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# Task 210 – Subsurface Site Investigation Safety & Operational Improvements on I-84

West Hartford, CT

**September 2018**

**Prepared for:**

Connecticut Department of Transportation  
Division of Environmental Compliance  
2800 Berlin Turnpike  
Newington, Connecticut 06111

DTC Project Number 17-141-06E  
CTDOT Project Number 0155-0171  
Assignment Number 218-5607



**SIGNATURE PAGE**

**TASK 210 SUBSURFACE SITE INVESTIGATION  
SAFETY AND OPERATIONAL IMPROVMENTS ON I-84  
WEST HARTFORD, CONNECTICUT**



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## 1.0 INTRODUCTION

Diversified Technology Consultants, Inc. (DTC) was retained by the State of Connecticut Department of Transportation (CTDOT) to conduct a Task 210 Subsurface Site Investigation (SSI) in support of CTDOT Project No. 0155-0171, Safety and Operational Improvements on I-84 in West Hartford, Connecticut. This report provides a discussion of the local environment and receptors, the investigation rationale, a summary of the data obtained during the investigation, an interpretation of the results with respect to the appropriate regulatory criteria, and recommendations.

### 1.1 Background and Purpose

The project is located on I-84 east and westbound in West Hartford, Connecticut. The tasks are in support of this scope and specifically as it relates to the future improvements which includes drainage and roadway widening along portions of I-84. The location and pertinent site features are depicted on Figures DRN-01 through DRN-11.

The purpose of the Task 210 SSI was to collect and review site soil data in order to evaluate potential subsurface contamination within the project area and to evaluate whether the proposed construction activities may require management of contaminated soil. The soil data will also be reviewed and compared to the Connecticut Department of Energy and Environmental Protection (CT DEEP) Remediation Standard Regulations (RSRs).

The potential exists for soil within the above-mentioned project area to be impacted with extractable total petroleum hydrocarbons (ETPH), semi-volatile organic compounds (SVOCs) or polynuclear aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and total RCRA 8 metals.

### 1.2 Scope of Work

DTC designed the Task 210 SSI activities based on a review of the project plans. The Task 210 SSI was completed pursuant to DTC's task assignment dated June 19, 2018 and work plan dated July 5, 2018, which were both approved by CTDOT.

The scope of work for this Task 210 SSI included the following tasks:

- Pre-drilling activities, including: (1) marking proposed drilling locations, (2) contacting Call-Before-You-Dig to request mark outs of subsurface utilities, and (3) meeting at the site to discuss proposed drilling locations with current property owners/representatives;
- Completion of 20 soil borings to a maximum depth of 4 feet below grade using a track-mounted Geoprobe direct-push rig;
- Recordation of soil lithology;
- Field screening of each soil sample with a photoionization detector (PID);
- Collection and laboratory analysis of 20 soil samples for one or more of the following compounds:
  - ETPH by Connecticut Department of Public Health (DPH) method;
  - PAHs by EPA Method 8270;
  - VOCs by EPA Method 8260/5035;
  - PCBs by EPA Method 8081; and

- o RCRA 8 Metals by EPA Method 6010B.

### **1.3 Previous Environmental Reports**

Previous environmental reports were not provided.

## **2.0 LOCAL ENVIRONMENT AND RECEPTORS**

### **2.1 Surficial Geology**

According to CT Environmental Conditions Online (CT ECO) the surficial materials for the project area are mapped as fines (very fine sand, silt, and clay) and alluvium overlying fines. Glacial till is mapped on the eastern portion of the corridor with a variety of these materials mapped on the western portion of the corridor including sand and gravel deposits. During drilling, red/brown silty sand and gravel with some clay was observed. Boring logs are included as Appendix A.

### **2.2 Bedrock Geology**

According to CT Environmental Conditions Online (CT ECO), the majority of the site is underlain by Portland Arkose formation, which is described as reddish-brown arkose (brownstone). Bedrock was not encountered during the investigation. Bedrock outcrops were not observed within the project area nor within the immediate vicinity of the site.

### **2.3 Groundwater**

According to CT ECO, groundwater beneath the site and surrounding area has been classified by CT DEEP as “GA” quality. Groundwater of this classification is defined by the DEEP as groundwater within the area of existing private water supply wells or an area with the potential to provide water to public or private water supply wells. The DEEP presumes that groundwater in such an area is, at a minimum, suitable for drinking or other domestic uses without treatment.

During this Task 210 SSI, groundwater was not encountered. Based on the topography and elevation of the highway, groundwater likely flows away from the highway. The presence of subsurface structures, impervious surfaces, and the character of the subsurface stratigraphy may also locally influence the direction of groundwater movement.

### **2.4 Surface Water**

The site is located within the Park Regional Basin and the Trout Brook and Park River Sub Regional Basins. Multiple waterbodies exist along the project corridor. According to CT ECO, the waterbodies surrounding the project corridor are classified as a “A” surface water body. The Class “A” designation indicates an inland water body known or presumed as a fish and wildlife habitat, potential drinking water supplies, recreational use, industrial and agricultural supply, and other legitimate uses including navigation.

### **3.0 FIELD INVESTIGATION AND SAMPLING METHODS**

This Task 210 SSI included the advancement of 20 soil borings using a Geoprobe direct-push rig. The borings were completed by DTC's subcontractor Logical Environmental Solutions (LES) of Tolland, Connecticut. A total of 20 soil samples were collection and analyzed at a state-certified laboratory. The soil borings locations are depicted on Figures 2 and 3. Table 1 provides a summary of the sampling rationale and the laboratory analyses requested for each soil sample.

#### **3.1 Soil Boring Advancement and Sampling**

Soil borings B-1 through B-20 were advanced to depths between 2 to 4 feet below grade on August 27 and 28, 2018. Soil samples were obtained continuously during advancement of the borings using a stainless-steel, four-foot long sampling device, lined with a dedicated acetate liner. The Acetate liner containing the sample was removed from the sampling tube and opened along its length to allow inspection, description of lithology, and sampling of the material.

A representative portion of each 4-foot long soil core was immediately collected by the DTC field scientist and placed within a clean polyethylene zip-lock bag for field screening with a PID. The PID was equipped with a 10.6 eV bulb and was calibrated to isobutylene standard gas (100 parts per million). The results of the PID screening are provided on the boring logs, which are included as Appendix A.

Each soil sample was collected at approximately 2-foot intervals from each boring and placed in laboratory prepared bottle ware. Soil samples were selected for laboratory analysis based on the current/historic use of the site, visual appearance, field screening results, and the anticipated construction activities. The samples were placed on ice, tracked under chain of custody and submitted to Phoenix Environmental Laboratories, Inc. (Phoenix) of Manchester, CT, which is a State of Connecticut Department of Public Health certified environmental testing laboratory.



## 4.0 REGULATORY CRITERIA

The soil analytical results were compared to the numeric criteria listed in the Connecticut Remediation Standard Regulations (RSRs), Sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies (RCSA), revised June 27, 2013.

The RSRs were developed by the DEEP to define the remediation performance standards for soil and groundwater, specific numeric cleanup criteria, and processes for establishing alternative site-specific standards. The RSRs apply specifically to sites at which remedial actions are required by the DEEP under Chapters 445, 446k, or Section 22a-208a(c)(2) of the CGS such as under an administrative order, subsequent to a transfer of an “Establishment” under CGS Section 22a-134a, and to sites that are enrolled in a Voluntary Remediation Program (VRP) under CGS Sections 22a-133x or 22a-133y.

The remediation criteria are based on the property usage (industrial/commercial or residential) and the DEEP groundwater quality designation (“GA” or “GB”). Based on our review of the state groundwater quality maps, the site is located in an area designated as “GA” quality groundwater.

The RSRs do not provide soil and groundwater criteria for all substances detected at the site. In accordance with Sections 22a-133k-2(b)(5), -(2)(e)(6), -3(b)(3)(B), & -3(c)(4)(B), alternative criteria may be developed and used for such Additional Polluting Substances (APS) with the approval of DEEP. The alternative criteria for the Additional Polluting Substances detected at the site that are listed in the data summary tables of this report were obtained from the fast track criteria outlined in the Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Requests, revised April 17, 2018.

DTC used the numeric criteria in the RSRs as guidelines to evaluate the data and to make conclusions regarding concentrations of regulated compounds detected in soil. The following summarizes the soil criteria utilized during this Task 210 SSI.

### 4.1 Soil Criteria

The RSRs contain two sets of soil criteria; the Direct Exposure Criteria (DEC) and the Pollutant Mobility Criteria (PMC), as summarized below.

#### *Direct Exposure Criteria*

The DEC are designed to protect human health from risks associated with exposure to pollutants in contaminated soil within 15 feet of the ground surface. Different DEC apply to a property depending on land use, either “residential” or “industrial/commercial”, as defined by the RSRs.

The less stringent Industrial/Commercial (IDEC) cannot be used unless an Environmental Land Use Restriction (ELUR) has been recorded on the property deed restricting the site to industrial/commercial uses. An ELUR has not been recorded, therefore, the soil analytical results were compared to the Residential DEC (RDEC).

#### *Pollutant Mobility Criteria*

The PMC are designed to protect groundwater quality by reducing or eliminating the potential for migration of pollutants to the groundwater from contaminated soil. Different PMC apply to a property depending on the groundwater quality at the site, as designated by DEEP. In a “GA” groundwater classification area the PMC apply to soil located above the seasonal low water table and in a “GB” groundwater classification area the PMC apply to soil located above the seasonal

high-water table. The PMC do not apply to “environmentally isolated” soil (i.e. soil beneath a building or a “cap”). Since the site is located in a “GA” groundwater quality area, the GA PMC will be used for comparison to the analytical results.

Groundwater was not observed during the advancement of the soil borings.

Note, the RSRs provide two exceptions from the PMC, one for polluted fill material and another to polluted soil at a release area.

In order to qualify for the polluted fill material exception, the following must be met: 1) the fill is polluted only with coal ash, wood ash, coal fragments, and/or asphalt paving fragments, 2) the fill is not polluted with VOCs at concentrations exceeding the applicable PMC, 3) the soil complies with the DEC, 4) substances in the fill will not affect existing or potential drinking water supplies, 5) public water is available within 200 feet of the parcel, and 6) the placement of the polluted fill was not prohibited by law at the time it was placed.

In order for a substance, other than a VOC, to qualify for the polluted soil exception in a “GB” area, the following must be met: 1) the release area a) must be located in an area in which at least 80 percent of the release area has been subject to infiltration, and not obstructed by anthropogenic features, for a minimum of five years, or b) has been determined by DEEP to have been subject to sufficient infiltration of precipitation such that the concentration of the compounds of concern and extent of the groundwater plume will not increase if any obstruction to infiltration is removed in the future, 2) the analytical results of four consecutive quarterly samples of groundwater are all less than the SWPC, and 3) the groundwater sampling locations are representative of the groundwater plume and the extent of the plume exceeding the applicable remedial criteria is not increasing over time.

## 5.0 SUMMARY AND EVALUATION OF ANALYTICAL DATA

### 5.1 Soil Sample Analytical Results

Soil analytical results for this Task 210 are summarized in Table 2, along with the regulatory criteria, and are discussed below. The soil analytical laboratory reports are included in Appendix B.

