							
-38-							
-39-							
-40-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B11 Well ID No.: Sheet 1 of 1

Boring Location: AOC20-B11:		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/11/2020
Depth to First Water:	25 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes:	Driller's Name:	Ryan, Pat, Dan, Andrew
		AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski
		Owner/Client Rep.:	

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear		1.9	Medium/ dark brown graded SAND with gravel, some silt, moist	Fill	
-2-				1.7	Medium brown fine to medium SAND, some gravel with silt, moist	Fill	
-3-				3.6	Medium brown gravelly SAND, trace silt, moist	Fill	
-4-				1.8			
-5-				1.4			
-6-		60/60"	AOC20-B11 (5-7)	1.6			
-7-				2.4			
-8-							
-9-				0.8	Light brown fine to medium graded SAND and GRAVEL, some subangular/rounded gravel, trace silt, moist	Fill	
-10-							
-11-		60/60"	AOC20-B11 (10-12)	1.6	Medium brown fine to medium graded SAND, some coarse sand, some subrounded gravel, moist	Fill	
-12-							
-13-				0.2	Medium brown SAND and GRAVEL, some silt, moist	Fill	
-14-							
-15-		60/60"	AOC20-B11 (15-17)	0.4	Dark brown silty SAND, some sub-angular gravel, moist	SM	
-16-							
-17-				1	Light brown medium to coarse graded SAND, some fine sand, trace subrounded gravel, moist	SP	
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B11 Well ID No.: Sheet 1 of 1

Boring Location: AOC20-B11:			
Ground Elevation:			
Depth to First Water:	25	feet BGS	
Depth to Static Water:	N/A	feet BGS	
Stabilization Time:	N/A		

AECOM Project Manager:	Mike Garbolski
Project Number:	60579714
Date Started:	6/11/2020
Date Completed:	6/16/2020
Drill Type:	Hand Cleared/Direct Push
Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Drilling Company:	Cisco Geotechnical
Driller's Name:	Ryan, Pat, Dan, Andrew
AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski
Owner/Client Rep.:	

Sampler
Type: Geoprobe
Hammer: NA
Fall: NA

Notes:

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-		60/60"	AOC20-B11 (20-22) Duplicate	2.3	Light brown medium to carse graded SAND, some fine sand, trace subrounded gravel, moist	SW	
-22-							
-23-				1.2	Dark brown silty SAND, some sub-rounded gravel, moist	SM	
-24-							
-25-							▼
-26-		???	AOC20-B11 (25-27)	0.3	Light brown fine to medium graded SAND, some silt, trace subrounded gravel, saturated, sheen test negative	SW	
-27-							
-28-				0.7			
-29-							
-30-							
-31-					End of boring 30ft		
-32-							
-33-							
-34-							
-35-							
-36-							
-37-							
-38-							
-39-							
-40-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B12 Well ID No.: Sheet 1 of 1

Boring Location: AOC20-B12:		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/11/2020
Depth to First Water:	30 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes:	Driller's Name:	Ryan, Pat, Dan, Andrew
		AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski
		Owner/Client Rep.:	

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	3"Asphalt, 2" processed gravel		
-1-			AOC20-B12 (0.5-2)	1.9	Medium brown graded SAND, little silt, trace gravel, moist		
-2-				2.2	Medium brown fine to medium SAND with silt, trace gravel, moist		
-3-		Vacuum/ Hand Clear	AOC20-B12 (2-4) MS/MSD	2.2			
-4-				1.3	Medium brown gravelly graded SAND, trace silt, moist	Fill	
-5-			AOC20-B12 (4-6)	1.2			
-6-				1.3			
-7-			AOC13-B5 (5-7)	0.5	Dark brown fine to medium graded SAND, trace silt, trace subrounded gravel, moist	Fill	
-8-		60/60"					
-9-				0.5	Light brown SAND and GRAVEL, trace silt, moist	Fill	
-10-							
-11-			AOC20-B12 (10-12)	0.8			
-12-							
-13-		60/60"			Light brown fine to medium graded SAND, trace subrounded gravel, dry	SW	
-14-				1.7			
-15-							
-16-			AOC20-B12 (15-17)	0.9	Dark brown silty SAND, trace subrounded gravel, moist	SM	
-17-							
-18-		60/60"		1	Dark brown fine to medium graded SAND, some subrounded gravel, trace silt, moist	SW	
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B12 Well ID No.: Sheet 1 of 1

Boring Location: AOC20-B12:			
Ground Elevation:			
Depth to First Water:	30	feet BGS	
Depth to Static Water:	N/A	feet BGS	
Stabilization Time:	N/A		

AECOM Project Manager:	Mike Garbolski
Project Number:	60579714
Date Started:	6/11/2020
Date Completed:	6/16/2020
Drill Type:	Hand Cleared/Direct Push
Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Drilling Company:	Cisco Geotechnical
Driller's Name:	Ryan, Pat, Dan, Andrew
AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski
Owner/Client Rep.:	

Sampler
Type: Geoprobe
Hammer: NA
Fall: NA

Notes:

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-					No recovery		
-22-							
-23-		30/60"		1.0	Dark brown fine to medium graded SAND, some subrounded gravel, trace silt, moist	SW	
-24-							
-25-							
-26-			AOC20-B12 (25-27)	0.9			
-27-							
-28-		60/60"		2.6	Dark brown fine to medium graded SAND, some subrounded gravel, trace silt, saturated, sheen test negative	SW	
-29-							
-30-							
-31-					End of boring 30ft		
-32-							
-33-							
-34-							
-35-							
-36-							
-37-							
-38-							
-39-							
-40-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B13 Well ID No.: Sheet 1 of 1

Boring Location: AOC20-B13: 41°21'38.013" N, 72°05'28.508"W	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/9/2020	Date Completed: 6/15/2020
Depth to First Water: 28.5 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Ryan, Andrew, Dan	
Notes: Boring was identified as B6 in the field but later chagned to B13 as B6 was used previously	AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	AOC20-B6 (0-2)	3.1	Medium brown medium SAND, trace gravel, some fine sand, moist	Fill	
-2-				5.9	Medium brown graded SAND, little gravel, trace silt, moist	Fill	
-3-			AOC20-B6 (2-4) MS/MSD	4.5	Medium brown/ orange fine SAND, some medium sand, little gravel, some silt, moist	Fill	
-4-				3.0			
-5-				1.9	Medium brown graded SAND, some gravel, little silt, moist	Fill	
-6-			AOC20-B6 (5-7)	2.0			
-7-		46/46"		2.8	Medium brown graded SAND, some gravel, little silt, dry	Fill	
-8-			AOC20-B6 (6-8)				
-9-			AOC20-B6 (8-10)	1.4			
-10-					Light brown SAND and GRAVEL, dry	Fill	
-11-		60/60"	AOC20-B6 (10-12)	1.9			
-12-							
-13-				3.8			
-14-							
-15-					Light brown fine to medium graded SAND, some subrounded graded gravel, tace silt, dry	SW	
-16-		60/60"	AOC20-B6 (15-17)	1.3			
-17-							
-18-				2.2	Light brown fine SAND, some silt, trace subrounded gravel, dry	SP	
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B13 Well ID No.: Sheet 1 of 1

Boring Location: AOC20-B13: 41°21'38.013" N, 72°05'28.508"W	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/9/2020	Date Completed: 6/15/2020
Depth to First Water: 28.5 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Ryan, Andrew, Dan	
Notes: Boring was identified as B6 in the field but later chagned to B13 as B6 was used previously	AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-		60/60"	AOC20-B6 (20-22)	1.5	Light brown fine SAND, some silt, trace subrounded gravel, dry	SP	
-22-							
-23-				3.2	Light brown fine SAND, some silt, trace subrounded gravel, moist	SP	
-24-							
-25-							
-26-		60/60"	AOC20-B6 (25-27)	3.8			
-27-							
-28-				4.1	Light brown fine SAND, some silt, trace subrounded gravel, saturated, sheen test negative	SP	▼
-29-							
-30-							
-31-					End of boring 30ft		
-32-							
-33-							
-34-							
-35-							
-36-							
-37-							
-38-							
-39-							
-40-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.:
Well ID No.: MW-19
Sheet 1 of 1

Boring Location: MW-19: 41°21'42.757" N, 72°05'31.952" W		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	6/15/2020
Depth to First Water:	6.5 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Drum vac/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Rob, Jim
Type: Geoprobe	No samples, well set only. Well set on 6/17/20	AECOM Representative:	Dan Keilbania, Max Meadows, Jordan Trezinski
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

Project Number: 60579714
Date Completed: 6/17/2020

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-					Asphalt		
-2-		Vacuum/ Hand Clear			Medium brown graded SAND, some gravel, trace silt, moist	Fill	
-3-					Medium brown gravelly SAND, some silt, moist	Fill	
-4-					Dark brown gravelly graded SAND, some silt, moist	Fill	
-5-					Medium brown gravelly graded SAND, some silt, moist	Fill	
-6-					Medium brown gravelly graded SAND, some silt, trace subrounded angular gravel, saturated	Fill	
-7-				0.7	Gray SILT, some fine to medium sand, some clay, slighly plastic and whesile, saturated	ML	
-8-		50/60"					
-9-				0.6			
-10-							
-11-							
-12-							
-13-					End of boring at 13ft		
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: Well ID No.: MW-21 Sheet 1 of 1

Boring Location: MW-21: 41°21'37.851" N, 72°05'25.783" W	AECOM Project Manager:	Mike Garbolski	Project Number: 60579714
Ground Elevation:	Date Started:	6/16/2020	Date Completed: 6/17/2020
Depth to First Water: 7 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Drum vac/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Driller's Name:	Rob, Jim	
Notes: No samples, well set only. Well set on 6/17/20	AECOM Representative:	Max Meadows	
	Owner/Client Rep.:		

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear		0.0	3" Asphalt, asphalt base		
				0.0			
				0.0	Medium brown gravelly graded SAND with gravel, little silt, moist	Fill	
-2-							
-3-				0.0		Fill	
				0.0			
-4-							
-5-				0.0	Light brown, fine to medium SAND, some gravel, little silt, moist	Fill	
-6-		60/60"		0.8			
-7-						Fill	
-8-							
-9-				0.7	Light brown, fine to medium SAND, some gravel, little silt, saturated		
-10-						Fill	
-11-							
-12-							
-13-					End of boring 14 feet		
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B14 Well ID No.: MW-24 Sheet 1 of 2

Boring Location: 211321.23 m N, 359911.75 m E		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	8/10/2020
Depth to First Water:	21 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes:	Driller's Name:	Julio, Jim, Dan
		AECOM Representative:	Max Meadows
		Owner/Client Rep.:	

Project Number:	60637932
Date Completed:	8/18/2020

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (4") Asphalt Base (2")		
-1-		Vacuum/ Hand Clear	AOC20-B14 (0.5-2) 09:30	1.3	Medium/ dark brown fine - medium SAND, trace silt, trace gravel, trace asphalt, moist	SP	
-2-				1.7	Medium brown fine - medium SAND, some silt, with coarse gravel and cobbles, moist	SP	
-3-				4.7			
-4-				4.2			
-5-				0.0	No recovery, too many cobbles to collect a sample with hand auger. Pre-cleared to 5', end of vacuum boring	GP	
-6-		18/57"	AOC20-B14 (5-7) 12:30	0.0	Medium brown gravelly graded SAND, trace silt, moist	SW	
-7-							
-8-							
-9-							
-10-				0.0	Light gray/ brown gravelly graded SAND, trace silt, moist	SW	
-11-		17/57"	AOC20-B14 (10-12) 12:40	1.7			
-12-				1.9	Light gray fine SAND, little silt, trace gravel, trace cobbles, moist	SP	
-13-							
-14-				2.0	Light brown/ gray graded SAND, with gravel, little silt, moist	SW	
-15-							
-16-		22/57"	AOC20-B14 (15-17) 12:50	0.7	Light brown/ gray gravelly and silty graded SAND, moist	SW-SM	
-17-							
-18-							
-19-							
-20-				0.2	Light brown silty fine SAND, trace gravel, moist	SP	

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B14 Well ID No.: MW-24 Sheet 2 of 2

Boring Location: 211321.23 m N, 359911.75 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/10/2020	Date Completed: 8/18/2020
Depth to First Water:	21	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler	Notes:		Driller's Name:	Julio, Jim, Dan	
Type: Geoprobe			AECOM Representative:	Max Meadows	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-		24/57"	AOC20-B14 (20-22) 13:10	1.8	Medium gray fine - medium silty SAND, wet at 21'	SP-SM	
-22-							
-23-							
-24-							
-25-				1.6	Medium gray gravelly graded SAND, with silt, saturated	SW-SM	
-26-		18/57"			Medium gray gravelly graded SAND, with silt, saturated. Boring terminated at 30'	SW-SM	
-27-							
-28-							
-29-							
-30-							
-31-							
-32-							
-33-							
-34-							
-35-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Construction Notes

Well set at 28.5' bgs
20 Slot Screen
Screened 18.5'-28.5'
No. 2 sand: 16.5'-28.5'
Bentonite: 14.5'-16.5'
Native material: 1'-14.5'
Concrete & road box: grade-1'

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B15 Well ID No.: Sheet 1 of 2

Boring Location: 211306.14 m N, 359915.14 m E	AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:	Date Started:	8/10/2020	Date Completed: 8/19/2020
Depth to First Water: 25 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes:	Driller's Name:	Julio, Jim, Dan
		AECOM Representative:	Max Meadows, Jordan Trczinski
		Owner/Client Rep.:	

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (4") Asphalt Base (2")		
-1-			AOC20-B15 (0.5-2) 10:30	1.6	Medium brown graded SAND, trace gravel, trace silt, moist	SW	
-2-		Vacuum/ Hand Clear		1.8			
-3-				3.0	Light brown/ gray graded SAND, with gravel, with cobbles, trace silt, moist	GW	
-4-				0.0	COBBLES with graded sand, trace silt, moist. Could not recover sample with auger or post hole digger. End of vacuum boring, pre-cleared to 5'	GW	
-5-							
-6-			AOC20-B15 (5-7) 08:10	0.2	Medium brown gravelly graded SAND, little silt, moist	SW	
-7-							
-8-		18/57"		0.3	Light brown silty fine - medium SAND, trace gravel, moist	SP	
-9-							
-10-							
-11-			AOC20-B15 (10-12) 08:20	0.4	Light brown gravelly and silty graded SAND, moist	SW-SM	
-12-				0.2	Light brown silty fine - medium SAND, trace coarse sand, trace gravel, moist	SP-SM	
-13-		34/57"		0.1	Light brown fine SAND, some silt, moist	SP	
-14-							
-15-							
-16-			AOC20-B15 (15-17) 08:30	0.3	Light brown fine SAND, some silt, moist	SP	
-17-				0.4	Light/ medium brown graded SAND, trace gravel, moist	SW	
-18-		44/57"		0.3	Light brown silty fine SAND, trace coarse sand, trace gravel, moist	SP	
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B15 Well ID No.: Sheet 2 of 2

Boring Location: 211306.14 m N, 359915.14 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/10/2020	Date Completed: 8/19/2020
Depth to First Water:	25	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Jim, Dan	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-		24/57"	AOC20-B15 (20-22) 08:40	0.3	Medium brown gravelly graded SAND, trace silt, moist	SW	
-22-							
-23-				0.1	Light brown fine SAND, little medium sand, some silt, moist	SP	
-24-				0.1	Medium brown gravelly graded SAND, trace silt, moist	SW	
-25-							▼
-26-		18/57"	AOC20-B15 (25-27) 08:50	0.1	Medium/ dark brown sandy GRAVEL, saturated. Boring terminated 30'	GP	
-27-							
-28-							
-29-							
-30-							
-31-							
-32-							
-33-							
-34-							
-35-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B16 Well ID No.: Sheet 1 of 2