#### *ETPH*

A total of 20 soil samples were analyzed for ETPH. ETPH was detected in one soil sample B-1 (2-4') at 98 mg/kg, which is below both the RDEC and GA PMC of 500 mg/kg. ETPH was not detected above laboratory reporting limits in any of the remaining samples.

#### *VOCs*

A total of 20 soil samples were analyzed for VOCs by EPA Method 8260. VOCs were not detected above laboratory reporting limits in any of the samples.

#### *PAHs*

A total of 20 soil samples were analyzed for PAHs by EPA Method 8270. Several PAH compounds exceeded either the RDEC and/or the GA PMC in soil sample B-3 (2-4'). One PAH compound (phenanthrene) was detected above the method detection limit in soil sample B-10 (2-4'), but at concentrations below their respective RSR criteria. PAHs were not detected above laboratory reporting limits in the remaining samples.

#### *PCBs*

A total of 20 soil samples were analyzed for PCBs by EPA Method 8082. PCBs were not detected above laboratory reporting limits in any of the samples.

#### *Metals*

A total of 20 soil samples were analyzed for total RCRA 8 metals, which include arsenic, barium, cadmium, chromium, mercury, lead, selenium and silver. As summarized in Table 2, arsenic, barium, cadmium, chromium, lead, and mercury were detected in one or more of the samples collected above laboratory reporting limits, but at concentration below the RDEC. These concentrations appear to be indicative of naturally occurring concentrations.

## 6.0 DATA QUALITY ANALYSIS / DATA USABILITY EVALUATION

During this investigation, DTC determined that QA/QC procedures were followed to conduct a Data Quality Assessment (DQA) and Data Usability Evaluation (DUE), as required by the May 2009 DEEP Laboratory QA/QC DQA & DUE Guidance Document. The following provides a discussion of the DQA/DUE conducted for the data obtained by DTC.

Based on the information provided in this section, it is DTC's opinion that the Site-Specific Data Quality Objectives (DQOs) have been met.

### 6.1 Data Quality Objectives

DQOs for this environmental investigation were developed to ensure that a sufficient quantity and quality of analytical data were obtained from each Recognized Environmental Condition (REC)/Area of Environmental Concern (AOEC) in order to:

1. Make a determination if a release has taken place at an REC/AOEC; and
2. Make a determination whether contamination is present in the environment at concentrations exceeding the applicable RSR criteria.

The soil samples obtained by DTC during this investigation were analyzed per the RCP methods to ensure the highest quality data.

Only a single COC needs to be detected above site-specific background concentrations within an REC/AOEC in order to determine that a release has occurred. Typically, analytical data obtained for this purpose does not require an exhaustive QA/QC review if a COC is detected above background levels; the environmental professional could simply conclude that a release has occurred. DTC performed a careful DQA/DUE for analytical data where COCs were not detected to support the conclusion that a release has or has not occurred at a REC.

When COCs are detected at concentrations well above the RSR criteria, an exhaustive QA/QC review is not necessary. The environmental professional could simply conclude that the contaminants are present in the environment at concentrations greater than the RSRs. For this investigation, DTC performed a careful DQA/DUE for analytical data where COCs were detected at concentrations below the RSR criteria in order to show that the data are adequate to conclude that the COCs are, in fact, present at concentrations less than the criteria.

### 6.2 Soil Analytical Obtained by DTC

The soil analytical report Case Narratives indicated that there were a number of QA/QC non-conformities for both COCs and non-COCs. In the Case Narratives, the lab indicated that the non-conformities did not affect the usability of the data due to the evaluation of the QC data using multiple lines of evidence. The QA/QC Certification Forms included with each laboratory report indicated that all of the data meet the requirements for Reasonable Confidence.

- **For laboratory report GCB21541 (dated 9/5/18).** The PAH and PCB Narration indicates all QA/QC performance criteria were achieved.

The ETPH narration indicates the LCS and/or LCSD recovery is below the method criteria. Since all the other QC is acceptable, no significant bias is suspected. The LCS/LCSD RPD

exceeds the method criteria for one or more analytes, therefore there may be variability in the reported results. Because ETPH was either non-detect or well below RSR criteria, the data can be relied upon.

The mercury narration indicates the sample/duplicate RPD exceeds the method criteria, therefore there may be variability in the result. Concentrations were well below criteria. As such, the data can be relied upon.

The Sample/Duplicate RPD exceeded the method criteria for one or more metals, therefore there may be variability in the reported barium, chromium, and lead results. A high lead bias is suspected, due to analyte found in the blank. However, concentrations of lead were well below criteria. As such, the data can be relied upon.

There were no other significant QA/QC non-conformances that would affect the usability of the data. See laboratory reports for details.

## **7.0 POTENTIAL SOURCES OF CONTAMINATION AND IDENTIFIED PRELIMINARY AREAS OF ENVIRONMENTAL CONCERN**

The following provides a summary of the potential sources of soil contamination identified during completion of this Task 210 SSI and the identification of one (1) preliminary Area of Environmental Concern (AOEC) and two (2) Low-Level AOECs within the project area. The identified preliminary AOEC and LLAOECs are depicted in Figures DRN-02, DRN-03, and DRN-06, respectively.

### **AOEC 1 – Soil Impact in the Vicinity of Soil Boring B-3**

Multiple PAH compounds (at concentrations above applicable RSR criteria) were detected in one soil sample obtained from boring B-3 at a depth of 2 to 4 feet below grade. Elevated PID readings and soil staining was not observed during the soil boring installation. The source of the contamination is currently unclear but may likely be attributed to either roadway construction and/or fill-related impacts.

Soil boring (B-3) is located in the area of proposed excavation and drainage improvements. Any soil excavated in the vicinity of B-3 should be handled as controlled material.

### **LLAOEC “A” – Low Level Soil Impact in the Vicinity of Soil Boring B-1**

ETPH was detected in one soil sample obtained from boring B-1 at a depth of 2 to 4 feet below grade at a concentration above the laboratory reporting limit, but below applicable RSR criteria. Elevated PID readings and soil staining was not observed during the soil boring installation. The source of the contamination is currently unclear but may likely be attributed to either roadway construction and/or fill-related impacts.

Soil boring B-1 is located in an area of proposed excavation and drainage improvements. Any soil excavated in the vicinity of B-1 should be handled as low-level material.

### **LLAOEC “B” – Low Level Soil Impact in the Vicinity of Soil Boring B-10**

Phenanthrene, which is a PAH compound, was detected in one soil sample obtained from soil boring B-10 at a depth of 2 to 4 feet below grade at a concentration above the laboratory reporting limit, but below applicable RSR criteria. Elevated PID readings and soil staining was not observed during the soil boring installation. The source of the contamination is currently unclear but may likely be attributed to either roadway construction and/or fill-related impacts.

Soil boring (B-10) is located in an area of proposed excavation and drainage improvements. Any soil excavated in the vicinity of B-10 should be handled as low-level material.

## 8.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the analytical data collected by DTC, one (1) preliminary AOEC and two (2) preliminary LLAOECs were identified within the project area, and as summarized below:

AOEC 1 - Identified PAH compounds exceeding RSR criteria.

LLAOEC "A" - Identified low-level ETPH at a concentration below RSR criteria.

LLAOEC "B" - Identified low-level PAH compound at a concentration below RSR criteria.

Based on the results of this Task 210 SSI, DTC recommends that a Task 310 – Plans, Specifications, and Estimates be assigned to provide guidance for the proper management and disposal of contaminated materials that may be excavated, handled, transported, or disposed during construction activities and for the establishment of appropriate worker health and safety protocols.

## 9.0 LIMITATIONS

All work products and reports provided in connection with the performance of this Task 210 SSI are subject to the following limitations.

Where visual observations have been provided in this report, they represent conditions at the time of observation and may not be indicative of past or future conditions.

DTC's work presented herein was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area. DTC observed a degree of care and skill generally exercised by other consultants under similar circumstances and conditions. DTC's findings and conclusions must be considered not as scientific certainties, but as our professional opinion concerning the significance of the limited data gathered during the course of the investigation. Specifically, DTC does not and cannot represent that the site contains no hazardous material, oil, or other latent condition beyond that observed by DTC during the investigation.

In completing this investigation, DTC has relied upon information and/or data provided by other environmental consultants, drillers, analytical laboratories, municipal agencies, and State agencies. DTC provides no warranty regarding the accuracy of the data provided by these parties.

No specific attempt was made to check the compliance of the owners/operators of the site with Federal, State, or local laws and regulations, environmental or otherwise.

This report was prepared for the exclusive use of the CTDOT. No other party may rely on this report without written consent of these parties.

If conditions or activities on or near the site change, the conclusions in this report may no longer be valid. DTC should be made aware of such changes so that the conclusions presented in this report may be modified (if necessary).

The conclusions and recommendations contained in this report are based upon data obtained from a limited number of soil samples obtained from locations selected by DTC and others. The nature and extent of variations between these sample locations may not be evident from the data obtained.



## 10.0 REFERENCES

1. “Remediation Standard Regulations”, DEEP, Sections 22a-133k-1 through –3 of the Regulations of Connecticut State Agencies, effective June 27, 2013.
2. Table 10: CT DEEP Recommended Criteria Values for Common Additional Polluting Substances and Alternative Criteria Requests, dated December 10, 2015.
3. “Site Characterization Guidance Document”, DEEP, dated September 2007 (revised December 2010).
4. “Laboratory Quality Assurance & Quality Control, Data Quality Assessment & Data Usability Evaluation Guidance Document”, DEEP, dated May 2009.

## **FIGURES**



### Site Location Map

Task 210 SSI  
 I-84 West Hartford  
 West Hartford, Connecticut



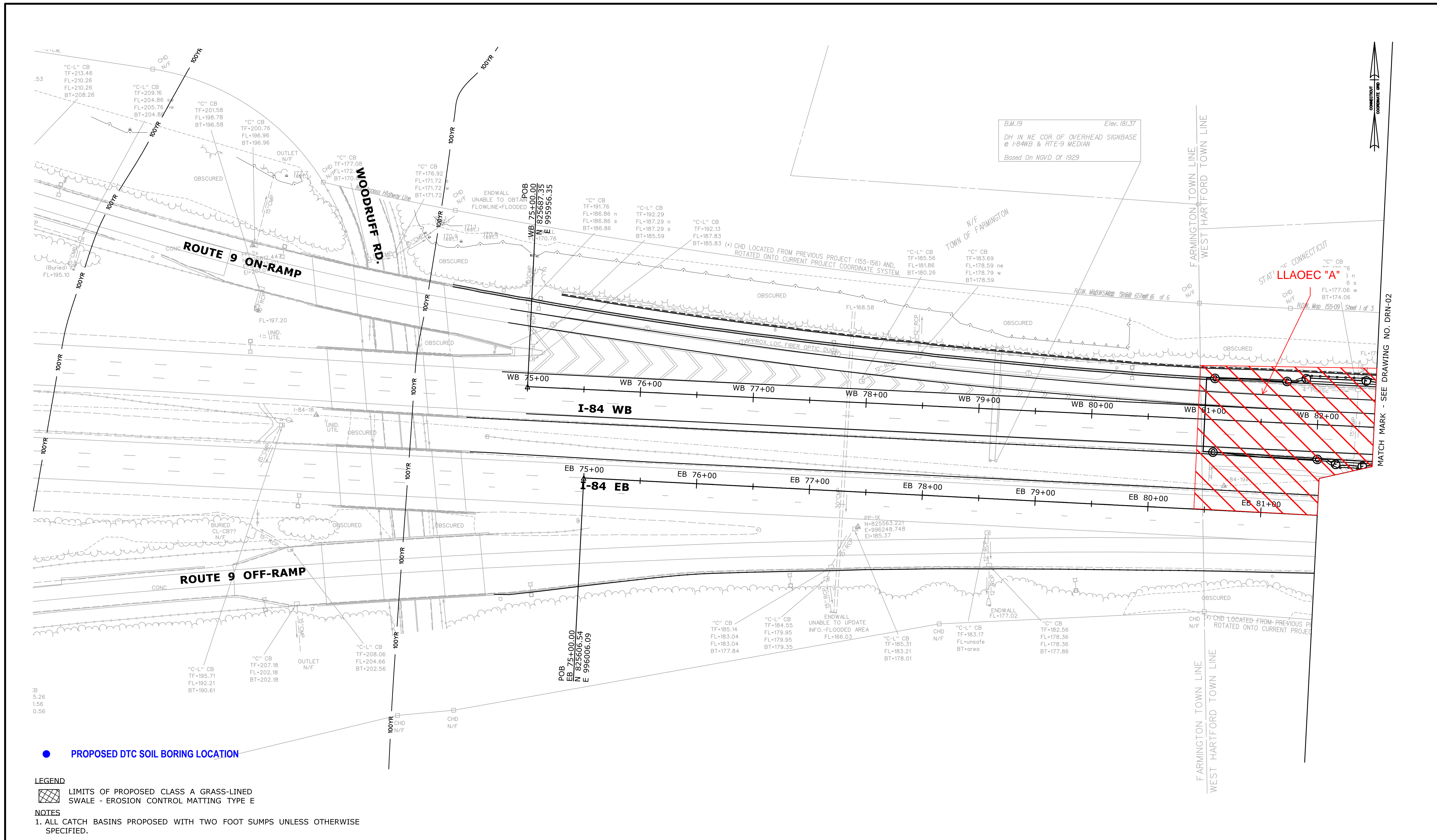
DTC Project No. 17-141-06E

**Figure 1**



ENGINEER  
 CONSULT  
 MANAGE

**DTC, Inc.**  
 2321 Whitney Avenue, Suite 301 Hamden CT 06518  
 Andover, MA



B.M.19 Elev. 181.37  
 DH IN NE COR OF OVERHEAD SIGNBASE  
 @ I-84WB & RTE-9 MEDIAN  
 Based On NGVD of 1929

STATE OF CONNECTICUT  
 LLAOC "A"

MATCH MARK - SEE DRAWING NO. DRN-02

● PROPOSED DTC SOIL BORING LOCATION

**LEGEND**  
 LIMITS OF PROPOSED CLASS A GRASS-LINED SWALE - EROSION CONTROL MATTING TYPE E

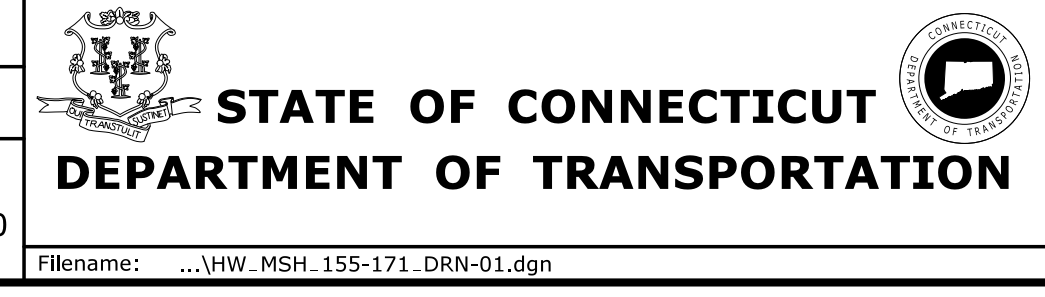
- NOTES**
1. ALL CATCH BASINS PROPOSED WITH TWO FOOT SUMPS UNLESS OTHERWISE SPECIFIED.
  2. ALL EXISTING DRAINAGE PIPES WITHIN THE PROJECT LIMITS SHALL BE CLEANED PRIOR TO CONSTRUCTION.

**SEMI FINAL DESIGN REVIEW**

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

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 CM/JO/SF  
 CHECKED BY:  
 MF/AC  
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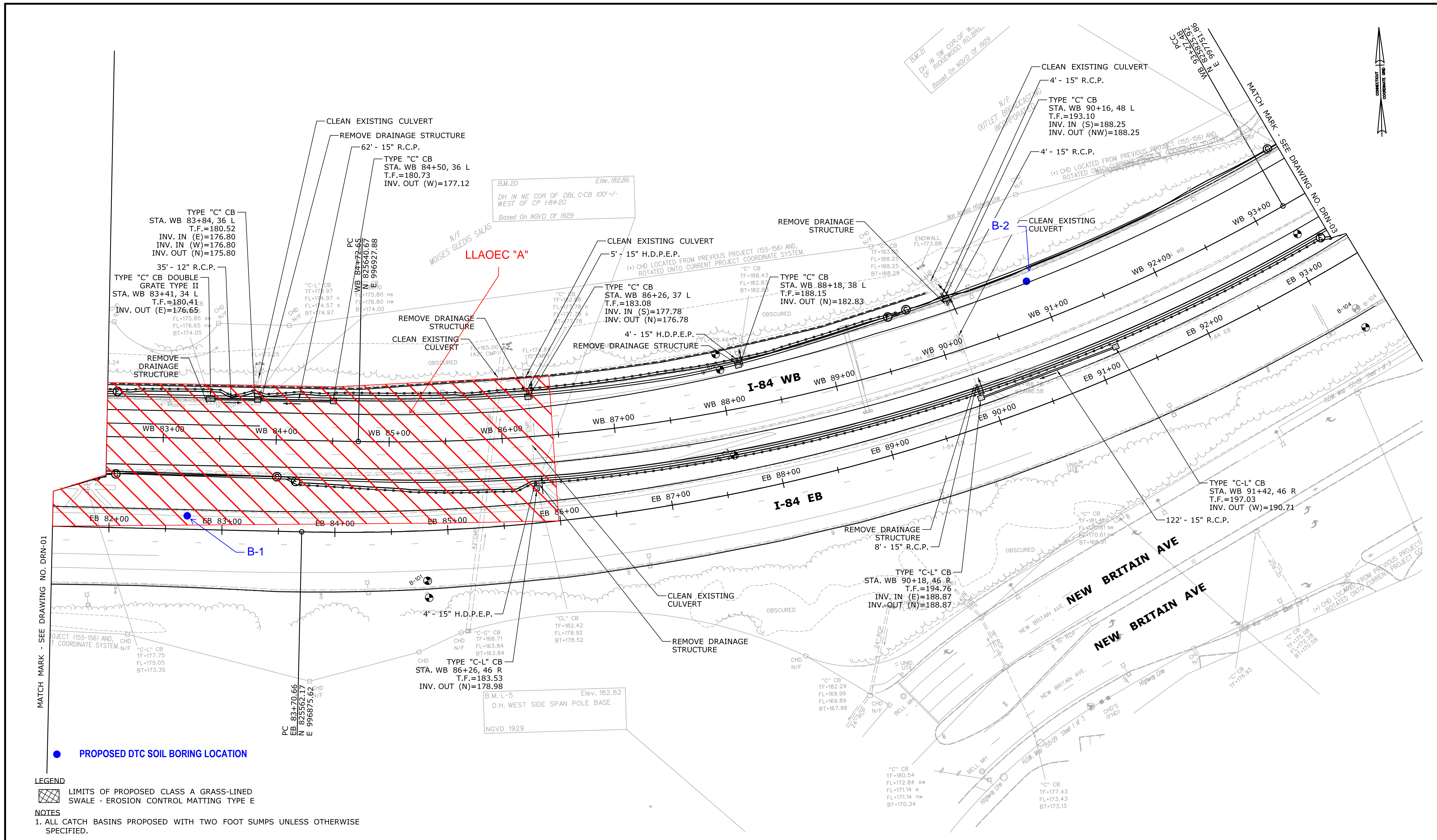
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 ENGINEERING  
 ENVIRONMENTAL  
 LAND SURVEYING  
 Companies

PROJECT TITLE:  
**SAFETY AND OPERATIONAL IMPROVEMENTS ON I-84**

TOWN: **WEST HARTFORD**  
 DRAWING TITLE: **DRAINAGE PLAN**  
 PROJECT NO.: **155-171**  
 DRAWING NO.: **DRN-01**  
 SHEET NO.

Plotted Date: 3/6/2018

Filename: ...VHW\_MSH-155-171-DRN-01.dgn



MATCH MARK - SEE DRAWING NO. DRN-01



**LEGEND**  
 LIMITS OF PROPOSED CLASS A GRASS-LINED SWALE - EROSION CONTROL MATTING TYPE E

- NOTES**
1. ALL CATCH BASINS PROPOSED WITH TWO FOOT SUMPS UNLESS OTHERWISE SPECIFIED.
  2. ALL EXISTING DRAINAGE PIPES WITHIN THE PROJECT LIMITS SHALL BE CLEANED PRIOR TO CONSTRUCTION.