Boring Location:	211286.64 m N, 359920.20 m E		AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/10/2020	Date Completed: 8/19/2020
Depth to First Water:	25	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Jim, Dan	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (4") Asphalt Base (2")		
-1-		Vacuum/ Hand Clear	AOC20-B16 (0.5-2) 12:35	1.8	Medium brown graded SAND, with silt, with coarse gravel, moist	SW-SM	
-2-				1.6	Medium brown fine - medium SAND, some coarse gravel, trace silt, moist	SP	
-3-				7.3	Light gray graded SAND, with coarse gravel, trace silt, moist. End of vacuum boring, pre-cleared to 5'	SW	
-4-				9.2			
-5-				7.7			
-6-		31/57"	AOC20-B16 (5-7) 09:15	0.1	Light/ medium brown gravelly graded SAND, little silt, moist	SW	
-7-							
-8-							
-9-							
-10-							
-11-		43/57"	AOC20-B16 (10-12) 09:25	0.0	Light/ medium brown gravelly graded SAND, little silt, moist	SW	
-12-							
-13-							
-14-							
-15-							
-16-		49/57"	AOC20-B16 (15-17) 09:35	0.2	Light brown fine - medium SAND, trace silt, moist	SP	
-17-							
-18-				0.0	Light/ medium gray fine sandy SILT, moist (17'-18'), saturated (18'-19')	ML	
-19-							
-20-				0.1	Light/ medium gray fine sandy SILT, trace medium - coarse sand, saturated	ML	

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B16 Well ID No.: Sheet 2 of 2

Boring Location: 211286.64 m N, 359920.20 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/10/2020	Date Completed: 8/19/2020
Depth to First Water:	25	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Jim, Dan	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-		35/57"	AOC20-B16 (20-22) 09:45	0.1	Medium brown gravelly graded SAND, trace silt, moist	SW	
-22-							
-23-				0.2	Light brown medium - coarse SAND, trace silt, trace gravel, wet at 25'	SP	▼
-24-							
-25-							
-26-		23/57"	AOC20-B16 (25-27) 09:55	0.1	Medium/ dark brown sandy GRAVEL, trace silt, wet	GP	
-27-							
-28-							
-29-							
-30-							
-31-		26/57"	AOC20-B16 (30-32) 10:00	0.0	Medium brown gravelly graded SAND, trace silt, saturated. Boring terminated at 35'	SW	
-32-							
-33-							
-34-							
-35-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B17 Well ID No.: Sheet 1 of 2

Boring Location: 211227.37 m N, 359959.00 m E	AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:	Date Started:	8/11/2020	Date Completed: 8/19/2020
Depth to First Water: 20 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes:	Driller's Name:	Julio, Pat, Dan
		AECOM Representative:	Max Meadows, Jordan Trczinski
		Owner/Client Rep.:	

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (6")		
-1-		Vacuum/ Hand Clear	AOC20-B17 (0.5-2) 11:25	5.7	Black fine - medium poorly graded SAND, some silt, trace gravel, with pulverized asphalt, moist	FILL	
-2-				10.0	Medium brown/ black fine - medium poorly graded SAND, with pulverized asphalt, some silt, trace gravel, moist	FILL	
-3-				9.8	Medium brown graded SAND, little gravel, trace silt, moist. End of vacuum boring, pre-cleared to 5'	SW	
-4-				6.0			
-5-				1.8			
-6-		20/57"	AOC20-B17 (5-7) 12:20	0.2	Medium brown gravelly graded SAND, with pulverized rock, trace silt, moist	SW	
-7-							
-8-							
-9-							
-10-							
-11-		29/57"	AOC20-B17 (10-12) 12:30 DUP 12:35	0.2	Medium brown gravelly graded SAND, with pulverized rock, trace silt, moist	SW	
-12-				0.3	Medium brown fine - medium SAND, trace gravel, moist	SP	
-13-				0.2	Medium brown gravelly graded SAND, with pulverized rock, little silt, moist	SW	
-14-							
-15-							
-16-		36/57"	AOC20-B17 (15-17) 12:40 MS/MSD	0.3	Light brown/ gray gravelly graded SAND, trace silt, moist	SW	
-17-							
-18-				0.0	Light brown/ gray silty fine - medium SAND, trace coarse sand, wet at 20'	SP	
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B17 Well ID No.: Sheet 2 of 2

Boring Location: 211227.37 m N, 359959.00 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/11/2020	Date Completed: 8/19/2020
Depth to First Water:	20	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler	Notes:		Driller's Name:	Julio, Pat, Dan	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21- -22- -23- -24- -25-		4/57"		0.0	Pulverized rock, saturated. Rock in tip of macrocore sleeve caused poor recovery. No sample collected at this interval	GW	
-26- -27- -28- -29- -30-		6/57"		0.0	Pulverized rock, saturated. Rock in tip of macrocore sleeve caused poor recovery. No sample collected at this interval. Boring terminated at 30'	GW	
-31- -32- -33- -34- -35-		26/57"	AOC20-B16 (30-32) 10:00	0.0	Medium brown gravelly graded SAND, trace silt, saturated. Boring terminated at 35'	SW	

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B18 Well ID No.: Sheet 1 of 2

Boring Location: 211225.88 m N, 359945.22 m E	AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:	Date Started:	8/11/2020	Date Completed: 8/19/2020
Depth to First Water: 25 feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water: N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time: N/A	Drilling Company:	Cisco Geotechnical	
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes:	Driller's Name:	Julio, Pat, Dan
		AECOM Representative:	Max Meadows, Jordan Trczinski
		Owner/Client Rep.:	

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (4"), asphalt base (2")		
-1-			AOC20-B18 (0.5-2) 13:20 DUP 13:25	2.6	Dark brown silty graded SAND, little gravel little crushed asphalt, moist	FILL	
-2-		Vacuum/ Hand Clear		2.0	Medium/ dark brown fine - medium SAND, with silt, trace gravel, little coal, trace nails, trace slag, moist	FILL	
-3-				5.4	Medium brown fine - medium silty SAND, trace gravel, some cobbles, moist	SP-SM	
-4-				3.5	COBBLES and fine - medium dark brown SAND, little silt, with gravel, moist. End of vacuum boring, pre-cleared to 5'	GP	
-5-				0.0			
-6-			AOC20-B18 (5-7) 13:25				
-7-							
-8-		29/57"		0.0	Medium brown gravelly graded SAND, and pulverized rock, trace silt, moist	SW	
-9-							
-10-							
-11-							
-12-							
-13-		18/57"		0.0	White pulverized rock. Macrocore sleeve melted, no sample collected at this interval	GW	
-14-							
-15-							
-16-			AOC20-B18 (15-17) 13:45				
-17-							
-18-		36/57"		0.0	Light gray/ brown gravelly graded SAND, trace silt, moist	SW	
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B18 Well ID No.: Sheet 2 of 2

Boring Location: 211225.88 m N, 359945.22 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/11/2020	Date Completed: 8/19/2020
Depth to First Water:	25	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat, Dan	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-		42/57"	AOC20-B18 (20-22) 13:50	0.1	Light brown graded SAND, trace silt, moist	SW	
-22-							
-23-				0.1	Light gray fine SAND, moist	SP	
-24-							
-25-							▼
-26-		48/57"	AOC20-B18 (25-27) 14:00	0.4	Light gray fine SAND, saturated	SP	
-27-							
-28-							
-29-				0.0	Light/ medium brown/ gray graded SAND, trace gravel, trace silt saturated. Boring terminated at 30'	SW	
-30-							
-31-							
-32-							
-33-							
-34-							
-35-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B19 Well ID No.: Sheet 1 of 2

Boring Location:	211287.98 m N, 359953.19 m E		AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/11/2020	Date Completed: 8/19/2020
Depth to First Water:	25	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat, Dan	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (4"), asphalt base (2")		
-1-			AOC20-B19 (0.5-2) 14:25	0.8	Medium brown fine - medium SAND, some gravel, some silt, trace asphalt, moist	FILL	
-2-		Vacuum/ Hand Clear		3.3	Light brown fine SAND, trace silt, moist	SP	
-3-				2.0	Medium brown medium SAND, little gravel, trace silt, moist. End of vacuum boring, pre-cleared to 5'	SP	
-4-				2.2			
-5-				0.7			
-6-			AOC20-B19 (5-7) 10:20				
-7-							
-8-		20/57"		2.9	Light brown graded SAND, trace gravel, little silt, moist	SW	
-9-							
-10-							
-11-			AOC20-B19 (10-12) 10:30				
-12-							
-13-		30/57"		0.6	Pulverized ROCK, some graded sand, trace silt, moist	GW	
-14-							
-15-							
-16-			AOC20-B19 (15-17) 10:35				
-17-							
-18-		24/57"		0.2	Light/ dark brown/ gray gravelly graded SAND, with pulverized rock, moist	SW	
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B19 Well ID No.: Sheet 2 of 2

Boring Location: 211287.98 m N, 359953.19 m E		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	8/11/2020
Depth to First Water:	25 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler Type: Geoprobe Hammer: NA Fall: NA	Notes:	Driller's Name:	Julio, Pat, Dan
		AECOM Representative:	Max Meadows, Jordan Trczinski
		Owner/Client Rep.:	

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-			AOC20-B19 (20-22) 10:40				
-22-							
-23-		19/57"		0.6	Light gray graded SAND and pulverized rock, little silt, some gravel, moist	SW	
-24-							
-25-							▼
-26-			AOC20-B19 (25-27) 10:45				
-27-							
-28-		23/57"		0.6	Medium gray gravelly graded SAND, little silt, saturated. Boring terminated at 30'	SW	
-29-							
-30-							
-31-							
-32-							
-33-							
-34-							
-35-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B20 Well ID No.: Sheet 1 of 2

Boring Location:	211248.09 m N, 359930.20 m E		AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/17/2020	Date Completed: 8/19/2020
Depth to First Water:	25	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat, Dan	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (3"), asphalt base (3")		
-1-		Vacuum/ Hand Clear	AOC20-B20 (0.5-2) 11:05	1.1	Medium brown medium SAND, some gravel, trace silt, moist	FILL	
-2-				3.3	Medium/ dark brown medium SAND, some gravel, some cobbles, trace silt, moist	FILL	
-3-				1.1	Medium/ dark brown graded SAND, some gravel, some cobbles, trace silt, moist	SW	
-4-				1.6			
-5-				0.4	Medium brown graded SAND and gravel, trace silt, moist. End of vacuum boring, pre-cleared to 5'	SW	
-6-		36/57"	AOC20-B20 (5-7) 14:35	0.0	Light gray/ medium brown gravelly graded SAND and pulverized rock, trace silt, moist	SW	
-7-							
-8-							
-9-							
-10-							
-11-		44/57"	AOC20-B20 (10-12) 14:45	0.1	Light gray/ medium brown gravelly graded SAND and pulverized rock, little silt, moist	SW	
-12-							
-13-							
-14-							
-15-							
-16-		38/57"	AOC20-B20 (15-17) 14:55	0.1	Light gray fine SAND, moist	SP	
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B20 Well ID No.: Sheet 2 of 2

Boring Location: 211248.09 m N, 359930.20 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/17/2020	Date Completed: 8/19/2020
Depth to First Water:	25	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat, Dan	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-			AOC20-B20 (20-22) 15:00				
-22-							
-23-		48/57"		0.1	Light gray silty fine SAND, moist	SP	
-24-							
-25-							▼
-26-			AOC20-B20 (25-27) 15:05				
-27-							
-28-		25/57"		0.0	Medium brown gravelly graded SAND and pulverized rock, little silt, saturated. Boring terminated at 30'	SW	
-29-							
-30-							
-31-							
-32-							
-33-							
-34-							
-35-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B21 Well ID No.: Sheet 1 of 2

Boring Location: 211253.65 m N, 359889.78 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/17/2020	Date Completed: 8/21/2020
Depth to First Water:	30	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler	Notes:		Driller's Name:	Julio, Pat, Dan, Avery	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (3"), asphalt base (3")		
-1-			AOC20-B21 (0.5-2) 12:15	0.1	Dark brown fine - medium SAND and gravel, trace coal, trace nails, little silt, moist	FILL	
-2-		Vacuum/ Hand Clear		0.5			
-3-				0.0	Dark brown fine - medium SAND, and cobbles, little silt, trace organic material (roots, sticks), trace gravel, moist. End of vacuum boring, pre-cleared to 5'	SP	
-4-				0.0			
-5-				0.0			
-6-			AOC20-B21 (5-7) 07:55	0.1	Light gray/ dark brown gravelly graded SAND, with wood, little concrete, little silt, trace plastic, moist.	FILL	
-7-		23/57"					
-8-				0.1	Light gray gravelly graded SAND and pulverized rock, moist	SW	
-9-							
-10-							
-11-			AOC20-B21 (10-12) 08:15	0.3	Light brown gravelly fine - medium SAND, little coarse sand, trace silt, moist	SP	
-12-		30/57"					
-13-				0.1	Light/ medium brown/gray gravelly graded SAND, little silt, little pulverized rock, moist	SW	
-14-							
-15-							
-16-			AOC20-B21 (15-17) 08:20	0.4	Light/ medium brown/gray gravelly graded SAND, little silt, little pulverized rock, moist	SW	
-17-		25/57"					
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B21 Well ID No.: Sheet 2 of 2

Boring Location: 211253.65 m N, 359889.78 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/17/2020	Date Completed: 8/21/2020
Depth to First Water:	30	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat, Dan, Avery	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-		32/57"	AOC20-B21 (20-22) 08:25	0.2	Light/ medium brown/gray gravelly graded SAND, little silt, little pulverized rock, moist	SW	
-22-							
-23-							
-24-							
-25-							
-26-		19/57"	AOC20-B21 (25-27) 08:35	0.3	Light/ medium brown/gray gravelly graded SAND, little silt, little pulverized rock, moist	SW	
-27-							
-28-							
-29-							
-30-							▼
-31-		44/57"	AOC20-B21 (30-32) 08:45 MS/MSD	0.2	Medium gray medium SAND, little silt, trace gravel, saturated. Boring terminated at 35'	SP	
-32-							
-33-							
-34-							
-35-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B22 Well ID No.: Sheet 1 of 1

Boring Location: 211296.19 m N, 359885.77 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/17/2020	Date Completed: 8/17/2020
Depth to First Water:		feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler	Notes:		Driller's Name:	Julio, Pat, Dan	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (3"), asphalt base (3")		
-1-			AOC20-B22 (0.5-2) 14:15	0	Medium/ dark brown fine - medium SAND, some gravel, little silt, moist	FILL	
-2-		Vacuum/ Hand Clear		0.0	Medium brown graded SAND, some gravel, some concrete, little silt, moist		
-3-				0.0	Medium brown graded SAND, some gravel, some concrete, little silt, trace ceramic pipe, moist	FILL	
-4-				0.1	Medium/ dark brown fine - medium SAND, little silt, trace cobbles, moist. End of vacuum boring, pre-cleared to 5'	SP	
-5-				0.1			
-6-			AOC20-B22 (5-7) 09:30	0.1	Medium gray gravelly medium SAND, pulverized concrete. Boring terminated at 8', refusal from concrete.	SP	
-7-							
-8-		11/57"					
-9-							
-10-							
-11-							
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B23 Well ID No.: Sheet 1 of 2

Boring Location: 211305.97 m N, 359902.68 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/18/2020	Date Completed: 8/21/2020
Depth to First Water:	29	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler	Notes:		Driller's Name:	Julio, Dan, Avery	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (3"), asphalt base (3")		
-1-		Vacuum/ Hand Clear	AOC20-B23 (0.5-2) 14:20 MS/MSD	0.1	Dark brown graded SAND, with gravel, some silt, trace brick, moist	FILL	
-2-				0.1	Medium/ dark brown graded SAND, with gravel, some silt, trace brick, trace metal, trace cobbles, moist		
-3-				0.1			
-4-				0.1	Medium/ dark brown graded SAND, and cobbles, with gravel, some silt, trace brick, trace metal, moist. End of vacuum boring, pre-cleared to 5'		
-5-				0.1			
-6-		30/57"	AOC20-B23 (5-7) 09:45	0.2	Light brown gravelly graded SAND, little pulverized rock, trace silt, moist	SW	
-7-							
-8-							
-9-							
-10-							
-11-		28/57"	AOC20-B20 (10-12) 09:50	0.1	Light brown gravelly graded SAND, trace silt, moist	SW	
-12-							
-13-							
-14-							
-15-							
-16-		20/57"	AOC20-B23 (15-17) 09:55	0.2	Light brown gravelly graded SAND, trace silt, moist	SW	
-17-							
-18-				0.1	Light brown silty graded SAND, little gravel, little pulverized rock	SW	
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: AOC20-B23 Well ID No.: Sheet 2 of 2

Boring Location: 211305.97 m N, 359902.68 m E			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/18/2020	Date Completed: 8/21/2020
Depth to First Water:	29	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Dan, Avery	
Type: Geoprobe			AECOM Representative:	Max Meadows, Jordan Trczinski	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-21-		24/57"	AOC20-B23 (20-22) 10:00	0.1	Light brown/ gray gravelly graded SAND, little pulverized rock, moist	SW	
-22-							
-23-							
-24-							
-25-							
-26-		23/57"	AOC20-B23 (25-27) 10:10	1.0	Light brown/ gray gravelly graded SAND, little pulverized rock, saturated at 29'	SW	▼
-27-							
-28-							
-29-							
-30-							
-31-		26/57"	AOC20-B23 (30-32) 10:15	0.0	Light brown/ gray gravelly graded SAND, little pulverized rock, saturated. Boring terminated at 35'	SW	
-32-							
-33-							
-34-							
-35-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: TRC-B1 Well ID No.: Sheet 1 of 1

Boring Location:	211193.24 m N, 359997.91 m E		AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/12/2020	Date Completed: 8/14/2020
Depth to First Water:	8.5	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat	
Type: Geoprobe			AECOM Representative:	Max Meadows	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (4"), asphalt base (2")		
-1-		Vacuum/ Hand Clear	TRC-B1 (0-2) 10:10 DUP 10:15	0.5	Light brown graded SAND, little gravel, little silt, moist	SW	
-2-				1.8	Light brown silty fine - medium SAND, trace gravel, moist	SP	
-3-				0.4			
-4-				1.7			
-5-				2.1			
-6-		36/57"	TRC-B1 (5-7) 13:00	0.8	Light/ medium brown silty fine SAND, trace gravel, iron staining, moist	SP	
-7-							
-8-			TRC-B1 (7-9) 13:05	1.7	Light brown silty fine SAND, trace gravel, wet at 8.5'	SP	▼
-9-							
-10-							
-11-		57/57"		0.6	Light gray fine sandy SILT, trace gravel, wet	ML	
-12-							
-13-				1.3	Black silt with organic material (roots exposed), sulfur odor, saturated	OL	
-14-					Light gray fine sandy SILT, trace gravel, saturated	ML	
-15-							
-16-		57/57"		0.4	Medium/ dark gray clayey SILT, and fine sand, trace gravel, saturated	CL	
-17-							
-18-							
-19-				0.1	Medium/ dark gray silty graded SAND, some gravel, saturated. Boring terminated at 20'	SW	
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: TRC-B2 Well ID No.: Sheet 1 of 1

Boring Location:	211144.44 m N, 359973.61 m E		AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/12/2020	Date Completed: 8/14/2020
Depth to First Water:	8	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat	
Type: Geoprobe			AECOM Representative:	Max Meadows	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (4"), asphalt base (2")		
-1-		Vacuum/ Hand Clear	TRC-B2 (0-2) 09:15 MS/MSD	1.3	Light brown graded SAND, little gravel, little silt, moist	SW	
-2-				1.7			
-3-				1.0			
-4-				0.9			
-5-				2.0	Light brown fine - medium SAND, little silt trace gravel, moist. End of vacuum boring, pre-cleared to 5'	SP	
-6-		44/57"	TRC-B2 (5-7) 14:15	1.7	Dark brown fine - medium SAND, little gravel, little silt, moist	SP	
-7-				2.0	Light brown silty fine SAND, trace gravel, moist	SP-SM	
-8-			TRC-B2 (7-9) 14:20	0.2	Light brown fine SAND, some silt, trace gravel, wet at 8'	SP	
-9-				0.6	Light brown fine SAND, trace silt, wet	SP	
-10-				0.7	Light gray SILT, little fine sand, trace gravel, wet	SM	
-11-		57/57"		1.6	Medium gray fine sandy SILT, trace gravel, saturated	SM	
-12-							
-13-							
-14-							
-15-							
-16-		57/57"		1.0	Medium gray silty graded SAND, trace gravel, saturated	SW-SM	
-17-							
-18-							
-19-			TRC-B2 (18-20) 14:50 DUP 14:55				
-20-				6.9	Dark gray gravelly graded SAND, some silt, saturated. Weathered petroleum odor and appearance. Boring terminated at 20'	SW	

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: TRC-B3 Well ID No.: Sheet 1 of 1

Boring Location:	211109.44 m N, 359945.36 m E		AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/12/2020	Date Completed: 8/17/2020
Depth to First Water:	8	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat	
Type: Geoprobe			AECOM Representative:	Max Meadows	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (4"), asphalt base (2")		
				0.0	0.5-1': Concrete (6")		
-1-			TRC-B3 (1-3) 08:35	1.9			
-2-		Vacuum/ Hand Clear					
-3-				3.5	Light brown medium - coarse SAND, little gravel, trace silt, moist. End of vacuum boring, pre-cleared to 5'	SP	
-4-				0.7			
-5-				1.7			
-6-			TRC-B3 (5-10) 09:35	0.1			
-7-				0.0	Medium gray silty fine - medium SAND, trace gravel, wet at 8'	SM	
-8-		11/57"					
-9-				0.1	Medium gray/ reddish brown silty fine - medium SAND, wet. Red color due to possible oxidation. Entire 5'-10' interval sampled due to poor recovery	SP-SM	
-10-							
-11-				0.0	Medium brown/ gray silty graded SAND, trace clay, saturated	SW-SM	
				0.0	Light brown/ gray silty fine SAND, saturated	SP-SM	
-12-				0.0	Medium gray CLAY, little shells, saturated	OH	
-13-		57/57"		0.0	Medium brown/ gray silty fine SAND, trace gravel, saturated	SM	
-14-				0.0	Light brown gray silty fine SAND, saturated	SM	
-15-							
-16-							
-17-							
-18-		57/57"		0.0	Light brown/ gray silty fine SAND, trace gravel, saturated. Boring terminated at 20'	SM	
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: TRC-B4 Well ID No.: Sheet 1 of 1

Boring Location:			AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/12/2020	Date Completed: 8/12/2020
Depth to First Water:		feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler			Driller's Name:	Julio, Pat, Dan	
Type: Geoprobe			AECOM Representative:	Max Meadows	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Notes:

Thick concrete ≥1' encountered at 3 boring locations. Could not break through to pre-clear. Boring not complete

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear					
-2-							
-3-							
-4-							
-5-							
-6-							
-7-							
-8-							
-9-							
-10-							
-11-							
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: TRC-B5
Well ID No.:
Sheet 1 of 1

Boring Location:	211073.62 m N, 359825.14 m E		AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/12/2020	Date Completed: 8/14/2020
Depth to First Water:	6	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat	
Type: Geoprobe			AECOM Representative:	Max Meadows	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	0-0.5': Asphalt (4"), asphalt base (2")		
-1-		Vacuum/ Hand Clear	TRC-B5 (1-3) 12:00	0.8	Medium brown graded SAND, little gray clumps of silty clay, some gravel, moist	SW-SC	
-2-				3.2	Medium brown fine - medium poorly graded SAND, trace coarse sand, trace gravel, trace silt, moist	SP	
-3-				2.8			
-4-				3.6	Medium brown graded SAND, trace gravel, trace cobbles, trace silt, moist. End of vacuum boring, pre-cleared to 5'	SW	
-5-				1.1			
-6-		16/57"	TRC-B5 (5-10) 10:35	1.4	Medium brown gravelly graded SAND, little silt, saturated at 6'. Entire 5'-10' interval sampled due to poor recovery.	SW	▼
-7-							
-8-							
-9-							
-10-							
-11-		18/57"		2.0	Medium gray graded SAND, trace gravel, little silt, saturated	SW	
-12-				0.0	Medium gray graded SAND, trace gravel, trace silt, saturated	SW	
-13-							
-14-				1.6	Medium gray fine - medium SAND, trace gravel, trace silt, saturated	SP	
-15-							
-16-		16/57"		1.2	Medium gray coarse SAND, some fine - medium SAND, trace gravel, saturated	SP	
-17-				2.0	Medium gray silty fine - medium SAND, saturated	SP	
-18-							
-19-							
-20-				3.5	Medium gray coarse SAND, some fine - medium SAND, trace gravel, saturated. Boring terminated at 20'	SP	

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: TRC-B6
Well ID No.:
Sheet 1 of 1

Boring Location: 211306.03 m N, 359831.77 m E		AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	8/12/2020
Depth to First Water:	8.5 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler	Notes:	Driller's Name:	Julio, Pat
Type: Geoprobe		AECOM Representative:	Max Meadows
Hammer: NA		Owner/Client Rep.:	
Fall: NA			

Project Number: 60637932
Date Completed: 8/14/2020

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	TRC-B6 (2-4) 13:40	0.0	Asphalt (1.5')		
-2-				1.3	Light brown graded SAND with gravel, trace silt, moist	SW	
-3-				1.0	Medium brown medium SAND, trace coarse SAND, some gravel, trace silt, moist	SP]	
-4-				2.1			
-5-				0.0	Sample not recovered. Cobbles preventing hand auger from collecting any material. End of vacuum boring. Pre-cleared to 5'	GW	
-6-		32/57"	TRC-B6 (6-8) 08:30	0.2	Light brown gravelly graded SAND and cobbles, trace silt, wet at 8.5'	SW	▼
-7-				0.2			
-8-				0.2			
-9-							
-10-				0.0	Medium brown gravelly graded SAND and cobbles, with silt, saturated. Boring terminated at 10'	SW	
-11-							
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: TRC-B7
Well ID No.:
Sheet 1 of 1

Boring Location:	211304.12 m N, 359752.92 m E	AECOM Project Manager:	Mike Garbolski
Ground Elevation:		Date Started:	8/12/2020
Depth to First Water:	9 feet BGS	Drill Type:	Hand Cleared/Direct Push
Depth to Static Water:	N/A feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT
Stabilization Time:	N/A	Drilling Company:	Cisco Geotechnical
Sampler		Driller's Name:	Julio, Pat
Type:	Geoprobe	AECOM Representative:	Max Meadows
Hammer:	NA	Owner/Client Rep.:	
Fall:	NA		

Project Number: 60637932
Date Completed: 8/14/2020

Notes:

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear	TRC-B7 (1-3) 14:50	0.0	Asphalt (1')		
-2-				0.0	Medium brown graded SAND, with gravel, trace silt, moist	SW	
-3-				1.0	Dark brown graded SAND with gravel, trace silt, moist	SW	
-4-				0.0	COBBLES with gravel, some medium brown fine sand, trace silt, moist.	GP	
-5-				0.0	Sample not recovered. Cobbles preventing hand auger from collecting any material. End of vacuum boring. Pre-cleared to 5'	GP	
-6-		36/57"		0.2	COBBLES, some light gray graded sand, little silt, moist	GW	
-7-				0.2	Medium brown gravelly graded SAND , trace silt, moist	SW	
-8-			TRC-B7 (7-9) 09:00	0.2	COBBLES, some light gray graded sand, little silt, moist	GW	
-9-				0.0	Medium brown gravelly graded SAND some cobbles, trace silt, wet at 9'. Boring terminated at 10'	SW	
-10-							
-11-							
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: TRC-B8
Well ID No.:
Sheet 1 of 1

Boring Location:	211239.13 m N, 359809.97 m E		AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/13/2020	Date Completed: 8/13/2020
Depth to First Water:	6	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat	
Type: Geoprobe			AECOM Representative:	Max Meadows	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear		0.0	Asphalt (1')		
-2-			TRC-B8 (1-3) 13:05	0.7	Medium/ dark brown fine - medium SAND, little gravel, trace silt, moist	SP	
-3-				2.0	Medium brown graded SAND, little gravel, trace silt, moist. End of vacuum boring, pre-cleared to 5'	SW	
-4-			TRC-B8 (3-5) 13:05	0.7			
-5-							
-6-		44/57"		0.1	Medium brown graded SAND, some gravel, trace silt, saturated at 6'. Boring terminated at 10'	SW	▼
-7-							
-8-							
-9-							
-10-							
-11-							
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment
State Pier
New London, CT

Boring ID No.: TRC-B9
Well ID No.:
Sheet 1 of 1

Boring Location:	211235.55 m N, 359775.24 m E		AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/13/2020	Date Completed: 8/13/2020
Depth to First Water:	11	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat	
Type: Geoprobe			AECOM Representative:	Max Meadows	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
-1-		Vacuum/ Hand Clear		0.0	Asphalt (1')		
-2-				0.1	Light brown/ gray graded SAND, some gravel, trace silt, moist	SW	
-3-			TRC-B9 (2-4) 09:00 MS/MSD	0.6			
-4-				0.9	Medium brown medium - coarse SAND, and gravel, little cobbles, trace silt, moist. End of vacuum boring, pre-cleared to 5'	SP	
-5-				0.7			
-6-		14/57"		0.1	Dark gray gravelly graded SAND, little silt, moist	SW	
-7-							
-8-							
-9-			TRC-B9 (8-10) 14:15	1.7	Light brown gravelly graded SAND, little silt, moist	SW	
-10-							
-11-		39/57"		0.1	Light brown gravelly graded SAND, little silt, saturated at 11'	SW	▼
-12-							
-13-							
-14-				0.0	Light gray gravelly graded SAND, with pulverized rock, some silt, saturated. Boring terminated at 15'	SW	
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM	Project: Phase III Assessment State Pier New London, CT	Boring ID No.: TRC-B10 Well ID No.: Sheet 1 of 1

Boring Location:	211252.07 m N, 359754.85 m E		AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/13/2020	Date Completed: 8/14/2020
Depth to First Water:	9	feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat	
Type: Geoprobe			AECOM Representative:	Max Meadows	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	Asphalt (6")		
-1-		Vacuum/ Hand Clear	TRC-B10 (0-2) 10:00	0.2	Medium/ dark brown graded SAND, some gravel, little silt, moist	SW	
-2-				0.1			
-3-				0.6	Medium brown graded SAND, some gravel, little silt, moist	SW	
-4-				1.2	Medium brown graded SAND, some gravel, some cobbles, little silt, moist. End of vacuum boring, pre-cleared to 5'	SW	
-5-				0.8			
-6-		14/57"	TRC-B10 (5-10) 09:30	1.6	Dark brown gravelly graded SAND, some silt, wet at 9'. Poor recovery, entire 5'-10' interval was sampled. Boring terminated at 10'	SW	▼
-7-							
-8-							
-9-							
-10-							
-11-							
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

AECOM

Project: Phase III Assessment State Pier New London, CT	Boring ID No.: TRC-B11 Well ID No.: Sheet 1 of 1

Boring Location:	211195.35 m N, 359777.04 m E		AECOM Project Manager:	Mike Garbolski	Project Number: 60637932
Ground Elevation:			Date Started:	8/13/2020	Date Completed: 8/13/2020
Depth to First Water:		feet BGS	Drill Type:	Hand Cleared/Direct Push	
Depth to Static Water:	N/A	feet BGS	Drill Rig and Model Number:	Vacmaster/Geoprobe 3230DT	
Stabilization Time:	N/A		Drilling Company:	Cisco Geotechnical	
Sampler		Notes:	Driller's Name:	Julio, Pat	
Type: Geoprobe		No signs of upgradient contamination. No samples collected past 5'	AECOM Representative:	Max Meadows	
Hammer: NA			Owner/Client Rep.:		
Fall: NA					

Depth (feet)	Blow Counts	Penetration / Recovery (inches)	Sample I.D.	PID (ppm/v)	Description of Sample	Sample Classification (USCS)	Well Construction
				0.0	Asphalt (4"), asphalt base (2")		
-1-		Vacuum/ Hand Clear	TRC-B11 (0-2) 11:05	0.2	Medium/ dark brown silty fine - medium SAND, little gravel, moist	SP	
-2-				0.1	Medium brown fine - medium SAND, trace gravel, trace silt, moist	SP	
-3-				0.6	Light brown fine - medium SAND, moist	SP	
-4-				0.0	Light brown fine - medium SAND, and cobbles, and gravel, moist. No sample recovered with hand auger, too many cobbles. Visual observation made. End of vacuum boring, pre-cleared to 5'	SW	
-5-				0.0			
-6-							
-7-							
-8-							
-9-							
-10-							
-11-							
-12-							
-13-							
-14-							
-15-							
-16-							
-17-							
-18-							
-19-							
-20-							