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DESIGNER/DRAFTER:  
CM/JO/SF  
 CHECKED BY:  
MF/AC  
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**STATE OF CONNECTICUT**  
**DEPARTMENT OF TRANSPORTATION**

SIGNATURE/BLOCK:

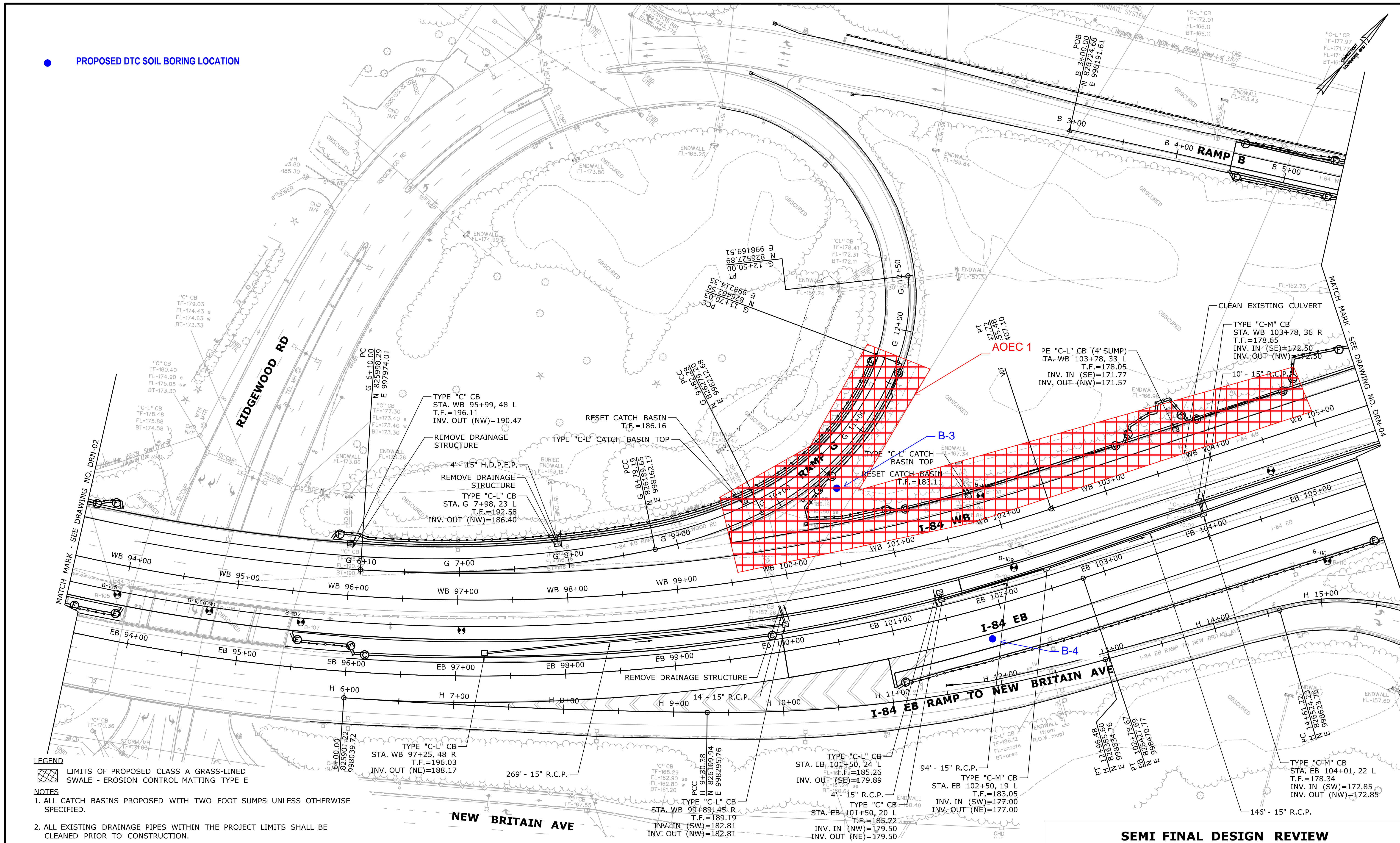
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**SAFETY AND OPERATIONAL IMPROVEMENTS ON I-84**

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 DRAWING NO.: **DRN-02**  
 SHEET NO.:  
 DRAWING TITLE: **DRAINAGE PLAN**

Plotted Date: 3/6/2018

Filename: ...VHW\_MSH-155-171-DRN-02.dgn

● PROPOSED DTC SOIL BORING LOCATION



**LEGEND**  
 LIMITS OF PROPOSED CLASS A GRASS-LINED SWALE - EROSION CONTROL MATTING TYPE E

- NOTES**
1. ALL CATCH BASINS PROPOSED WITH TWO FOOT SUMPS UNLESS OTHERWISE SPECIFIED.
  2. ALL EXISTING DRAINAGE PIPES WITHIN THE PROJECT LIMITS SHALL BE CLEANED PRIOR TO CONSTRUCTION.

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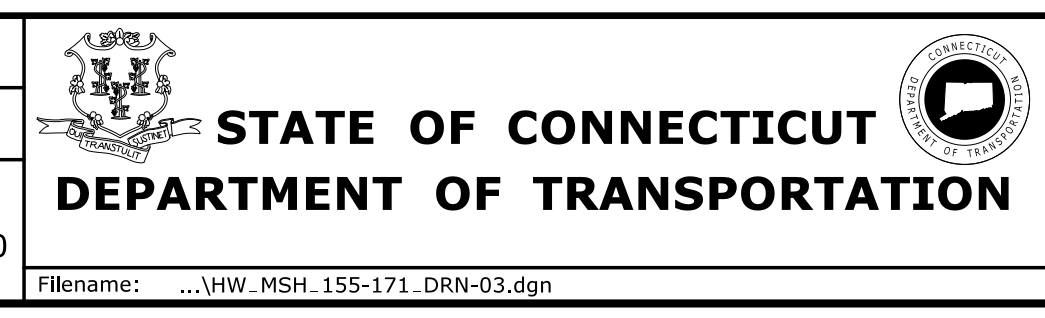
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 3/6/2018

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MF/AC

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SIGNATURE/  
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ENGINEERING  
ENVIRONMENTAL  
LAND SURVEYING

PROJECT TITLE:  
**SAFETY AND OPERATIONAL IMPROVEMENTS ON I-84**

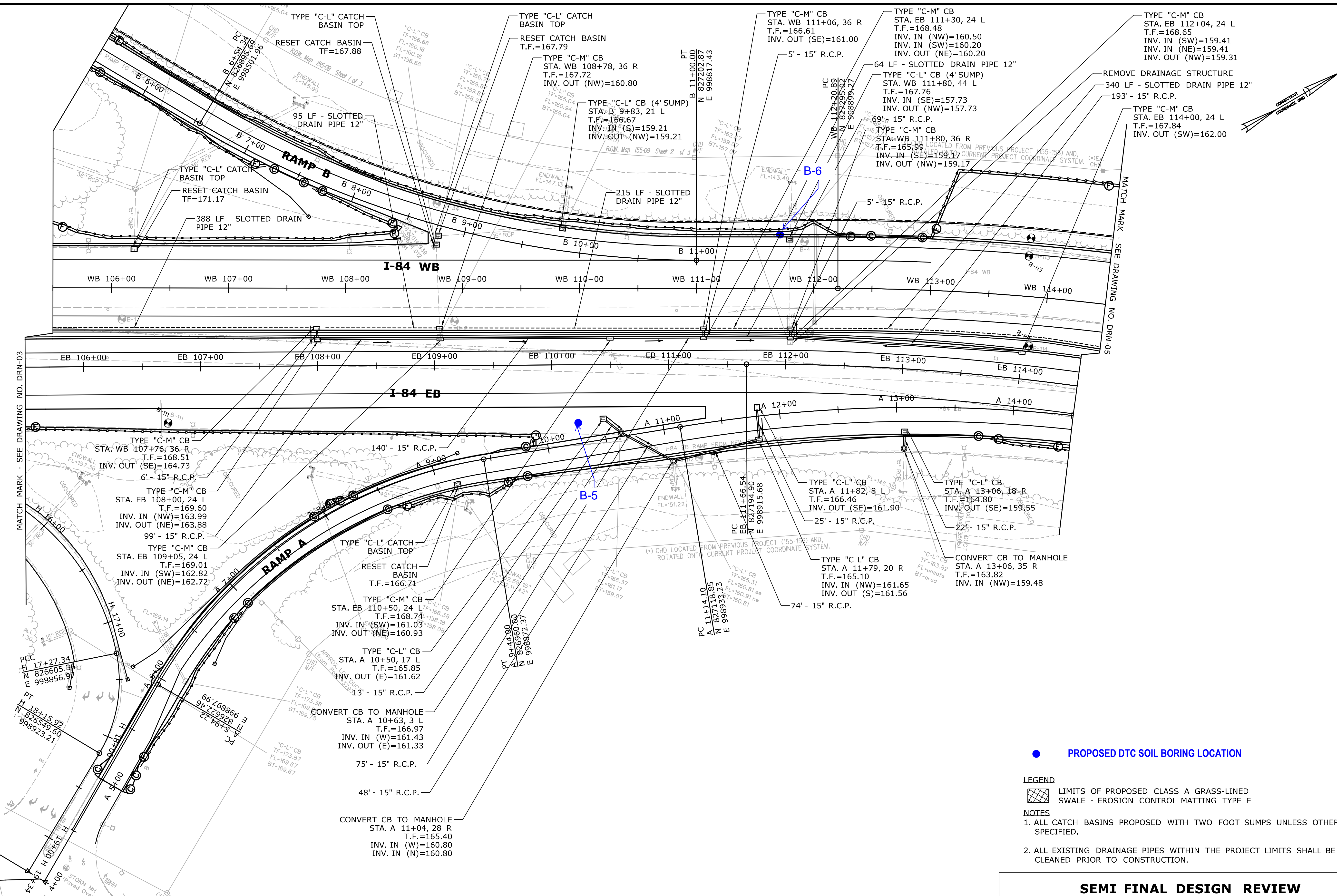
TOWN: **WEST HARTFORD**

DRAWING TITLE:  
**DRAINAGE PLAN**

PROJECT NO.: **155-171**

DRAWING NO.: **DRN-03**

SHEET NO.