Proportions Used

Trace	0 to 10%
Little	10 to 20%
Some	20 to 35%
And	35 to 50%

Change in Material Type

Well Schematic

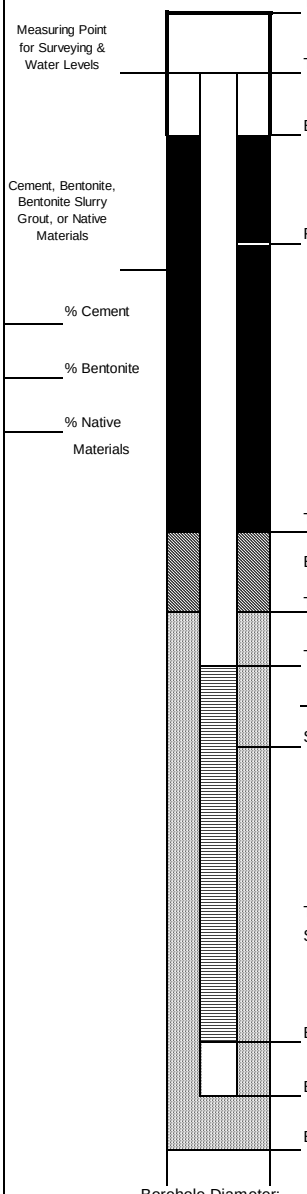
- Bentonite/Grout
- Filter Sand Pack
- Natural Backfill
- Well Riser
- Well Screen
- Concrete pad

Appendix B

Monitoring Well Completion Reports

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-9**
	Project Number: 60579714	
	Site Location: New London, CT	*Date Installed:* 6/8/2020
	Well Location: AOC 14 *Coords:*	*Inspector:* D. Keilbania
	Method:	*Contractor:* Cisco Geotechnical

MONITORING WELL CONSTRUCTION DETAIL



		Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)		0	
Top of Riser Pipe		TBD	
Bottom of Road Box		1 ft	
Riser Pipe:			
Length	5ft		
Inside Diameter (ID)	2"		
Type of Material	Sch 40 PVC		
Top of Bentonite		2 ft	
Bentonite Seal Thickness	1 ft		
Top of Sand		3 ft	
Top of Screen		5 ft	
Stabilized Water Level		TBD	
Screen:			
Length	10 ft		
Inside Diameter (ID)	2 in		
Slot Size	0.02 in.		
Type of Material	Sch 40 PVC		
Type/Size of Sand	#2		
Sand Pack Thickness	12 ft		
Bottom of Screen		15 ft	
Bottom of Tail Pipe:		NA	
Bottom of Borehole		15 ft	

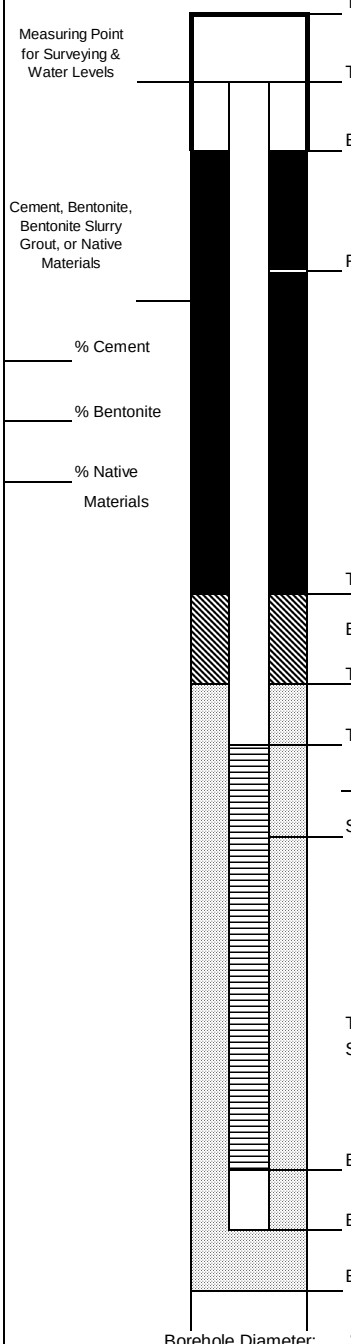
Borehole Diameter: 3.75 in.

Approved: _____ Signature _____ Date

Describe Measuring Point: Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-10**
	Project Number: 60579714	
	Site Location: New London, CT	*Date Installed:* 6/8/2020
	Well Location: AOC 14 *Coords:*	*Inspector:* D. Keilbania
	Method:	*Contractor:* Cisco Geotechnical

MONITORING WELL CONSTRUCTION DETAIL



	Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)	0	
Top of Riser Pipe	TBD	
Bottom of Road Box	1 ft	
Riser Pipe:		
Length: 5ft		
Inside Diameter (ID): 2"		
Type of Material: Sch 40 PVC		
Top of Bentonite	2 ft	
Bentonite Seal Thickness: 1 ft		
Top of Sand	3 ft	
Top of Screen	5 ft	
Stabilized Water Level	TBD	
Screen:		
Length: 10 ft		
Inside Diameter (ID): 2 in		
Slot Size: 0.02 in.		
Type of Material: Sch 40 PVC		
Type/Size of Sand: #2		
Sand Pack Thickness: 12 ft		
Bottom of Screen	15 ft	
Bottom of Tail Pipe:	NA	
Bottom of Borehole	15 ft	

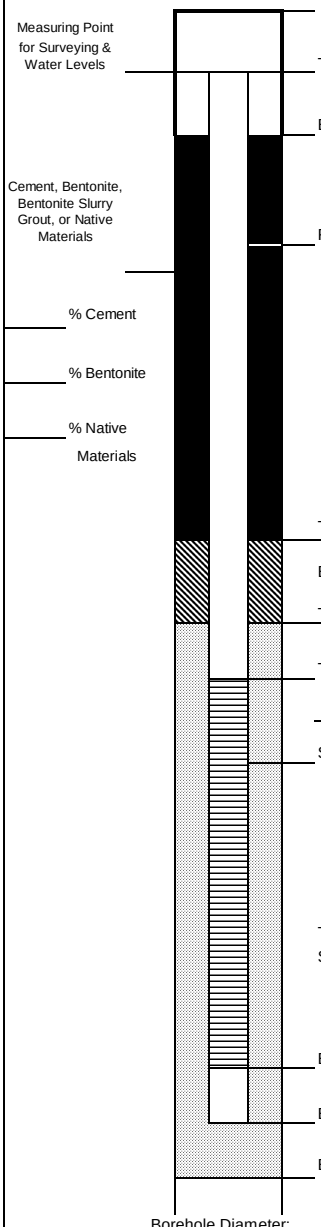
Borehole Diameter: 3.75 in.

Approved: _____ (Signature) Date

Describe Measuring Point: Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-11**
	Project Number: 60579714	
	Site Location: New London, CT	*Date Installed:* 6/9/2020
	Well Location: AOC 14 *Coords:*	*Inspector:* D. Keilbania
	Method:	*Contractor:* Cisco Geotechnical

MONITORING WELL CONSTRUCTION DETAIL



	Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)	0	
Top of Riser Pipe	TBD	
Bottom of Road Box	1 ft	
Riser Pipe:		
Length: 2 ft		
Inside Diameter (ID): 2"		
Type of Material: Sch 40 PVC		
Top of Bentonite	1 ft	
Bentonite Seal Thickness: 1 ft		
Top of Sand	2 ft	
Top of Screen	3 ft	
Stabilized Water Level	TBD	
Screen:		
Length: 10 ft		
Inside Diameter (ID): 2 in		
Slot Size: 0.02 in.		
Type of Material: Sch 40 PVC		
Type/Size of Sand: #2		
Sand Pack Thickness: 11 ft		
Bottom of Screen	13 ft	
Bottom of Tail Pipe:	NA	
Bottom of Borehole	13 ft	

Borehole Diameter: 3.75 in.

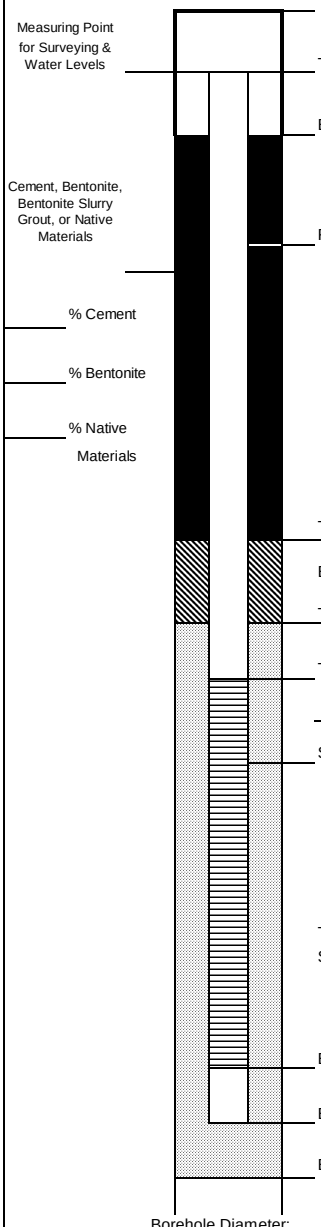
Approved: _____ Signature

Date

Describe Measuring Point: Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-12**
	Project Number: 60579714	
	Site Location: New London, CT	*Date Installed:* 6/9/2020
	Well Location: AOC 14 *Coords:*	*Inspector:* D. Keilbania
	Method:	*Contractor:* Cisco Geotechnical

MONITORING WELL CONSTRUCTION DETAIL



	Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)	0	
Top of Riser Pipe	TBD	
Bottom of Road Box	1 ft	
Riser Pipe:		
Length: 2 ft		
Inside Diameter (ID): 2"		
Type of Material: Sch 40 PVC		
Top of Bentonite	1 ft	
Bentonite Seal Thickness: 1 ft		
Top of Sand	2 ft	
Top of Screen	3 ft	
Stabilized Water Level	TBD	
Screen:		
Length: 10 ft		
Inside Diameter (ID): 2 in		
Slot Size: 0.02 in.		
Type of Material: Sch 40 PVC		
Type/Size of Sand: #2		
Sand Pack Thickness: 11 ft		
Bottom of Screen	13 ft	
Bottom of Tail Pipe:	NA	
Bottom of Borehole	13 ft	

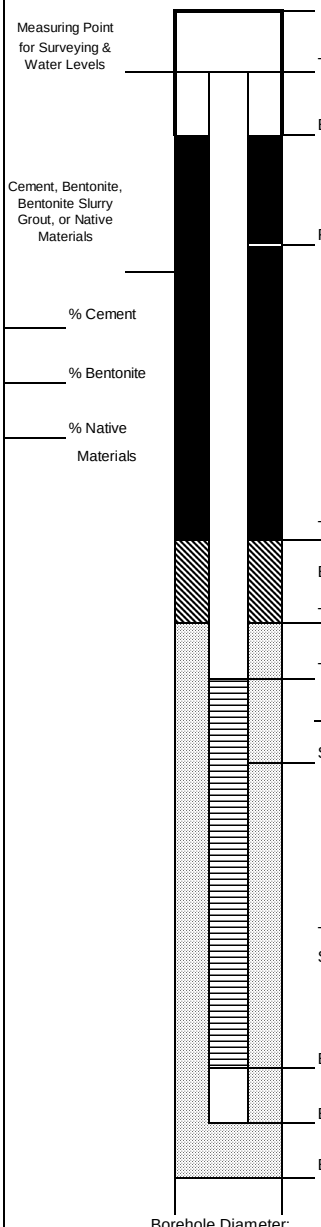
Borehole Diameter: 3.75 in.

Approved: _____ (Signature) _____ (Date)

Describe Measuring Point: Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-13**
	Project Number: 60579714	
	Site Location: New London, CT	*Date Installed:* 6/10/2020
	Well Location: AOC 17 *Coords:*	*Inspector:* D. Keilbania
	Method:	*Contractor:* Cisco Geotechnical

MONITORING WELL CONSTRUCTION DETAIL



	Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)	0	
Top of Riser Pipe	TBD	
Bottom of Road Box	1 ft	
Riser Pipe:		
Length: 2 ft		
Inside Diameter (ID): 2"		
Type of Material: Sch 40 PVC		
Top of Bentonite	1 ft	
Bentonite Seal Thickness: 1 ft		
Top of Sand	2 ft	
Top of Screen	3 ft	
Stabilized Water Level	TBD	
Screen:		
Length: 10 ft		
Inside Diameter (ID): 2 in		
Slot Size: 0.02 in.		
Type of Material: Sch 40 PVC		
Type/Size of Sand: #2		
Sand Pack Thickness: 11 ft		
Bottom of Screen	13 ft	
Bottom of Tail Pipe:	NA	
Bottom of Borehole	13 ft	

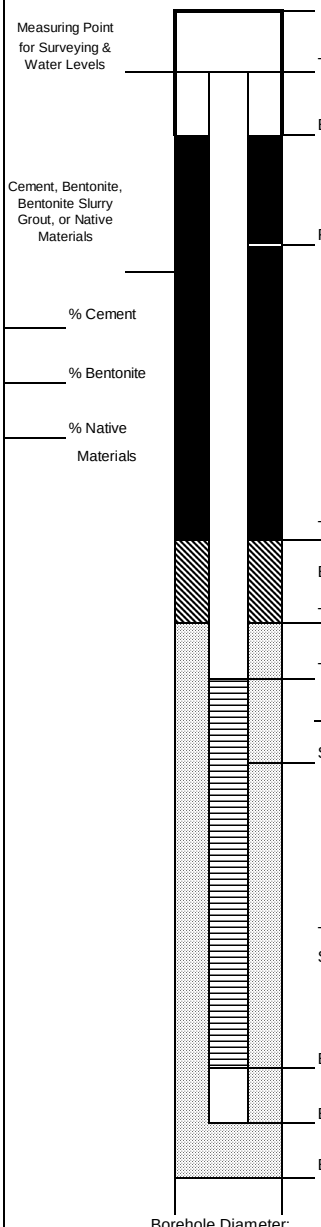
Borehole Diameter: 3.75 in.

Approved: _____ (Signature) _____ (Date)

Describe Measuring Point: Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-14**
	Project Number: 60579714	
	Site Location: New London, CT	*Date Installed:* 6/10/2020
	Well Location: AOC 1 *Coords:*	*Inspector:* D. Keilbania
	Method:	*Contractor:* Cisco Geotechnical

MONITORING WELL CONSTRUCTION DETAIL



	Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)	0	
Top of Riser Pipe	TBD	
Bottom of Road Box	0.7 ft	
Riser Pipe:		
Length: 9.5 ft		
Inside Diameter (ID): 2"		
Type of Material: Sch 40 PVC		
Top of Bentonite	6.5 ft	
Bentonite Seal Thickness: 1 ft		
Top of Sand	7.5 ft	
Top of Screen	9.5 ft	
Stabilized Water Level	TBD	
Screen:		
Length: 10 ft		
Inside Diameter (ID): 2 in		
Slot Size: 0.02 in.		
Type of Material: Sch 40 PVC		
Type/Size of Sand: #2		
Sand Pack Thickness: 12 ft		
Bottom of Screen	19.5 ft	
Bottom of Tail Pipe:	NA	
Bottom of Borehole	19.5 ft	

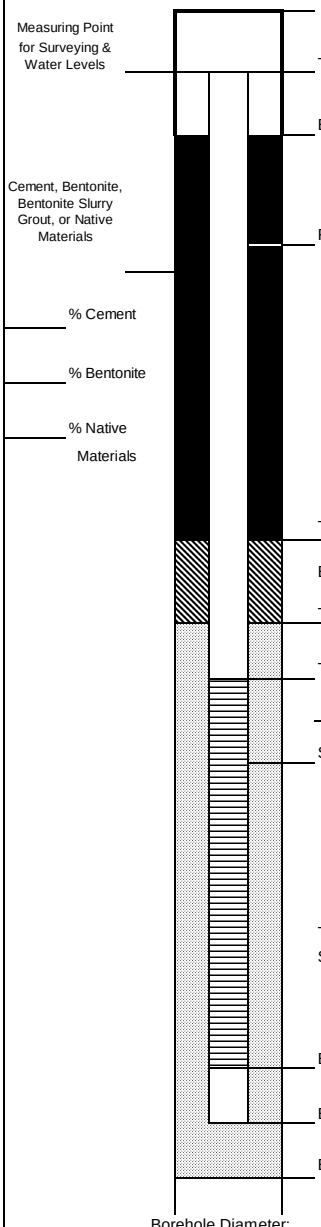
Borehole Diameter: 3.75 in.