● PROPOSED DTC SOIL BORING LOCATION

LEGEND  
 LIMITS OF PROPOSED CLASS A GRASS-LINED SWALE - EROSION CONTROL MATTING TYPE E

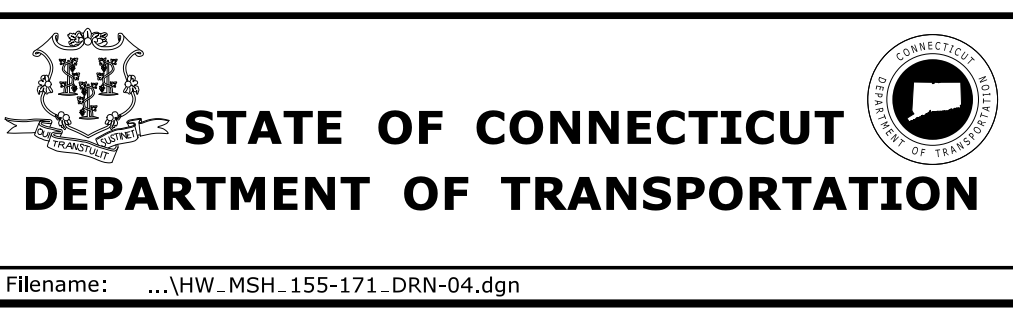
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REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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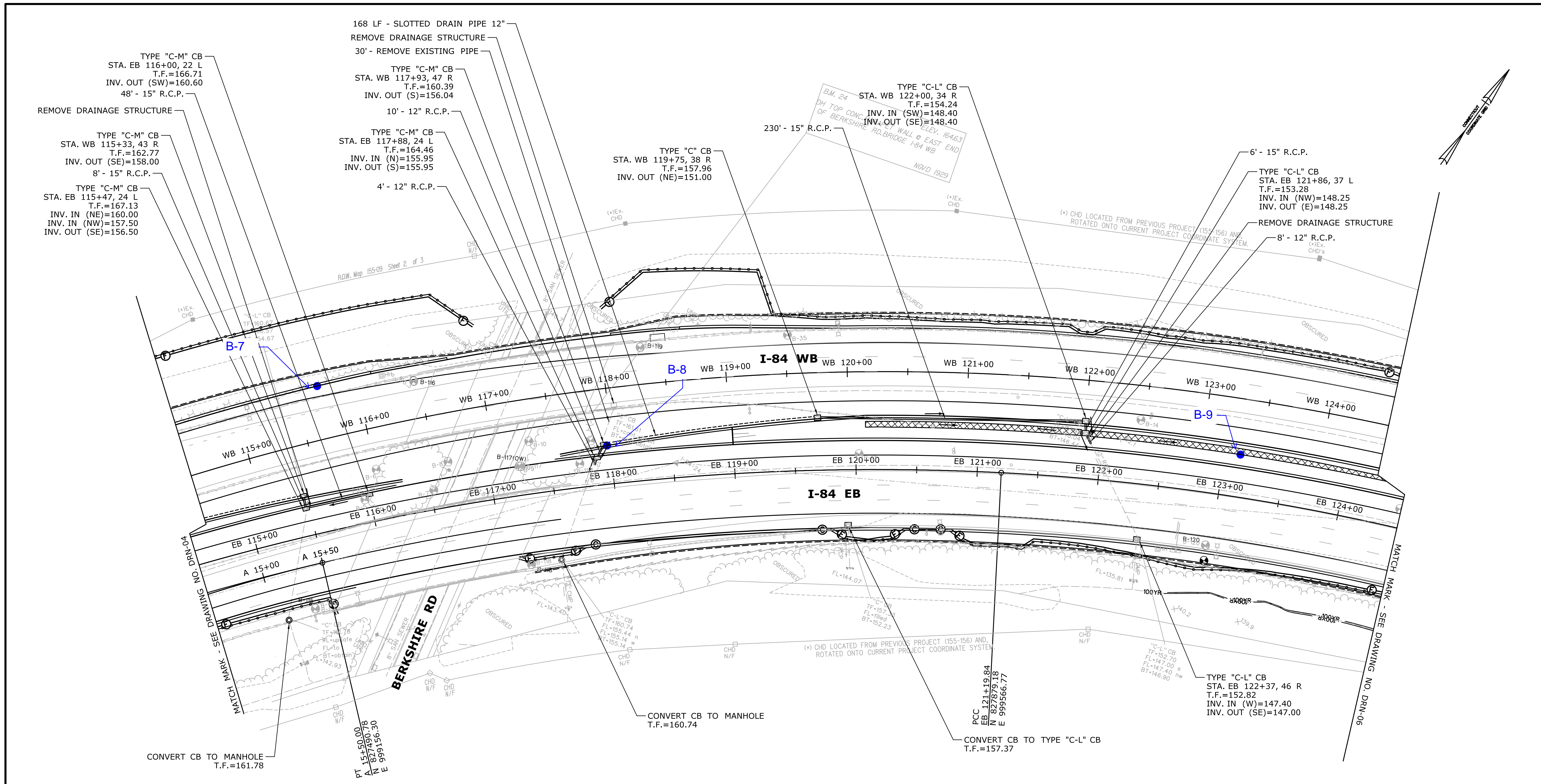
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Companies

PROJECT TITLE:  
**SAFETY AND OPERATIONAL  
IMPROVEMENTS ON I-84**

TOWN:  
**WEST HARTFORD**  
 PROJECT NO.:  
**155-171**  
 DRAWING NO.:  
**DRN-04**  
 SHEET NO.:  
 DRAWING TITLE:  
**DRAINAGE PLAN**

Plotted Date: 3/6/2018

Filename: ...VHW\_MSH-155-171-DRN-04.dgn



● PROPOSED DTC SOIL BORING LOCATION

**LEGEND**  
 LIMITS OF PROPOSED CLASS A GRASS-LINED SWALE - EROSION CONTROL MATTING TYPE E

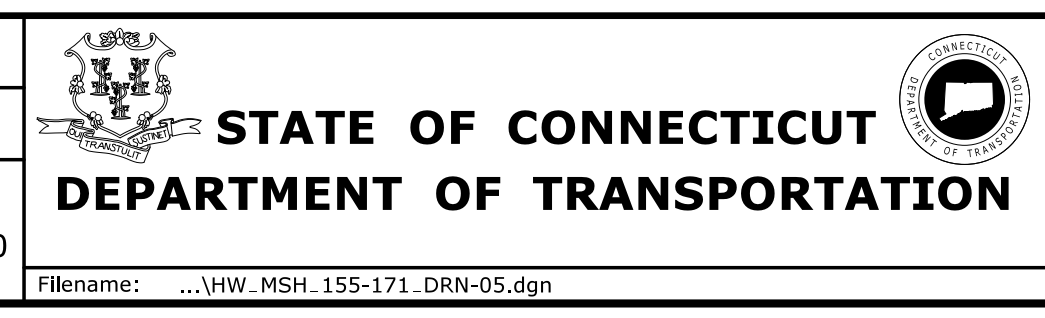
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SIGNATURE/BLOCK:  
 ARCHITECTURE ENGINEERING ENVIRONMENTAL LAND SURVEYING Companies

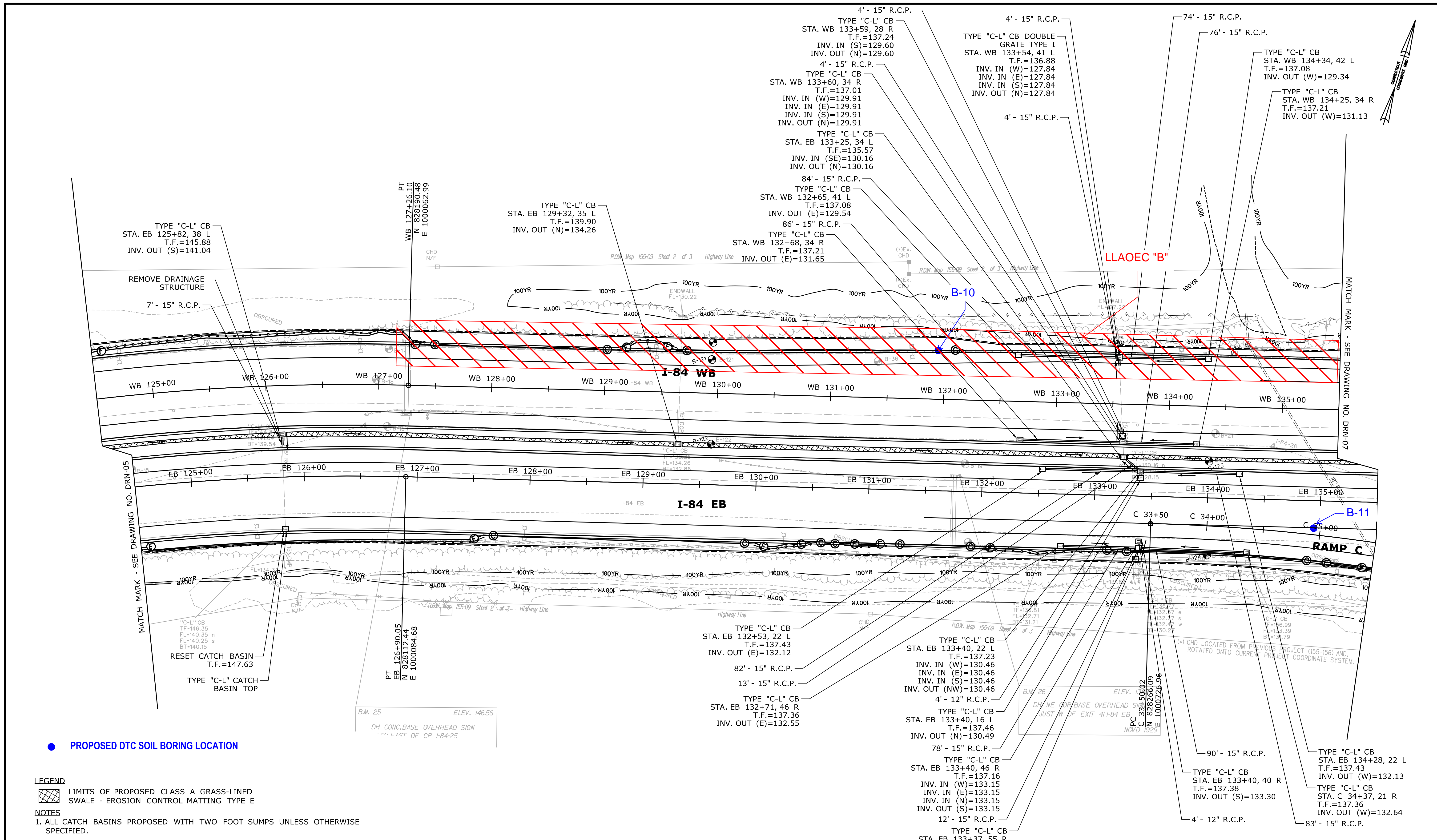
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**SAFETY AND OPERATIONAL IMPROVEMENTS ON I-84**

TOWN: **WEST HARTFORD**  
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 PROJECT NO.: **155-171**  
 DRAWING NO.: **DRN-05**  
 SHEET NO.

Plotted Date: 3/6/2018

Filename: ...VHW\_MSH-155-171\_DRN-05.dgn





● PROPOSED DTC SOIL BORING LOCATION

**LEGEND**  
 LIMITS OF PROPOSED CLASS A GRASS-LINED SWALE - EROSION CONTROL MATTING TYPE E

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REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/6/2018