Approved: _____ (Signature) _____ (Date)

Describe Measuring Point: Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-15**
	Project Number: 60579714	
	Site Location: New London, CT	*Date Installed:* 6/10/2020
	Well Location: AOC 1 *Coords:*	*Inspector:* D. Keilbania
	Method:	*Contractor:* Cisco Geotechnical

MONITORING WELL CONSTRUCTION DETAIL



		Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)		0	
Top of Riser Pipe		TBD	
Bottom of Road Box		0.7 ft	
Riser Pipe:			
Length	5 ft		
Inside Diameter (ID)	2"		
Type of Material	Sch 40 PVC		
Top of Bentonite		2 ft	
Bentonite Seal Thickness	2 ft		
Top of Sand		4 ft	
Top of Screen		6 ft	
Stabilized Water Level		TBD	
Screen:			
Length	10 ft		
Inside Diameter (ID)	2 in		
Slot Size	0.02 in.		
Type of Material	Sch 40 PVC		
Type/Size of Sand	#2		
Sand Pack Thickness	12 ft		
Bottom of Screen		16 ft	
Bottom of Tail Pipe:		NA	
Bottom of Borehole		16 ft	

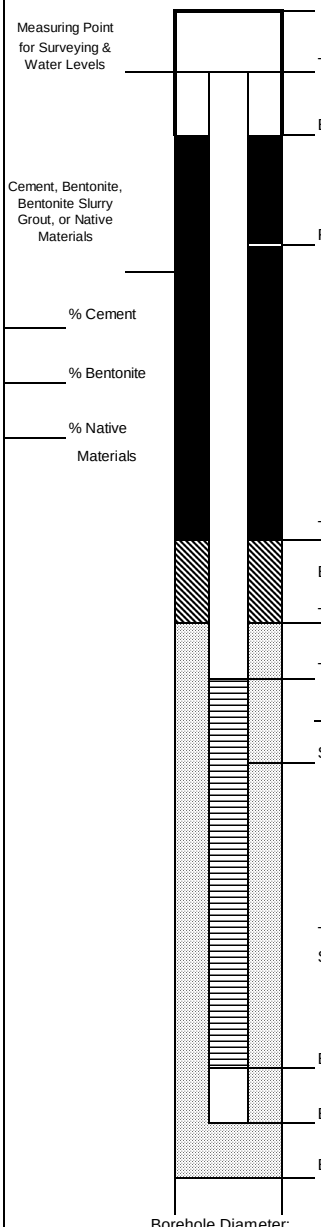
Borehole Diameter: 3.75 in.

Approved: _____ Signature _____ Date

Describe Measuring Point: Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-16**
	Project Number: 60579714	
	Site Location: New London, CT	*Date Installed:* 6/11/2020
	Well Location: AOC 1 *Coords:*	*Inspector:* D. Keilbania
	Method:	*Contractor:* Cisco Geotechnical

MONITORING WELL CONSTRUCTION DETAIL



		Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)		0	
Top of Riser Pipe		TBD	
Bottom of Road Box		1 ft	
Riser Pipe:			
Length	4 ft		
Inside Diameter (ID)	2"		
Type of Material	Sch 40 PVC		
Top of Bentonite		2 ft	
Bentonite Seal Thickness	1 ft		
Top of Sand		3 ft	
Top of Screen		5 ft	
Stabilized Water Level		TBD	
Screen:			
Length	10 ft		
Inside Diameter (ID)	2 in		
Slot Size	0.02 in.		
Type of Material	Sch 40 PVC		
Type/Size of Sand	#2		
Sand Pack Thickness	12 ft		
Bottom of Screen		15 ft	
Bottom of Tail Pipe:		NA	
Bottom of Borehole		15 ft	

Borehole Diameter: 3.75 in.

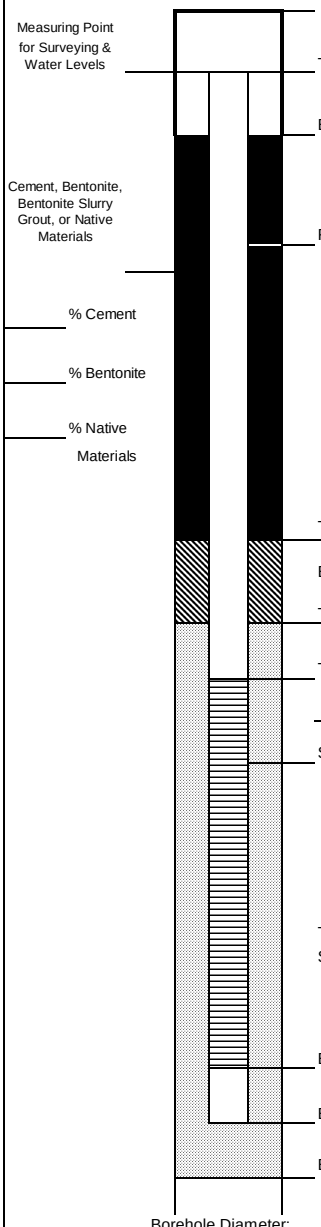
Approved: _____ Signature

Date

Describe Measuring Point:
Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-17**
	Project Number: 60579714	
	Site Location: New London, CT	*Date Installed:* 6/11/2020
	Well Location: AOC 2 *Coords:*	*Inspector:* D. Keilbania
	Method:	*Contractor:* Cisco Geotechnical

MONITORING WELL CONSTRUCTION DETAIL



		Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)		0	
Top of Riser Pipe		TBD	
Bottom of Road Box		1 ft	
Riser Pipe:			
Length	5 ft		
Inside Diameter (ID)	2"		
Type of Material	Sch 40 PVC		
Top of Bentonite		2 ft	
Bentonite Seal Thickness	1 ft		
Top of Sand		3 ft	
Top of Screen		6 ft	
Stabilized Water Level		TBD	
Screen:			
Length	10 ft		
Inside Diameter (ID)	2 in		
Slot Size	0.02 in.		
Type of Material	Sch 40 PVC		
Type/Size of Sand	#2		
Sand Pack Thickness	13 ft		
Bottom of Screen		16 ft	
Bottom of Tail Pipe:		NA	
Bottom of Borehole		16 ft	

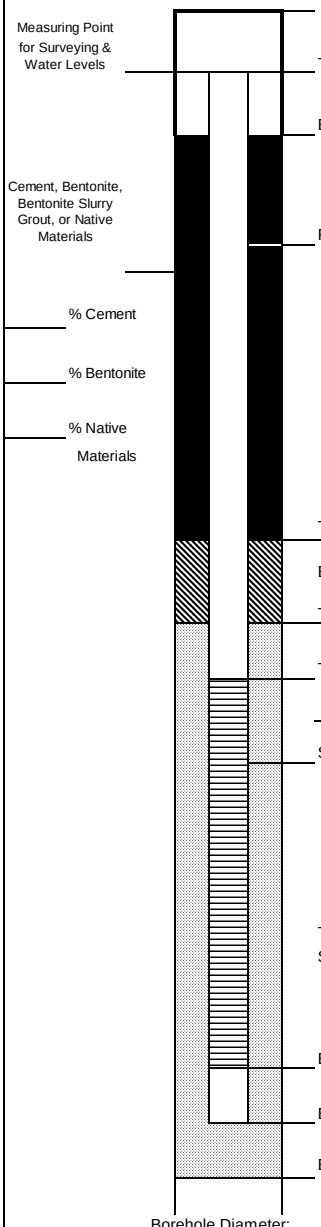
Borehole Diameter: 3.75 in.

Approved: _____ Signature _____ Date

Describe Measuring Point: Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-18**
	Project Number: 60579714	
	Site Location: New London, CT	*Date Installed:* 6/11/2020
	Well Location: AOC 2 *Coords:*	*Inspector:* D. Keilbania
	Method:	*Contractor:* Cisco Geotechnical

MONITORING WELL CONSTRUCTION DETAIL



	Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)	0	
Top of Riser Pipe	TBD	
Bottom of Road Box	1 ft	
Riser Pipe:		
Length: 5.5 ft		
Inside Diameter (ID): 2"		
Type of Material: Sch 40 PVC		
Top of Bentonite	5 ft	
Bentonite Seal Thickness: 1 ft		
Top of Sand	6 ft	
Top of Screen	6.5 ft	
Stabilized Water Level	TBD	
Screen:		
Length: 10 ft		
Inside Diameter (ID): 2 in		
Slot Size: 0.02 in.		
Type of Material: Sch 40 PVC		
Type/Size of Sand: #2		
Sand Pack Thickness: 10.5 ft		
Bottom of Screen	16.5 ft	
Bottom of Tail Pipe:	NA	
Bottom of Borehole	16.5 ft	

Borehole Diameter: 3.75 in.

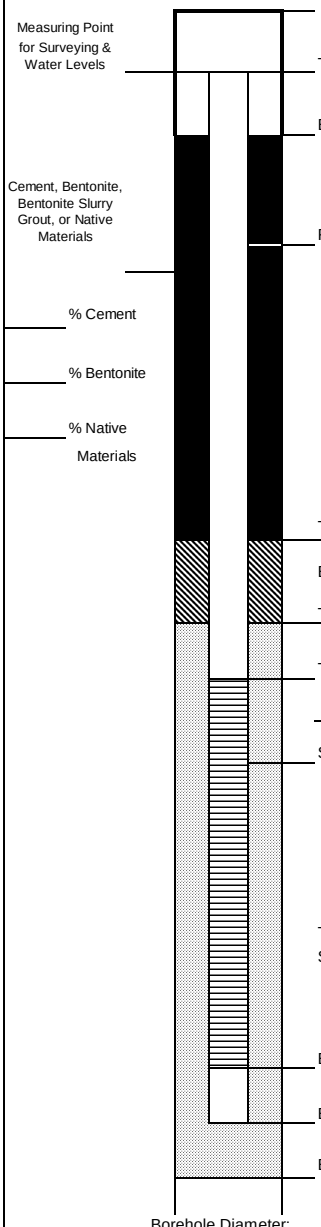
Approved: _____ Signature

Date

Describe Measuring Point:
Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-19**
	Project Number: 60579714	
	Site Location: New London, CT	*Date Installed:* 6/11/2020
	Well Location: *Coords:*	*Inspector:* *D. Keilbania*
	Method:	*Contractor:* *Cisco Geotechnical*

MONITORING WELL CONSTRUCTION DETAIL



	Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)	0	
Top of Riser Pipe	TBD	
Bottom of Road Box	0.7 ft	
Riser Pipe:		
Length: 2 ft		
Inside Diameter (ID): 2"		
Type of Material: Sch 40 PVC		
Top of Bentonite	1 ft	
Bentonite Seal Thickness: 1 ft		
Top of Sand	2 ft	
Top of Screen	3 ft	
Stabilized Water Level	TBD	
Screen:		
Length: 10 ft		
Inside Diameter (ID): 2 in		
Slot Size: 0.02 in.		
Type of Material: Sch 40 PVC		
Type/Size of Sand: #2		
Sand Pack Thickness: 11 ft		
Bottom of Screen	13 ft	
Bottom of Tail Pipe:	NA	
Bottom of Borehole	13 ft	

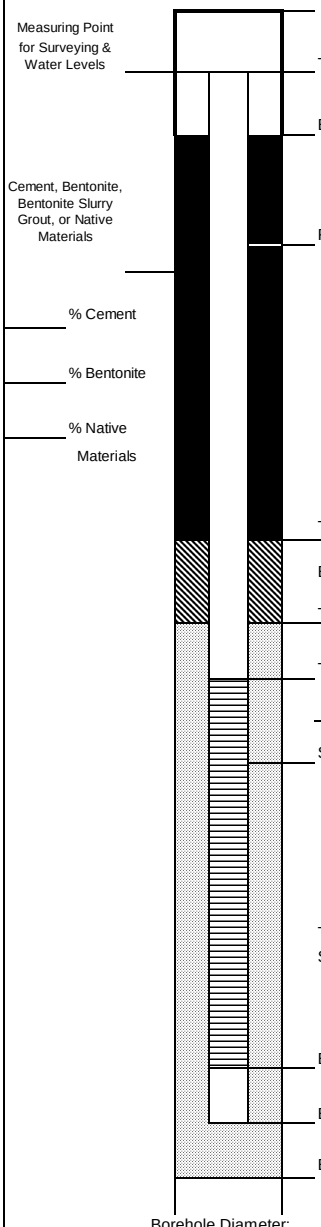
Borehole Diameter: 3.75 in.

Approved: _____ (Signature) _____ (Date)

Describe Measuring Point: Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-20**
	Project Number: 60579714	
	Site Location: New London, CT	*Date Installed:* 6/17/2020
	Well Location: AOC 2 *Coords:*	*Inspector:* D. Keilbania
	Method:	*Contractor:* Cisco Geotechnical

MONITORING WELL CONSTRUCTION DETAIL



	Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)	0	
Top of Riser Pipe	TBD	
Bottom of Road Box	0.7 ft	
Riser Pipe:		
Length: 2.5 ft		
Inside Diameter (ID): 2"		
Type of Material: Sch 40 PVC		
Top of Bentonite	1.5 ft	
Bentonite Seal Thickness: 1 ft		
Top of Sand	2.5 ft	
Top of Screen	3.5 ft	
Stabilized Water Level	TBD	
Screen:		
Length: 10 ft		
Inside Diameter (ID): 2 in		
Slot Size: 0.02 in.		
Type of Material: Sch 40 PVC		
Type/Size of Sand: #2		
Sand Pack Thickness: 11 ft		
Bottom of Screen	13.5 ft	
Bottom of Tail Pipe:	NA	
Bottom of Borehole	13.5 ft	

Borehole Diameter: 3.75 in.

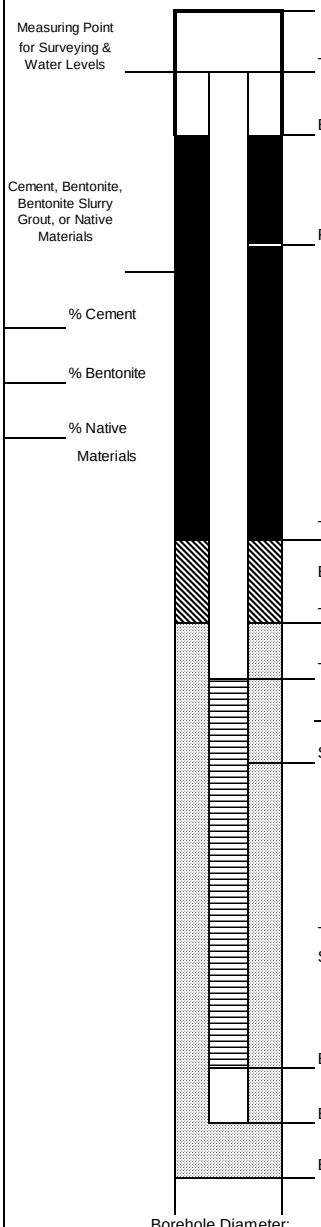
Approved: _____ Signature

Date

Describe Measuring Point:
Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-21**
	Project Number: 60579714	
	Site Location: New London, CT	*Date Installed:* 6/17/2020
	Well Location: *Coords:*	*Inspector:* *D. Keilbania*
	Method:	*Contractor:* *Cisco Geotechnical*

MONITORING WELL CONSTRUCTION DETAIL



	Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)	0	
Top of Riser Pipe	TBD	
Bottom of Road Box	0.7 ft	
Riser Pipe:		
Length: 2 ft		
Inside Diameter (ID): 2"		
Type of Material: Sch 40 PVC		
Top of Bentonite	1 ft	
Bentonite Seal Thickness: 1 ft		
Top of Sand	2 ft	
Top of Screen	3 ft	
Stabilized Water Level	TBD	
Screen:		
Length: 10 ft		
Inside Diameter (ID): 2 in		
Slot Size: 0.02 in.		
Type of Material: Sch 40 PVC		
Type/Size of Sand: #2		
Sand Pack Thickness: 11 ft		
Bottom of Screen	13 ft	
Bottom of Tail Pipe:	NA	
Bottom of Borehole	13 ft	

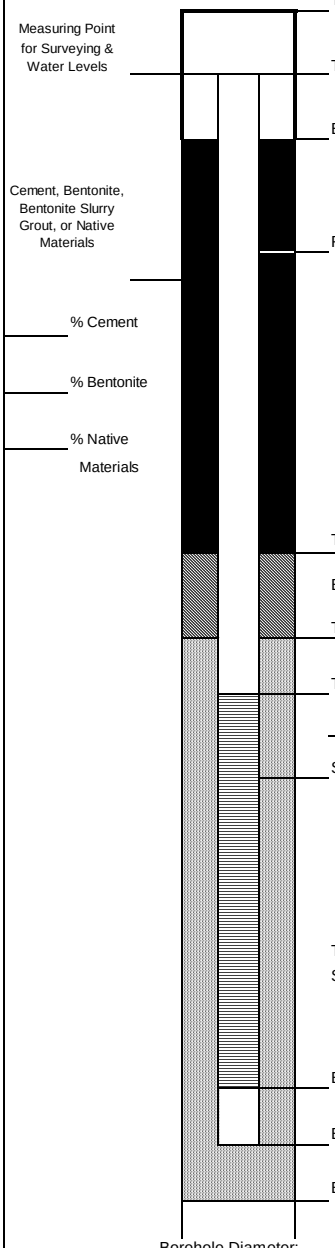
Borehole Diameter: 3.75 in.

Approved: _____ (Signature) _____ (Date)

Describe Measuring Point: Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-23**
	Project Number: 60637932	
	Site Location: New London, CT	*Date Installed:* 8/18/2020
	Well Location: AOC1 *Coords:*	*Inspector:* M. Meadows
	Method:	*Contractor:* Cisco Geotechnical

MONITORING WELL CONSTRUCTION DETAIL



		Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)		0	
Top of Riser Pipe		TBD	
Bottom of Road Box		1 ft	
Riser Pipe:			
Length	23 ft		
Inside Diameter (ID)	2"		
Type of Material	Sch 40 PVC		
Top of Bentonite		19 ft	
Bentonite Seal Thickness	2 ft		
Top of Sand		21 ft	
Top of Screen		23 ft	
Stabilized Water Level		TBD	
Screen:			
Length	10 ft		
Inside Diameter (ID)	2 in		
Slot Size	0.02 in.		
Type of Material	Sch 40 PVC		
Type/Size of Sand	#2		
Sand Pack Thickness	12 ft		
Bottom of Screen		33 ft	
Bottom of Tail Pipe:		NA	
Bottom of Borehole		35 ft	

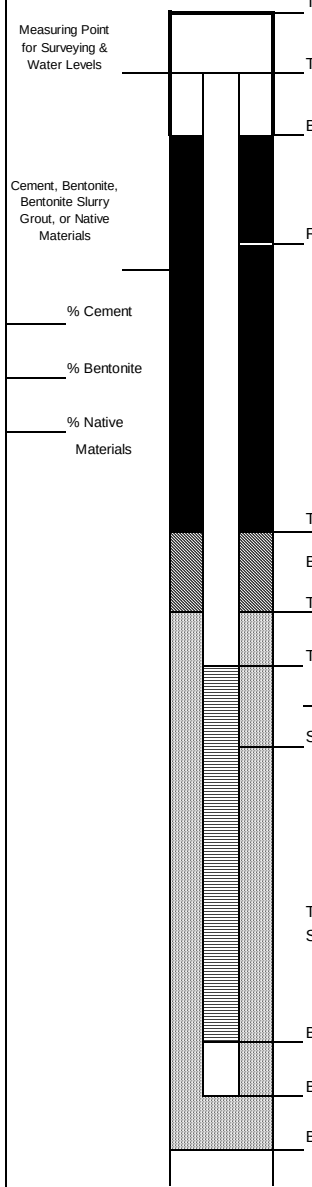
Borehole Diameter: 3.75 in.

Approved: _____ Signature _____ Date

Describe Measuring Point: Top of PVC

AECOM	*Client:* Connecticut Port Authority	***Well ID:*** **MW-24**
	Project Number: 60637932	
	Site Location: New London, CT	*Date Installed:* 8/18/2020
	Well Location: *Coords:*	*Inspector:* *M. Meadows*
	Method: AOC20	*Contractor:* *Cisco Geotechnical*

MONITORING WELL CONSTRUCTION DETAIL



		Depth from G.S. (feet)	Elevation(feet) Datum _____
Top of Road Box/Ground Surface (G.S.)		0	
Top of Riser Pipe		TBD	
Bottom of Road Box		1 ft	
Riser Pipe:			
Length	18.5 ft		
Inside Diameter (ID)	2"		
Type of Material	Sch 40 PVC		
Top of Bentonite		14.5 ft	
Bentonite Seal Thickness	2 ft		
Top of Sand		16.5 ft	
Top of Screen		18.5 ft	
Stabilized Water Level		TBD	
Screen:			
Length	10 ft		
Inside Diameter (ID)	2 in		
Slot Size	0.02 in.		
Type of Material	Sch 40 PVC		
Type/Size of Sand	#2		
Sand Pack Thickness	12 ft		
Bottom of Screen		28.5 ft	
Bottom of Tail Pipe:		NA	
Bottom of Borehole		30 ft	

x B

Borehole Diameter: 3.75 in.

Approved: _____ Signature

Date

Describe Measuring Point: Top of PVC

APPENDIX D

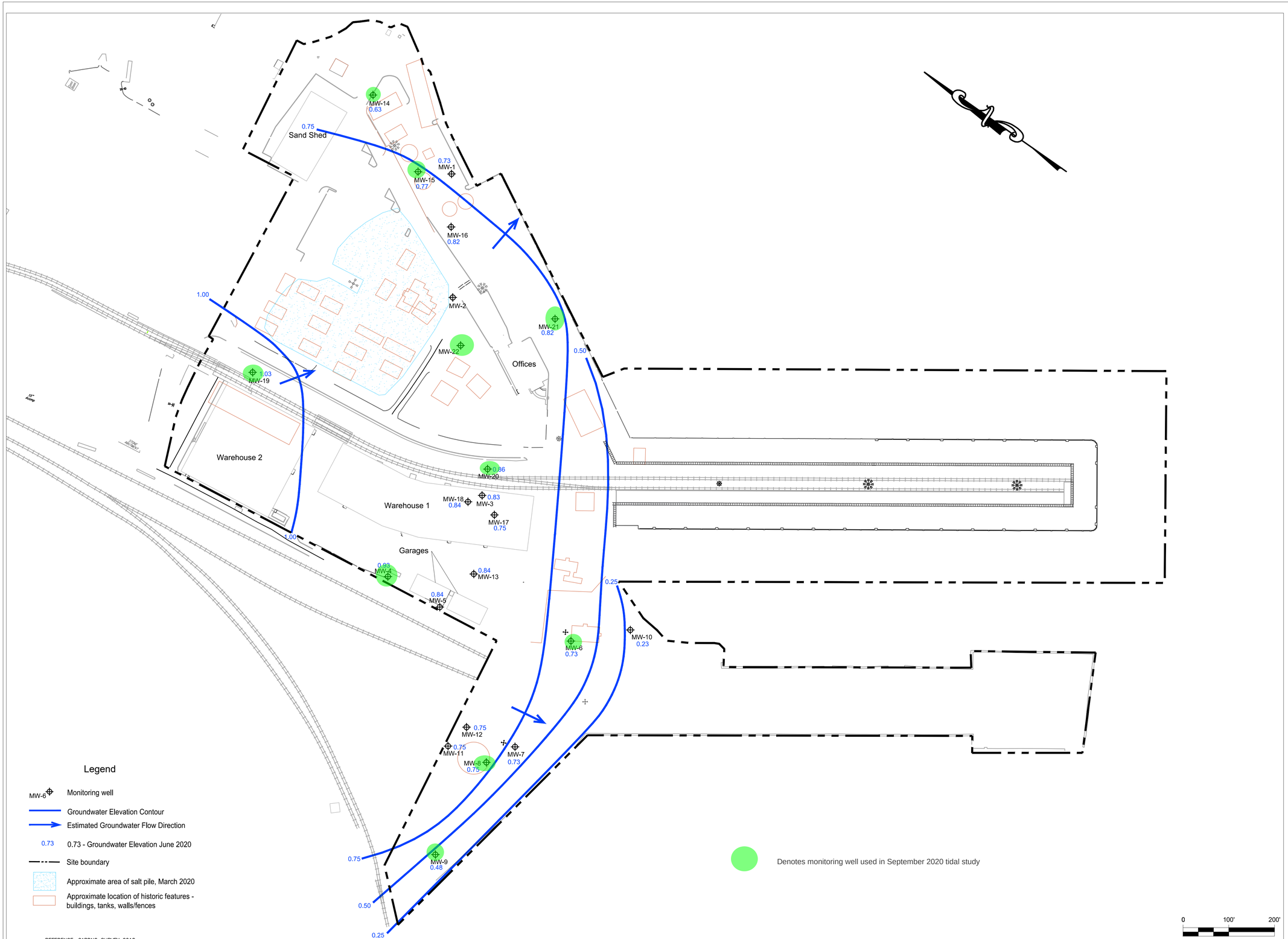
AECOM Low-Flow Groundwater Sampling Logs

TRC
21 Griffin Rd. North
Windsor, CT 06095
T 860.298.9692
TRCcompanies.com

State Pier Tidal Study

TRC performed a water level measurement study of existing groundwater monitoring wells on-site to determine the tidal influence (if any) on the water table over a 48-hour period. TRC mobilized to The Site on September 16, 2020. With the assistance of AECOM, a ten of the total 23 monitoring wells on-site were selected for the installation of transducers (Attachment A). The current monitoring well network was established by AECOM during Phase II and Phase III Environmental Site Investigations. The monitoring wells studied were: MW-4, MW-6, MW-8, MW-9, MW-14, MW-15, MW-19, MW-20, MW-21, and MW-22. On the morning of September 16, 2020 TRC installed a Solinst Levelogger Model 3001 (transducer) into each of the previously mentioned monitoring wells. Each transducer was installed approximately one foot above the bottom of each monitoring well to ensure the water level never drew down below the transducer. All transducers were pre-programed to record data at 5-minute intervals from 12:00PM September 16, 2020 until 12:00PM September 18, 2020. After installing all ten transducers, TRC performed synoptic gauging of the entire monitoring well network. Water levels were recorded from the ten select “transducer wells” beginning at 12:00PM. These water levels were used as the baseline for analyzing each well’s 48-hour transducer data.

All ten of the monitoring wells studied exhibited varying water levels over the 48-hour period which corresponded to observed New London tidal variation (Attachment B). Water levels varied on average less than 0.5ft over any 12-hour period (two consecutive high tides, or low tides). MW-9 exhibited the greatest variation of 0.88ft from the highest to lowest water level reading over the 48-hr period. MW-9 is the westernmost well on-site. Due to the configuration of the eastern and western piers, groundwater in the western portion of the site may be affected to a greater degree by tidal fluctuations in the southern portion of the Thames River and Long Island Sound.



Project Management Initials: ____ Designer: ____ Checked: ____ Approved: ____ ANSI D 22" x 34"

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AECOM

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NEW LONDON, CT

CLIENT

CONNECTICUT
PORT AUTHORITY
455 BOSTON POST ROAD, SUITE 204
OLD SAYBROOK, CT 06475

CONSULTANT

AECOM
500 ENTERPRISE DRIVE, SUITE 3B
ROCKY HILL, CT 06067
860.529.8882
www.aecom.com

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION

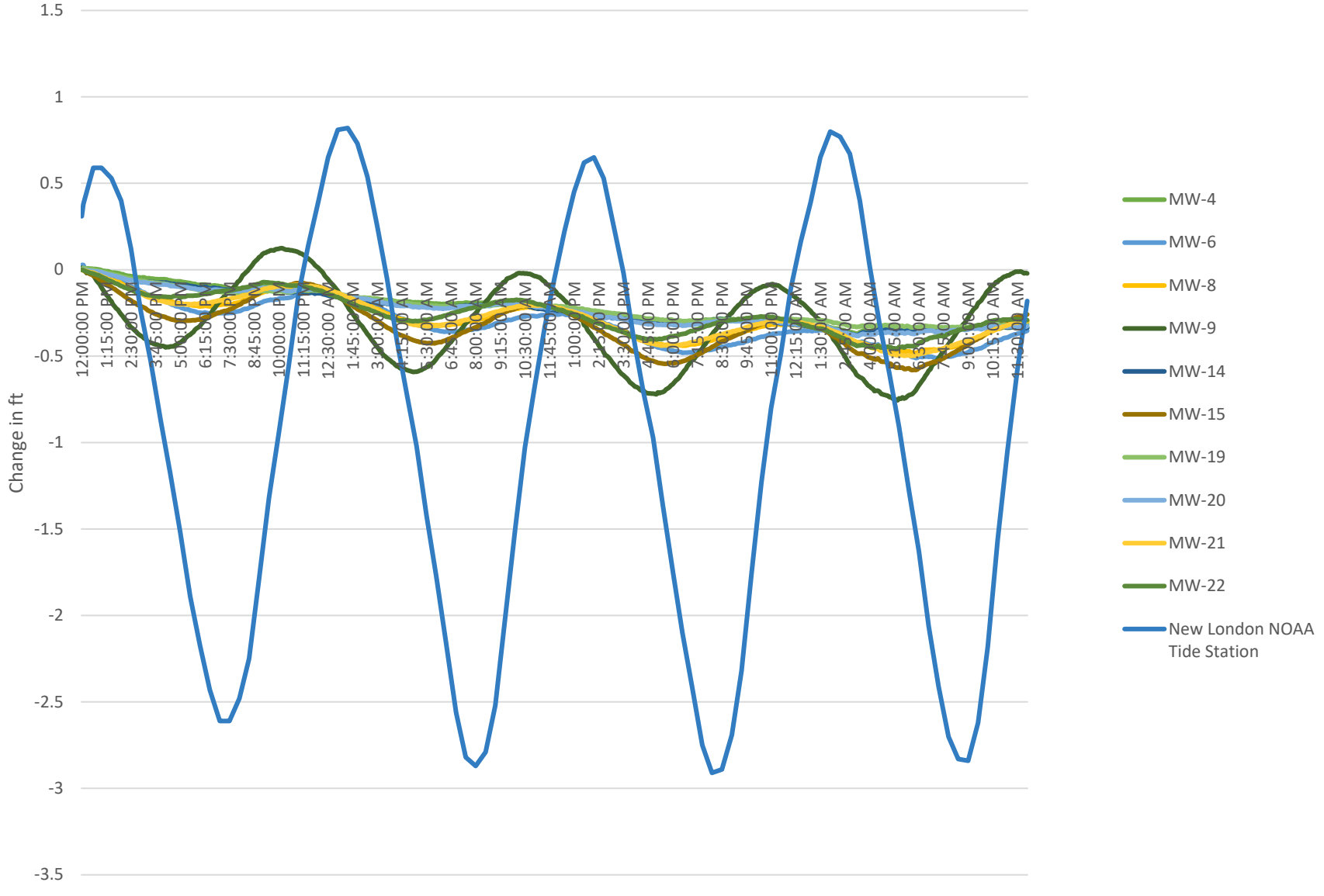
SHEET TITLE

ATTACHMENT A
TIDAL STUDY MONITORING WELLS

SHEET NUMBER

Attachment B

State Pier Groundwater Variation (48hr period)