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STATE OF CONNECTICUT  
 DEPARTMENT OF TRANSPORTATION

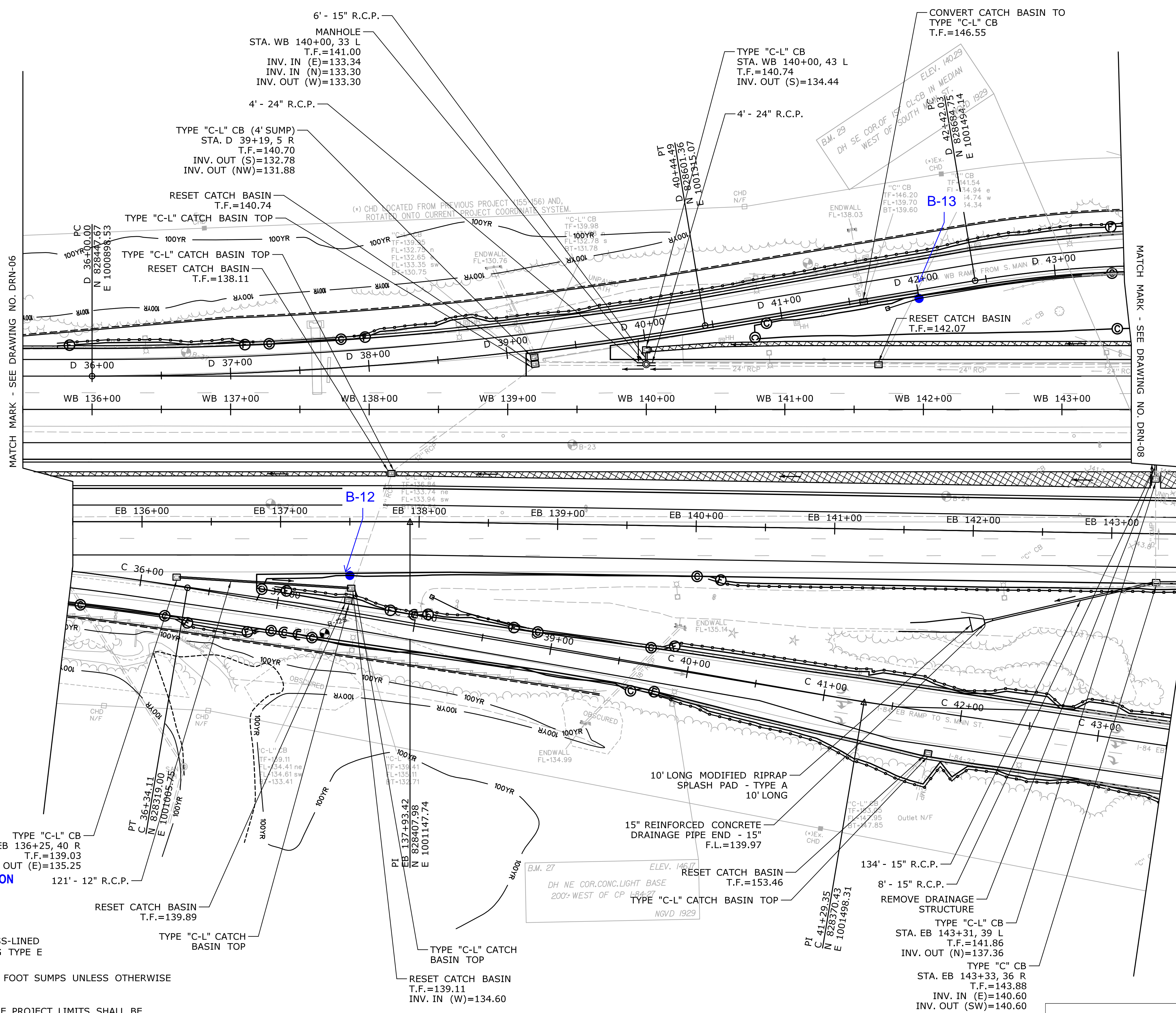
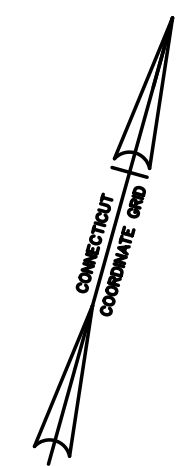
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 ENVIRONMENTAL  
 LAND SURVEYING  
 Companies

PROJECT TITLE:  
**SAFETY AND OPERATIONAL IMPROVEMENTS ON I-84**

TOWN: **WEST HARTFORD**  
 PROJECT NO.: **155-171**  
 DRAWING NO.: **DRN-06**  
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 DRAWING TITLE: **DRAINAGE PLAN**



● PROPOSED DTC SOIL BORING LOCATION

**LEGEND**  
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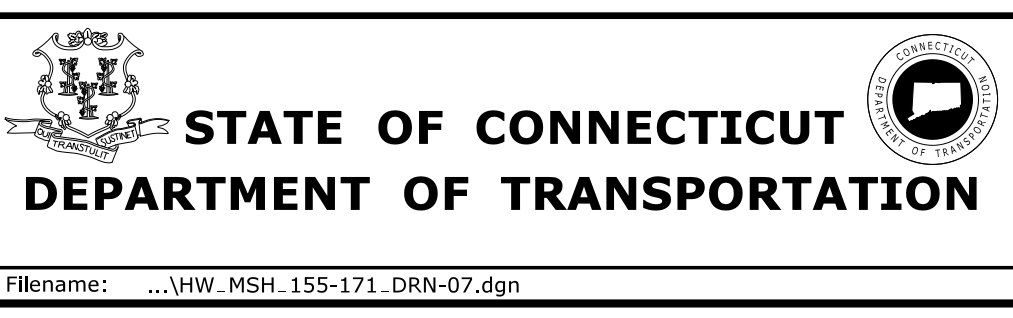
**SEMI FINAL DESIGN REVIEW**

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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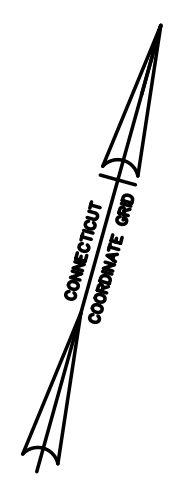
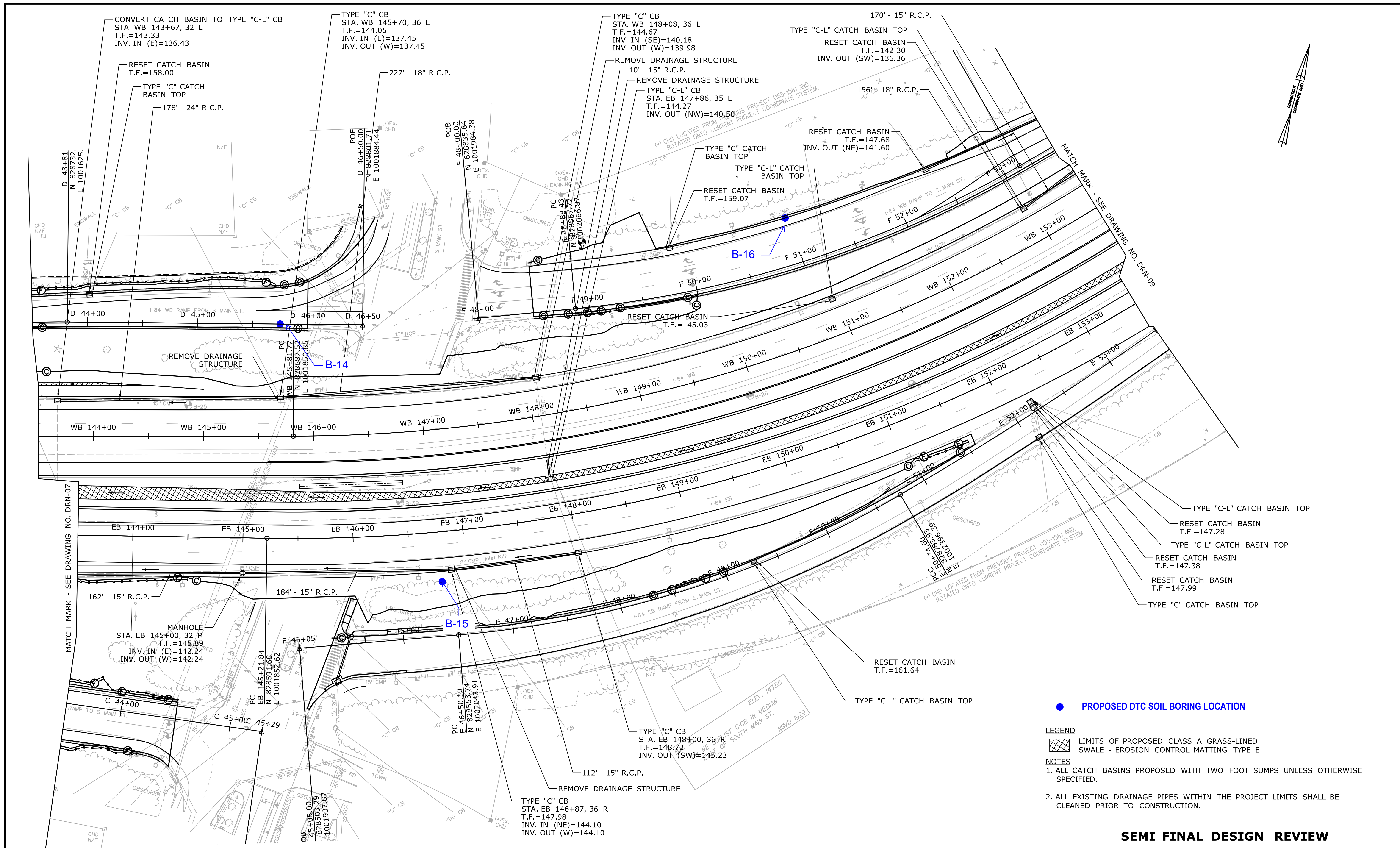
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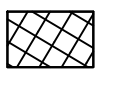
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ENGINEERING  
ENVIRONMENTAL  
LAND SURVEYING  
Companies

PROJECT TITLE:  
**SAFETY AND OPERATIONAL IMPROVEMENTS ON I-84**

TOWN: **WEST HARTFORD**  
PROJECT NO.: **155-171**  
DRAWING NO.: **DRN-07**  
DRAWING TITLE: **DRAINAGE PLAN**  
SHEET NO.