APPENDIX E

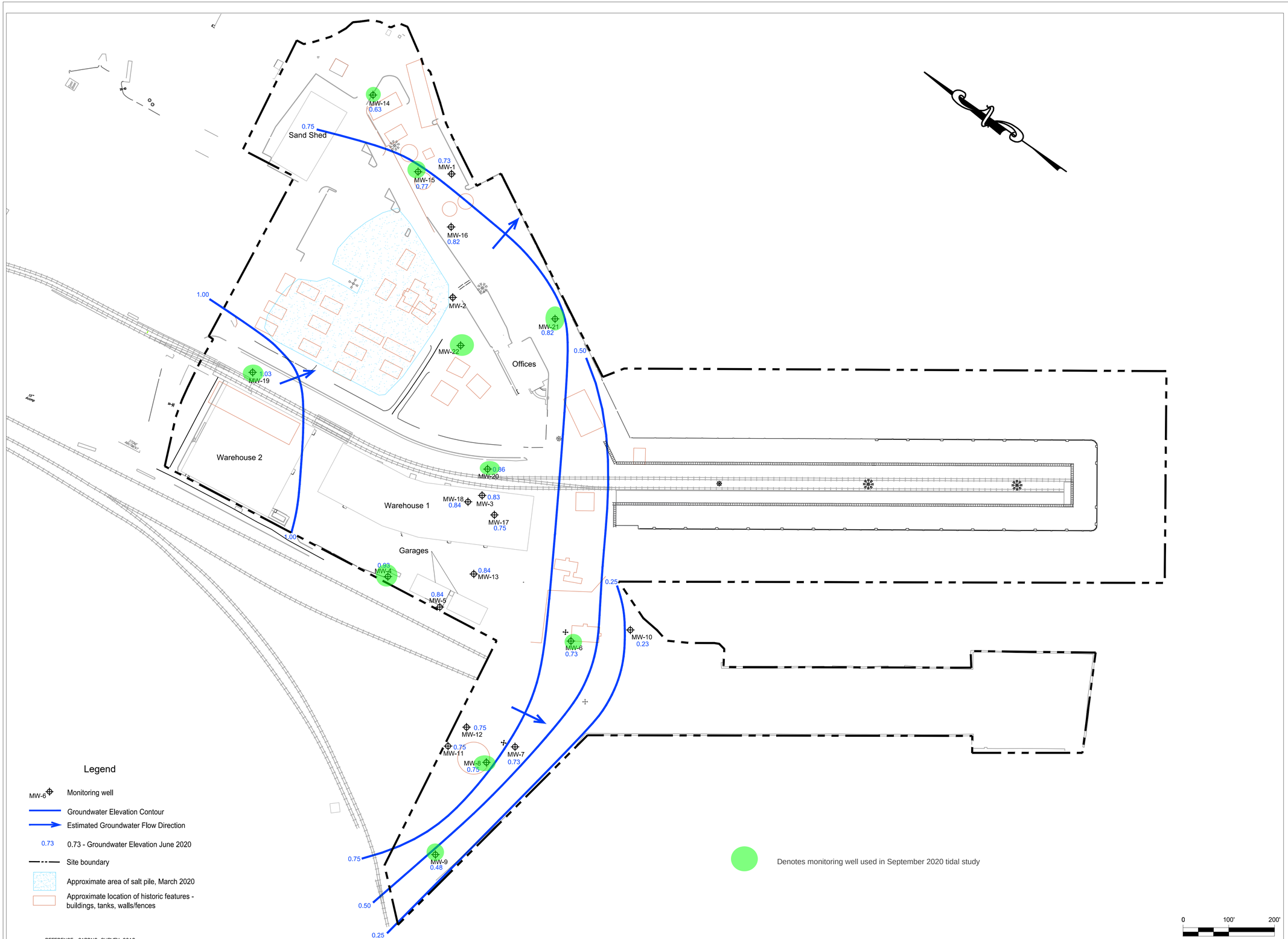
TRC Tidal Study

TRC
21 Griffin Rd. North
Windsor, CT 06095
T 860.298.9692
TRCcompanies.com

State Pier Tidal Study

TRC performed a water level measurement study of existing groundwater monitoring wells on-site to determine the tidal influence (if any) on the water table over a 48-hour period. TRC mobilized to The Site on September 16, 2020. With the assistance of AECOM, a ten of the total 23 monitoring wells on-site were selected for the installation of transducers (Attachment A). The current monitoring well network was established by AECOM during Phase II and Phase III Environmental Site Investigations. The monitoring wells studied were: MW-4, MW-6, MW-8, MW-9, MW-14, MW-15, MW-19, MW-20, MW-21, and MW-22. On the morning of September 16, 2020 TRC installed a Solinst Levelogger Model 3001 (transducer) into each of the previously mentioned monitoring wells. Each transducer was installed approximately one foot above the bottom of each monitoring well to ensure the water level never drew down below the transducer. All transducers were pre-programed to record data at 5-minute intervals from 12:00PM September 16, 2020 until 12:00PM September 18, 2020. After installing all ten transducers, TRC performed synoptic gauging of the entire monitoring well network. Water levels were recorded from the ten select “transducer wells” beginning at 12:00PM. These water levels were used as the baseline for analyzing each well’s 48-hour transducer data.

All ten of the monitoring wells studied exhibited varying water levels over the 48-hour period which corresponded to observed New London tidal variation (Attachment B). Water levels varied on average less than 0.5ft over any 12-hour period (two consecutive high tides, or low tides). MW-9 exhibited the greatest variation of 0.88ft from the highest to lowest water level reading over the 48-hr period. MW-9 is the westernmost well on-site. Due to the configuration of the eastern and western piers, groundwater in the western portion of the site may be affected to a greater degree by tidal fluctuations in the southern portion of the Thames River and Long Island Sound.



Project Management Initials: ____ Designer: ____ Checked: ____ Approved: ____ ANSI D 22" x 34"

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CONSULTANT

AECOM
500 ENTERPRISE DRIVE, SUITE 3B
ROCKY HILL, CT 06067
860.529.8882
www.aecom.com

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION

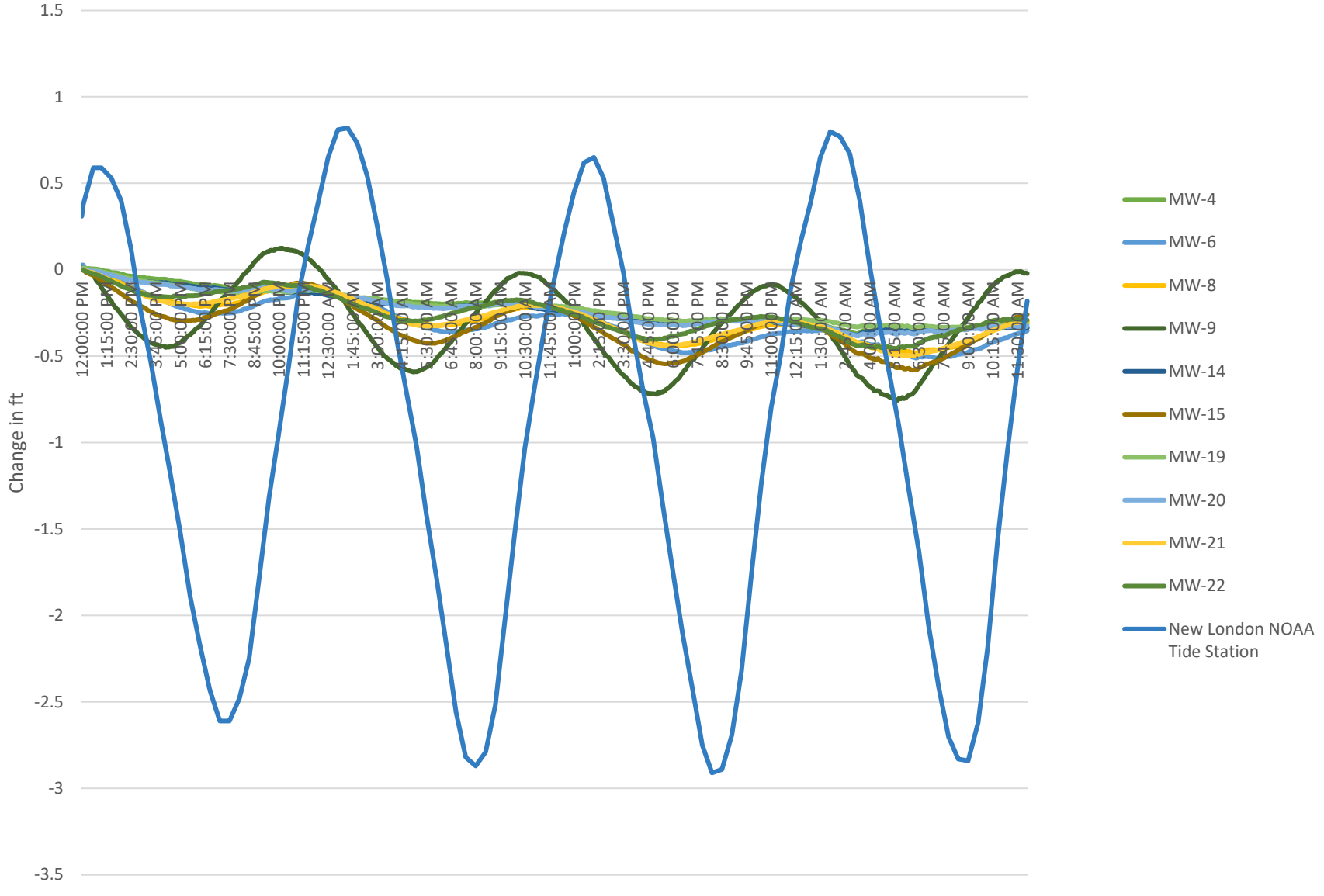
SHEET TITLE

ATTACHMENT A
TIDAL STUDY MONITORING WELLS

SHEET NUMBER

Attachment B

State Pier Groundwater Variation (48hr period)



APPENDIX F

Public Comment Summary

Admiral Harold E. Shear
State Pier
Terminal Office
State Pier
State Pier Office
State Pier Warehouse

ENVIRONMENTAL REMEDIATION
IS PROPOSED FOR THIS SITE

FOR FURTHER INFORMATION
CONTACT DOUG MARTIN
AT 860-298-9692

TRC

21 Griffin Road North
Windsor, CT 06095

T 860.298.9692
TRCcompanies.com

October 22, 2020

Mr. Stephen Mansfield
Director of Health
Ledge Light Health District
216 Broad Street
New London, CT 06320

Re: Notice of Intent to Remediate
Connecticut State Pier
State Pier Road
New London, Connecticut

Dear Mr. Mansfield:

On behalf of the Connecticut Department of Transportation (ConnDOT), TRC Environmental Corporation is hereby giving notice pursuant to The Connecticut Transfer Act (R.C.S.A. 22a-134) of its plan to conduct remedial activities at the property known as The Connecticut State Pier located along State Pier Road in New London, Connecticut beginning in 2021.

The remediation will consist of the excavation and proper disposal of soils impacted by polynuclear aromatic hydrocarbons (PAHs), total and leachable metals, petroleum compounds, and pesticides. If you have any questions or comments, please feel free to contact me at 860-298-6227.

Sincerely,
TRC Environmental Corporation

Kate Sheffield
Project Manager

Cc: Douglas Martin, TRC Environmental
Denise Young – Connecticut Department of Transportation
Adam Fox – Connecticut Department of Transportation

PUBLISHER'S CERTIFICATE

State of Connecticut
County of New London, ss. New London

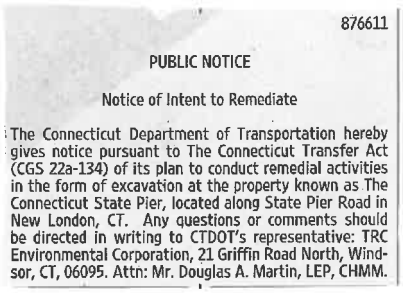
Personally appeared before the undersigned, a Notary Public within and for said County and State, Michelle Savona, Legal Advertising Clerk, of The Day Publishing Company Classifieds dept, a newspaper published at New London, County of New London, state of Connecticut who being duly sworn, states on oath, that the Order of Notice in the case of

876611 PUBLIC NOTICE Notice of Intent to Remediate The C

A true copy of which is hereunto annexed, was published in said newspaper in its issue(s) of

10/10/2020

Cust: TRC ENVIRONMENTAL
Ad #: d00876611



876611

PUBLIC NOTICE

Notice of Intent to Remediate

The Connecticut Department of Transportation hereby gives notice pursuant to The Connecticut Transfer Act (CGS 22a-134) of its plan to conduct remedial activities in the form of excavation at the property known as The Connecticut State Pier, located along State Pier Road in New London, CT. Any questions or comments should be directed in writing to CTDOT's representative: TRC Environmental Corporation, 21 Griffin Road North, Windsor, CT, 06095. Attn: Mr. Douglas A. Martin, LEP, CHMM.