● PROPOSED DTC SOIL BORING LOCATION

LEGEND  
 LIMITS OF PROPOSED CLASS A GRASS-LINED SWALE - EROSION CONTROL MATTING TYPE E

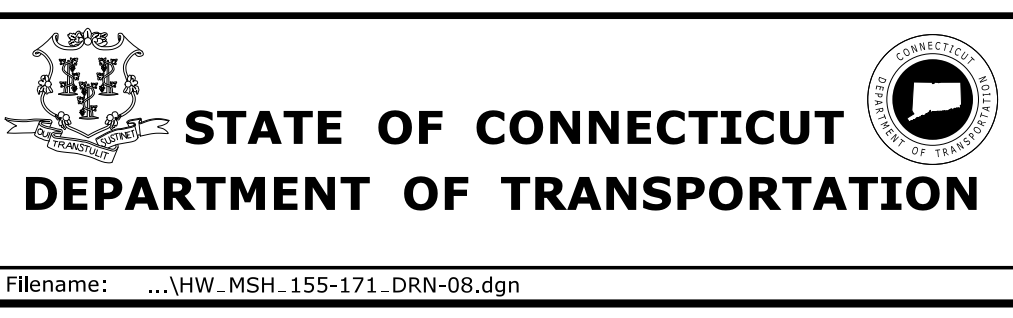
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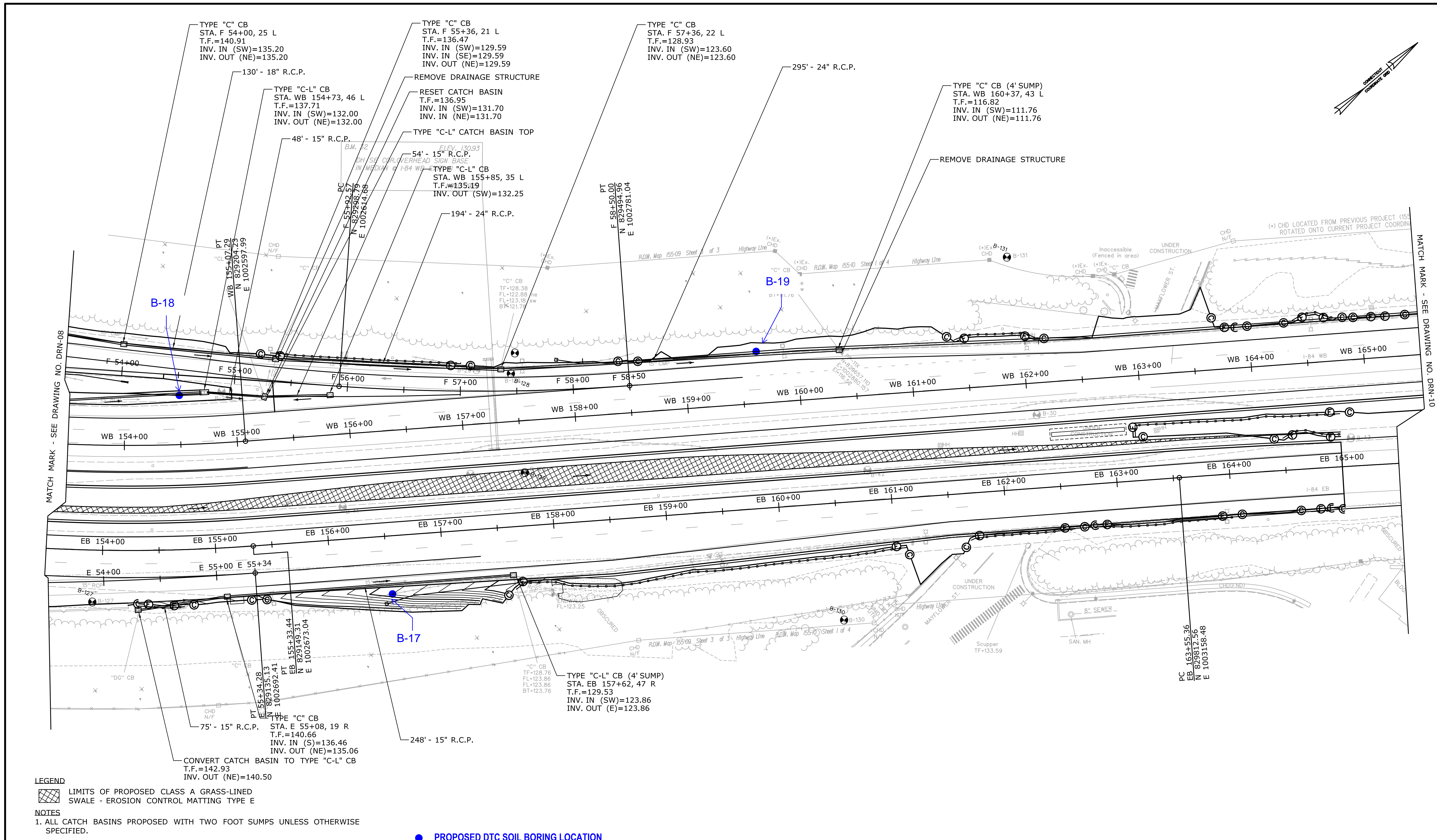
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PROJECT TITLE:  
**SAFETY AND OPERATIONAL IMPROVEMENTS ON I-84**

TOWN: **WEST HARTFORD**  
 PROJECT NO.: **155-171**  
 DRAWING NO.: **DRN-08**  
 SHEET NO.:  
 DRAWING TITLE: **DRAINAGE PLAN**

Plotted Date: 3/6/2018

Filename: ...VHW\_MSH-155-171-DRN-08.dgn



**LEGEND**  
 LIMITS OF PROPOSED CLASS A GRASS-LINED SWALE - EROSION CONTROL MATTING TYPE E

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PROPOSED DTC SOIL BORING LOCATION

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STATE OF CONNECTICUT  
 DEPARTMENT OF TRANSPORTATION

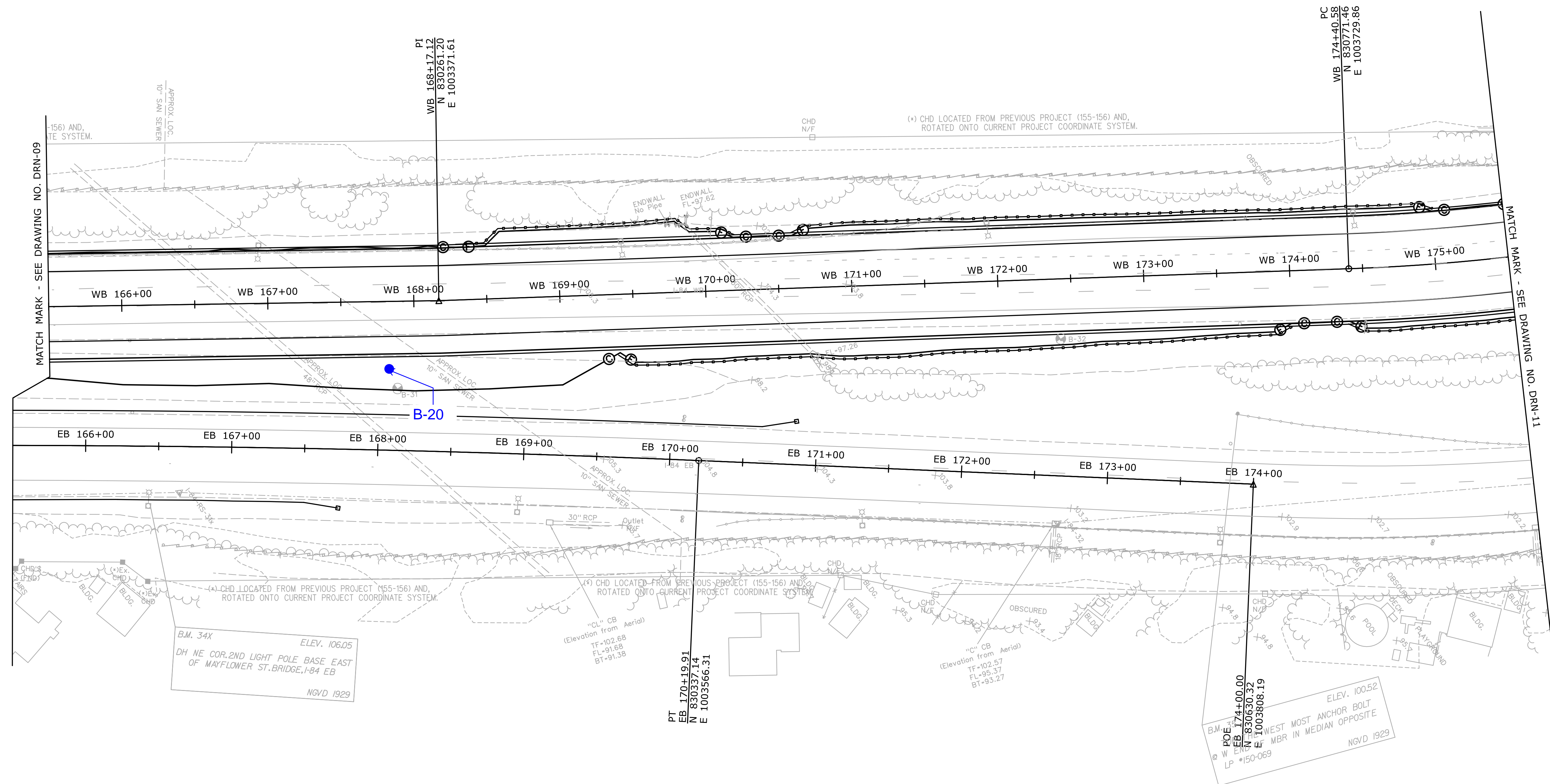
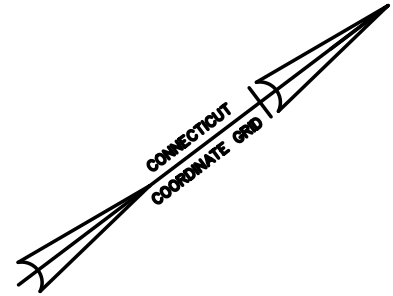
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 ARCHITECTURE  
 ENGINEERING  
 ENVIRONMENTAL  
 LAND SURVEYING  
 Companies

SIGNATURE/BLOCK:  
 PROJECT TITLE:  
**SAFETY AND OPERATIONAL IMPROVEMENTS ON I-84**

TOWN:  
**WEST HARTFORD**  
 DRAWING TITLE:  
**DRAINAGE PLAN**

PROJECT NO.  
**155-171**  
 DRAWING NO.  
**DRN-09**  
 SHEET NO.

**FINAL DESIGN REVIEW**



● PROPOSED DTC SOIL BORING LOCATION

**LEGEND**  
 LIMITS OF PROPOSED CLASS A GRASS-LINED SWALE - EROSION CONTROL MATTING TYPE E

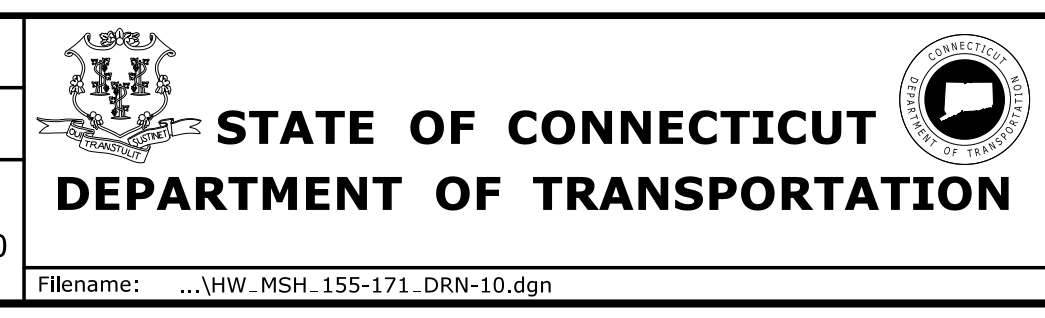
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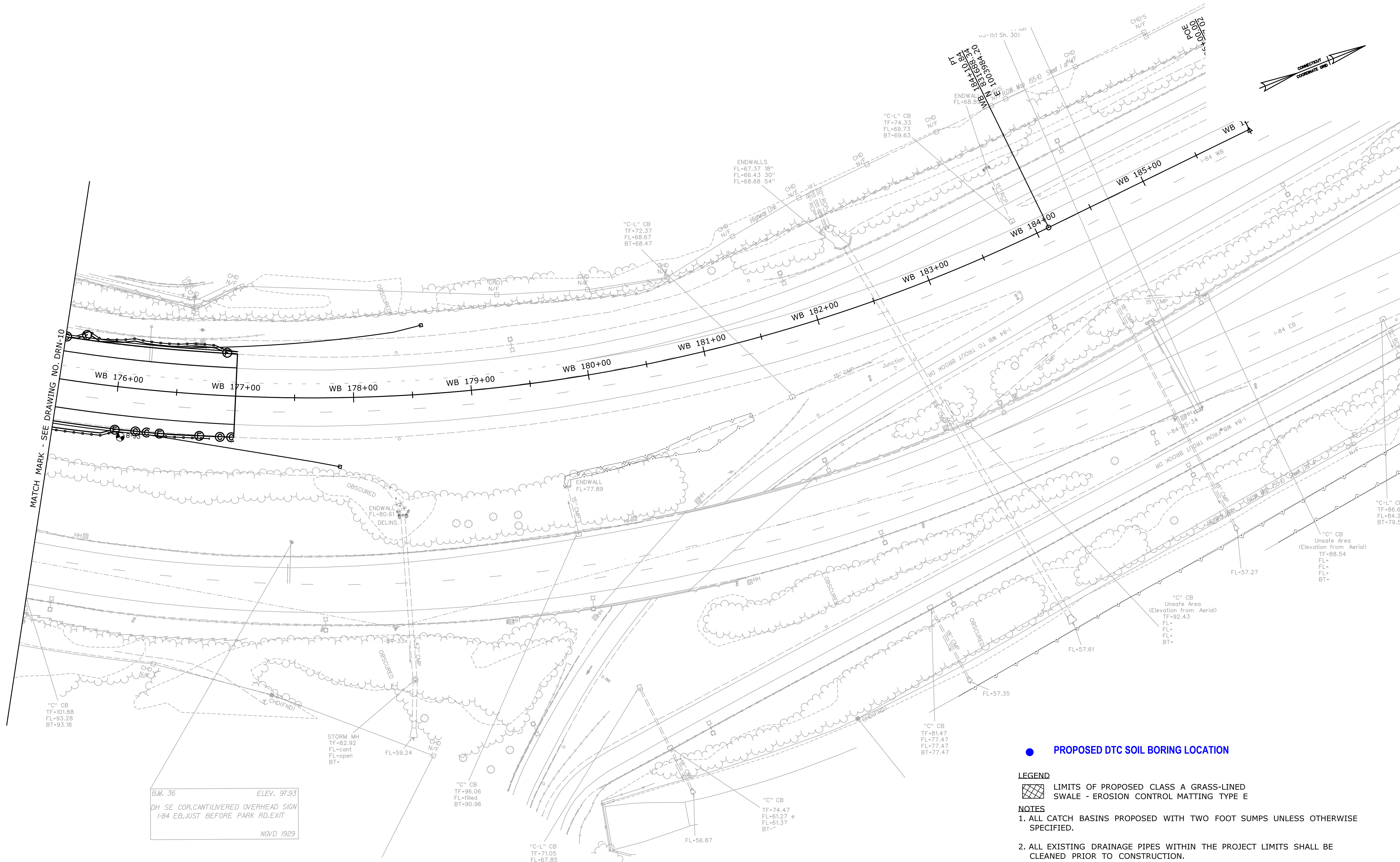