Michelle Savona

Subscribed and sworn to before me

This Friday, October 16, 2020

Marylle Solinsky

Notary Public

My commission expires 5/31/24

Response to Public Comments
New London State Pier Remedial Action Plan

Letter Date	Comment #	Last Name	Organization	Topic	Comment	Response	CTDOT Review
11/30/20	1	Chen	CTDEEP	Figures	Figure 3 does not show AOC-5. Please add AOC-5 on figures.	AOC-5 has been added to the RAP Figures.	CTDOT
11/30/20	2	Chen	CTDEEP	AOCs	The RAP indicates 13 out of 28 AOCs were identified exceeding RSRs by a Phase II investigation and then confirmed by a Phase III, but did not mention the status of the remaining 15 AOCs. If the remaining AOCs were investigated and confirmed with no release, please provide a brief statement. Please note that a release includes any detections, above and below the RSRs	A discussion of the full investigation of AOCs has been included in the RAP.	CTDOT
11/30/20	3	Chen	CTDEEP	Self-Implementing Options	Page 4-6 indicates "only self-implementing options (e.g., use of the I/C DEC) have been considered in this evaluation and selection of appropriate remedial options." It is not clear on what remedial actions are considered to be the "self-implementing options." The engineered control and ELUR are not self-implementing.	Comment noted. RA's have been re-evaluated for potential need for Engineered Controls.	CTDOT
11/30/20	4	Chen	CTDEEP	No Action	Section 4.3.4 No Action – The RAP calls out "no action" as an alternative but also include an ELUR as a remedial strategy. If "No Action" means "no physically active remedial action," please clarify.	"No Action" means "no physical active remedial action." This clarification will be made throughout the RAP.	CTDOT
11/30/20	5	Chen	CTDEEP	AOCs vs. Ras	Disconnection between AOCs and RAs (Remediation Areas) - please include a column in Table 2 to cross-reference the Remediation Area and its targeted AOCs.	AOCs and RA's do not necessarily correspond to one another, as some RAs contain samples collected in association with several AOCs. AOCs corresponding to RAs have been added to Table 2 in the RAP.	CTDOT
11/30/20	6	Chen	CTDEEP	QA/QC	Inconsistency between table and text – e.g., Section 4.4.1 Remediation Area 1 (RA-1) indicates the remediation is due to ETPH exceedance of GBPMC in AOC-14, but Table 1 indicates ETPH exceeding DEC not GBPMC. Section 4.4.6 RA-6 indicates PAHs exceeding GBPMC in AOC-14, but Table 1 does not include PAHs in AOC-14. Please revise the table and double check other RAs too for consistency.	Additional QA/QC as been completed on the table vs. the text. Discrepanies have been addressed and corrected.	CTDOT
11/30/20	7	Chen	CTDEEP	ELUR	Section 4.4.10 for RA-10 and Section 4.4.19 for RA-19 – RAP indicates no active remediation at these areas. I assume an ELUR will be recorded to address these exceedances. Please include the remediation actions (ELUR, no excavation) for these sections	Remedial Areas in which no active remediation is to be conducted but will be addressed by the placement of an ELUR will be clarified in the final RAP document.	CTDOT
11/30.20	8	Chen	CTDEEP	RA-20C	Section 4.4.20C and Figure 5 regarding RA-20C–excavated soil with PAHs > DEC to be reused at 0-1.5 ft below grade is not recommended, unless certain thickness of clean materials covers these soils.	Soils located within RA-20C exhibited PAH exceedances at depths between 0-1.5 fbg. These soils will be properly managed to ensure that any reused soils are properly covered with the appropriate amount of clean fill material or placed in the Central Wharf.	CTDOT
11/30/20	9	Chen	CTDEEP	PMC Remediation	Page 4-20, regarding remediation of PMC exceedance in soil in AOC-1 (RA-20) – The remedial actions include excavation of impacted soil 4 ft below water table and the RAP also indicates that a PMC cap (membrane) may be required if the excavation could not be performed. Please note that PMC does not apply to the soil below seasonal high water table. The excavation below water table is not for the purpose of PMC compliance but to reduce the mass load to groundwater which in turn may reduce the time for groundwater compliance. In addition, as this area was a former tank farm, the potential for LNAPLs or DNAPLs should be evaluated.	Correct, soils in RA-20 will be excavated below the seasonal high water table to improve groundwater quality in this area. Monitoring wells located within this RA have been monitored for the presence of NAPL. This area will continue to be monitored for the presence of NAPL throughout remedial and reconstruction activities.	CTDOT
11/30/20	10	Chen	CTDEEP	RSR Exceedances	Page 5-2, Number 3 indicates "In accordance with applicable environmental regulations, and as previously approved in concept by CTDEEP, in general, non-hazardous materials that exhibit constituent concentrations that exceed only the DEC but not the GBPMC, may be considered for reuse. Material only exceeding the RDEC can be reused on-site without additional restriction, however material exceeding the I/CDEC will require additional controls (capping) to render that material inaccessible." Polluted soil reuse shall follow RSRs 22a-133k-2(h)(3). For soil exceeding RDEC to be reused onsite, at a minimum, an ELUR to restrict residential use shall be place on the property. For engineered control to be used at the site, Commissioner's review and approval are required. Please clarify these statements.	Comment Noted. Please see response to Comment #3.	CTDOT
11/30/20	11	Chen	CTDEEP	Permitting/ Approvals	Section 5.2.1 **Permitting/Approvals** – The RAP states that this needs to be approved before mobilization: "CTDEEP review and approval of this RAP, to secure concurrence of the planned remediation strategies prior to final redevelopment of the Site, for ultimate verification in accordance with the Connecticut Property Transfer Act." As this site is a LEP lead in the CT Property Transfer Program (after 75 days of filing, the site automatically delegate to the LEP), DEEP's approval of RAP is not necessary. However, DEEP is willing, as a courtesy, to provide guidance, assistance, and comments on the RAP. In addition, agreement on the RAP does not warrant the success of final verification for the site	Text has been changed to indicate that DEEP approval of the RAP is not required.	CTDOT
11/30/20	12	Chen	CTDEEP	ELURs	The approvals should include engineered control applications and ELURs.	Comment noted.	CTDOT
11/30/20	13	Chen	CTDEEP	Engineered Control	The RAP did not call out for engineered control to address DEC exceedance soils, although some description of the work appears to be the work related to an engineered control. Please note that to render soil inaccessible, the contaminated soils (including the appropriate reused polluted soils) need to be either under 4ft of clean soil or 2 ft under pavement or capped by an engineered control cap. Please revise appropriate sections of this RAP.	Due to recent Site redevelopment design changes, several of the RAs may require additional excavation to allow for the necessary coverage to render underlying impacted soils inaccessible. In the event this approach is determined not to be practicable, an engineered control may be selected to address those few areas.	CTDOT

Response to Public Comments
New London State Pier Remedial Action Plan

Letter Date	Comment #	Last Name	Organization	Topic	Comment	Response	CTDOT Review
11/8/20	1	Blacker	Citizen	Public Notice	Public Notice was posted in the Day newspaper 10/10/2020. Why did the sign notifying Public of the remediation not get posted at State Pier until the first week of November? Is this in violation of the law? Were letters sent to all the adjacent property owners? Otherwise you have to leave the sign up for 30 days before you can close Public Notice to get the required 2 forms of Public Notice?	Public Notice was submitted to The New London Day and was published on 10/10/2020. Per the Connecticut Transfer Act, public notice needs to be published for at least 45-days prior to the start of any on-site remediation. Also, per the Transfer Act, a sign indicating that remedial actions will be taking place at the Site must be posted at the Site at least 30-days prior to the start of remedial activities. Notice to the individual property abutters is not required IF a sign is posted at the Site. A notification letter was also sent to the Director of Health at the Ledge Light Health District on October 22, 2020. The Public Notice and sign posting will provide ample time for public comment. Based on these regulatory timeframes, planned remedial actions could start as soon as soon as the start of the new year.	CTDOT
11/8/20	2	Blacker	Citizen	Public Hearing	Public Hearing should be held, the communal memory of the history of the property will help formulate the best remediation plan.	The site investigation activities have been conducted in accordance with that American Society for Testing and Materials (ASTM) Standard for site research and has been investigated per the Connecticut Department of Energy and Environmental Protection's (CTDEEP's) Site Characterization Guidance Document (SCGD). Multiple Licensed Environmental Professionals (LEPs), who require extensive testing to reach such a Licensure, have reviewed the historical records for the site to develop the investigation program for the site. These professionals have the expertise to formulate the remediation plan for the property in accordance with the CTDEEP's Remedial Standard Regulations (RSRs). The proposed remedial activities include removing contaminated material that can impact groundwater and then the installation of a cap that will prevent individuals from coming into contact with soil. A Deed Restriction will subsequently be filed that prevents disturbance of the capped soils without written authorization from the CTDEEP. These methodologies are standard remediation techniques used throughout the State. The Department's Licensed Environmental Professional for this site has spoken to you and your additional comments on the history of the property are being addressed below. Pursuant to the Remedial Standard Regulations under the Regulations of Connecticut State Agencies 22a-133k-1(d)(1) a Public Hearing may be held if the [DEEP] Commissioner determines that there is substantial public interest. DEEP will assess if there is substantial public interest if they receive a petition signed by 25 or more persons. If you have questions on this process, Raymond Frigon (raymond.frigon@ct.gov), Assistant Director of Remediation has made himself available to discuss them with you.	CTDOT
11/8/20	3	Blacker	Citizen	Site Investigation	I heard only 4 holes were drilled up on the hill where CPA made DRVN move all the salt. Is this a sufficient number of test holes? That area was a neighborhood. Could relying on "connecting the dots." (sic) Miss significant hot spots? Historic aerial photographs of the neighborhood exist, as do town records. They should be used. More detailed investigation of contamination on the hill should be conducted. Do town records indicate any of those houses had in ground oil tanks? It was common practice to dump gas, oil, unwanted chemicals on the ground in residential properties pre 1960's before there was understanding of environmental and health impacts of such actions .	Comprehensive Site Investigations (Phases I, II and III) have been completed in accordance with the CTDEEP Site Characterization Guidance Document (dated September 2007 and revised December 2010) (SCGD), and in accordance with other industry standards and practices. To date, a total of 25 soil borings have been completed on the hill area. These borings were completed to depths of up to 30 fbg. In addition, four monitoring wells have been installed in this area. As part of the investigation due diligence, and subsequent to the field investigations, a full "Conceptual Site Model" was developed per the SCGD. As part of the original Phase I Environmental Site Assessment (ESA), available Site current and historical information was reviewed, including historical aerial photographs, Sanborn Fire Insurance Maps, historical topographic maps, and other available historical information sources, to identify potential areas of concern across the entire Site, including the subject upland "hill." In summary, a comprehensive, methodical approach, consistent with applicable regulations and industry standards and practices, has been conducted on-site to characterize potential environmental impacts at the Site.	CTDOT
11/8/20	4	Blacker	Citizen	Herbicides/ Pesticides	What herbicides/pesticides of concern were identified in the soil at State Pier during analysis ?	Low levels of the pesticide 4,4-DDT, as well as its break-down products, were detected in several locations on the Site, including along the southwestern "spur" that abuts the waterfront. These concentrations are consistent with historic lawful use of these materials. These soils will be remediated pursuant to the DEEP's Remedial Standard Regulations by the installation of a cap as described above...	CTDOT
11/8/20	5	Blacker	Citizen	Petroleum Products	Petroleum products and certain distallates (sic) were imported to State Pier and stored in bulk tanks, up on hill. Was sufficient investigation of area where oil and distallates (sic) were offloaded, transported, and stored completed?	The referenced area located along the northeastern portion of the Site, documented to be the former location of a petroleum product storage and handling facility, was identified as an Area of Concern during the Phase I ESA and was the focus of the recent environmental investigations. This area, including the adjacent upland area, has been extensively investigated. In addition, several other areas of the Site were determined to be current or former locations of petroleum product storage tanks. A number of these former tank locations have been addressed previously, and were remediated, where warranted, at the time of their removal. All of the remaining tank locations were appropriately assessed during the recent Site investigation program.	CTDOT
11/8/20	6	Blacker	Citizen	Petroleum Storage	Were locations of all other commercial petroleum storage tanks and underground transfer lines on the property adequately investigated?	See Response to Comment #5.	CTDOT
11/8/20	7	Blacker	Citizen	Historic Dump	Where was the historic dump at State Pier?	Please refer to Comment 3. During Site due diligence, no evidence of a historical "dump" on-site was identified.	CTDOT
11/8/20	8	Blacker	Citizen	Historic Cesspools	Have all historic cest (sic) pools been located and tested on State Pier property? You better know stuff got dumped down the bathroom drain.	Please refer to Comment 3. No former cesspools or other septic systems have been identified at the Site. The property has been served by municipal sanitary sewer.	CTDOT

Response to Public Comments
New London State Pier Remedial Action Plan

Letter Date	Comment #	Last Name	Organization	Topic	Comment	Response	CTDOT Review
11/8/20	9	Blacker	Citizen	Historic Sewage	Have all historic sewage outflow pipes that went "overboard" into the river been located and sediment in those areas tested?	No historical sewage outflows have been identified at the Site. The only documented Site-related discharges to the Thames River are associated with storm water management, which does not involve sewage. Sediments in the areas of the storm water discharge locations as well as storm water catch basins and lines have been evaluated as a part of recent and previous Site investigations.	CTDOT
11/8/20	10	Blacker	Citizen	Transformers	Were transformers or trolley parts ever stored on Stater Pier property?	Please refer to Comment 3. Electrical transformers were historically present in a number of locations; these transformers have all been decommissioned, removed, sampled, and properly documented to close out any areas of potential contamination associated with those units.	CTDOT
11/8/20	11	Blacker	Citizen	Coal Ash	Where was coal ash dumped from Central Vermont and State Pier operations?	Please refer to Comment 3. No known areas of coal ash disposal have been encountered during due diligence or subsequent Site investigations at the Site.	CTDOT
11/8/20	12	Blacker	Citizen	Railroad	I hear the RR tracks are still on the CV Pier. That for Op-Sail they just paved over them. Are those cross ties the ones soaked in creosote? Are those allowed to stay under there?	Treated wood cross-ties have been observed to exist on-site. Remaining ties that are not slated for continued use are anticipated to be removed where encountered as part of any future Site improvements.	CTDOT
11/8/20	13	Blacker	Citizen	Dredge Sediments	I was told by a reliable source that EB Contractors recently (winter 2019) dumped "multiple loads" of dredge spoils from the EB job between the two piers at State Pier. I informed Army Corp of Engineers, and CT DEEP. Has this been investigated by a diver? Have recent samples been taken from between the two piers?	Sediment sampling along the northeastern portion of the Pier as well as between the former State Pier and CVRR Pier performed in the spring of 2019 yielded no evidence of unauthorized dredge spoils disposal associated with the Site. The Department has no evidence that this activity occurred at the property. Should you have additional concerns or evidence regarding such activities it is suggested that you contact the appropriate regulatory agencies.	CTDOT
11/8/20	14	Blacker	Citizen	Radioactive Material	Does the State have to clean up the radioactive material at State Pier before the Transfer Act requirements are fulfilled?	Sediments containing low levels of Cobalt-60 were identified during earlier (2009) sediment sampling performed along the eastern side of the East Pier. Cobalt-60 has a radioactive decay half-life of 5.27 years. In the recent sediment sampling performed in 2019, no radionuclides, including Cobalt-60, were detected in sampled river sediments.	CTDOT
11/8/20	15	Blacker	Citizen	WWI Admin Building	When the WWI era administration building was demolished was it removed from the property or buried? Was all asbestos, lead etc abated?	During completion of the Phase I ESA due diligence, none of the reviewed records mentioned sampling building materials associated with the WWI era administration building or it's demolition. Further, no evidence of buried debris was encountered during recent investigations.	CTDOT
11/8/20	16	Blacker	Citizen	Navy	Have Navy WWI activities at State Pier been reviewed for potential contamination created?	Yes, the available historical U.S. Navy, Connecticut Port Authority, Connecticut Department of Transportation, and CTDEEP files were reviewed as part of the Phase I ESA due diligence process.	CTDOT
11/8/20	17	Blacker	Citizen	Coast Guard	Were sufficient exploration of "areas of concern" from Coast Guard use of the property conducted? When the Coast Guard base there burned where was all the rubble buried?	During the Phase I due diligence process, none of the reviewed information indicated that the Coast Guard utilized the State Pier property as a base. During the Phase II and III investigations, a total of 28 areas of concern were investigated across the Site which would have been expected to encounter such debris, if present. No such material was found.	CTDOT
11/8/20	18	Blacker	Citizen	Firing Range	Was there ever a firing range on the property?	Please refer to Comment 3. No indication of a former firing range on-site was identified during the Phase I due diligence process.	CTDOT
11/8/20	19	Blacker	Citizen	USS Fulton	Live ammunition including torpedo's and I hear cruise missiles were loaded onto subs when Squadron 10 and the Fulton were there. Aside from environmental considerations of that, has search/sweeping been done in that area to affirm nothing was ever dropped overboard/spilled, fell off the boat.	During the Phase I due diligence process, no reports of lost ordnance from vessels berthed at the Site were noted. Further, it would be extremely unlikely that such items would not have been recovered at the time of such an event. The area in which naval vessels were berthed has not only been dredged in the past but has also been extensively sampled – no reports of encounters with live ordnance have been identified.	CTDOT
11/8/20	20	Blacker	Citizen	USS Fulton	The Fulton, a diesel boat, was a floating machine shop, one of the oldest boats in active duty at the time. Other subs in Squadron 10 were nuclear? Were any sub repairs conducted on land. Was there a sub parts workshop at State Pier? Is nuclear contamination a concern in other areas on the property?	Please refer to Comment 3. The files reviewed during the Phase I ESA process do not specifically indicate that any submarine parts were serviced on the land-based State Pier property. All such service and repairs appear to have been performed on-board the Fulton. However, all documented mechanical maintenance and/or repair facilities located on the State Pier property have been evaluated through the recent Site investigation process.	CTDOT
12/19/20	21 (submittied via email)	Blacker	Citizen	Draft Permit	Mr. Martin, I am confused. You told me my Nov. 8 comments are being addressed as part of the Final Remedial Action Plan for the State Pier property. DEEP Draft Permit for State Pier says the Final Plan was submitted in June of 2020. Why bother soliciting Public comment 5 months after the final plan has been submitted? Also, I have still not received the response to my comments or questions that you told me I would receive. Do you know when I can expect to recieve them? Thank you. sincerely, Kevin Blacker	Mr. Blacker: The Remedial Action Plan (RAP) that was cited in the referenced in the Draft *Structures, Dredging & Fill and Tidal Wetlands Permit* document you are referring to was the June 2020 "Preliminary Remedial Action Plan," which was essentially a conceptual outline for the proposed remedial planning. The October 2020 RAP, that you reviewed and provided comments on, provides more specifics for each remediation area and was reviewed by the Remediation Division of DEEP. A final RAP which addresses all comments received, including CTDEEP, is scheduled to be submitted to CTDEEP later today. All received comments directly relating to the RAP (i.e., the planned environmental remediation at the Site) are provided as an official attachment to that submittal package. In addition, as I indicated to you in my 12/1/20 email, you will receive a hardcopy of the comment/response document directly.	CTDOT