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BLOCK:  
 ARCHITECTURE  
ENGINEERING  
ENVIRONMENTAL  
LAND SURVEYING  
Companies

PROJECT TITLE:  
**SAFETY AND OPERATIONAL  
IMPROVEMENTS ON I-84**

TOWN: <b>WEST HARTFORD</b>	PROJECT NO. <b>155-171</b>
DRAWING TITLE: <b>DRAINAGE PLAN</b>	DRAWING NO. <b>DRN-10</b>
	SHEET NO.

Filename: ...VHW\_MSH-155-171-DRN-10.dgn



MATCH MARK - SEE DRAWING NO. DRN-10

B.M. 36 ELEV. 97.93  
 DH SE COR. CANTILVERED OVERHEAD SIGN  
 I-84 EB, JUST BEFORE PARK RD. EXIT  
 NGVD 1929

● PROPOSED DTC SOIL BORING LOCATION

LEGEND  
 LIMITS OF PROPOSED CLASS A GRASS-LINED SWALE - EROSION CONTROL MATTING TYPE E

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REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 3/6/2018

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 SCALE 1"=40'

**STATE OF CONNECTICUT**  
**DEPARTMENT OF TRANSPORTATION**

Filename: ...VHW\_MSH-155-171\_DRN-11.dgn

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BLOCK:

ARCHITECTURE  
 ENGINEERING  
 ENVIRONMENTAL  
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 Companies

PROJECT TITLE:  
**SAFETY AND OPERATIONAL IMPROVEMENTS ON I-84**

TOWN: <b>WEST HARTFORD</b>	PROJECT NO. <b>155-171</b>
DRAWING TITLE: <b>DRAINAGE PLAN</b>	DRAWING NO. <b>DRN-11</b>
	SHEET NO.

## **TABLES**

**Table 1**  
**Soil Sample Rationale and Anticipated Analyses**  
Task 210 - Subsurface Site Investigation  
I-84 Safety and Operational Improvements  
West Hartford, Connecticut

Sample ID	Location Rationale	Total Depth (ft)*	Proposed Analytical				
			ETPH	PAHs	VOCs	PCBs	RCRA 8**
B-1	Soil located within limits of future excavation activities.	2-4	1	1	1	1	1
B-2		2-4	1	1	1	1	1
B-3		2-4	1	1	1	1	1
B-4		2-4	1	1	1	1	1
B-5		0-2	1	1	1	1	1
B-6		2-4	1	1	1	1	1
B-7		2-4	1	1	1	1	1
B-8		2-4	1	1	1	1	1
B-9		2-4	1	1	1	1	1
B-10		2-4	1	1	1	1	1
B-11		2-4	1	1	1	1	1
B-12		2-4	1	1	1	1	1
B-13		2-4	1	1	1	1	1
B-14		2-4	1	1	1	1	1
B-15		2-4	1	1	1	1	1
B-16		2-4	1	1	1	1	1
B-17		2-4	1	1	1	1	1
B-18		2-4	1	1	1	1	1
B-19		2-4	1	1	1	1	1
B-20		2-4	1	1	1	1	1
Trip Blank					1		
Sub Totals			20	20	21	20	20

\* Final depths will be determined in the field based on soil impacts during drilling activities.  
\*\*SPLP metals maybe added, depending on Total results.



**TABLE 2**  
**Soil Analytical Results**  
 Task 210 SSI  
 Safety and Operational Improvements on I-84  
 West Hartford, Connecticut

Compound	RSR Criteria			B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8	B-9	B-10	B-11	B-12	B-13	B-14	B-15	B-16	B-17	B-18	B-19	B-20
	RDEC	IDEC	GA PMC	2-4'	2-4'	2-4'	2-4'	0-2'	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'	2-4'
				8/27/18	8/28/18	8/28/18	8/27/18	8/27/18	8/28/18	8/28/18	8/28/18	8/28/18	8/28/18	8/28/18	8/28/18	8/27/18	8/27/18	8/28/18	8/28/18	8/27/18	8/28/18	8/27/18	8/27/18
<b>Petroleum Hydrocarbons (mg/Kg)</b>																							
ETPH	500	2,500	500	98	ND<54	ND<270	ND<54	ND<280	ND<56	ND<260	ND<52	ND<52	ND<63	ND<56	ND<54	ND<55	ND<57	ND<54	ND<56	ND<54	ND<55	ND<52	ND<53
<b>Volatile Organic Compounds (mg/Kg)</b>																							
Various	Various	Various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Polynuclear Aromatic Hydrocarbons (mg/Kg)</b>																							
Acenaphthene	1,000	2,500	8.4	ND<0.25	ND<0.25	0.39	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Acenaphthylene	1,000	2,500	8.4	ND<0.25	ND<0.25	0.66	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Anthracene	1,000	2,500	40	ND<0.25	ND<0.25	0.98	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Benzo(a)anthracene	1	7.8	1	ND<0.25	ND<0.25	<b>2.2</b>	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Benzo(a)pyrene	1	1	1	ND<0.25	ND<0.25	<b>3.1</b>	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Benzo(b)fluoranthene	1	7.8	1	ND<0.25	ND<0.25	<b>3</b>	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Benzo(g,h,i)perylene	8.4	78	1	ND<0.25	ND<0.25	<b>1.4</b>	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Benzo(k)fluoranthene	8.4	78	1	ND<0.25	ND<0.25	<b>2.4</b>	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Chrysene	84	780	1	ND<0.25	ND<0.25	<b>2.7</b>	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Dibenz(a,h)anthracene	1	1	1	ND<0.25	ND<0.25	0.43	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Fluoranthene	1,000	2,500	5.6	ND<0.25	ND<0.25	5	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Flourene	1,000	2,500	5.6	ND<0.25	ND<0.25	0.55	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Indeno(1,2,3-cd)pyrene	1	7.8	1	ND<0.25	ND<0.25	<b>1.6</b>	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Phenanthrene	1,000	2,500	4	ND<0.25	ND<0.25	3.4	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	0.57	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
Pyrene	1,000	2,500	4	ND<0.25	ND<0.25	5.8	ND<0.26	ND<0.26	ND<0.27	ND<0.25	ND<0.24	ND<0.25	ND<0.3	ND<0.27	ND<0.25	ND<0.26	ND<0.27	ND<0.25	ND<0.27	ND<0.25	ND<0.26	ND<0.24	ND<0.25
<b>Metals (mg/Kg)</b>																							
Arsenic	10	10	0.05	3.02	2.15	2.66	2.55	1.59	3.66	0.68	5.16	3.14	1.68	3.27	2.16	3.7	3.81	1.75	ND<0.73	1.24	3.25	1.42	0.69
Barium	4,700	140,000	1	77.3	34.7	78.1	70.3	57.5	186	10.9	108	95	191	101	95.1	89.7	280	57.5	64.5	51.2	98.6	41	48.6
Cadmium	34	1,000	0.005	0.36	0.75	0.56	0.43	0.72	0.58	0.56	0.57	0.57	ND<0.44	0.51	0.43	0.49	0.59	0.34	ND<0.36	ND<0.36	0.51	ND<0.33	0.32
Chromium	NE	NE	0.05	17.4	10.7	19.7	17.9	29.6	27.3	7.52	23.2	20.4	17.7	24	20.1	25.1	29.7	14.2	10.3	8.14	23.3	6.14	8.62
Mercury	20	160	0.002	ND<0.03	ND<0.03	ND<0.03	ND<0.03	ND<0.03	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.08	ND<0.03	ND<0.03	ND<0.03	ND<0.03	ND<0.03	ND<0.03	ND<0.03	ND<0.03	ND<0.03	ND<0.03
Lead	400	1,000	0.015	9.77	3.2	16.4	9.7	66.2	11.7	1.75	12	9.57	19.2	10.5	7.77	11.5	12	5.96	2.04	2.48	9.91	1.79	8.16
Selenium	340	10,000	0.05	ND<1.4	ND<1.4	ND<1.4	ND<1.3	ND<1.4	ND<1.6	ND<1.4	ND<1.5	ND<1.3	ND<1.8	ND<1.5	ND<1.4	ND<1.3	ND<1.6	ND<1.3	ND<1.5	ND<1.4	ND<1.5	ND<1.3	ND<1.3
Silver	340	10,000	0.036	ND<0.35	ND<0.36	ND<0.36	ND<0.33	ND<0.35	ND<0.41	ND<0.34	ND<0.37	ND<0.33	ND<0.44	ND<0.38	ND<0.34	ND<0.33	ND<0.41	ND<0.33	ND<0.36	ND<0.36	ND<0.37	ND<0.33	ND<0.32
<b>PCBs (mg/Kg)</b>																							
1	10	0.0005	ND<0.36	ND<0.36	ND<0.36	ND<0.37	ND<0.38	ND<0.37	ND<0.35	ND<0.36	ND<0.35	ND<0.43	ND<0.37	ND<0.36	ND<0.37	ND<0.39	ND<0.35	ND<0.38	ND<0.36	ND<0.37	ND<0.36	ND<0.36	ND<0.36
<b>% Solids</b>																							
NA	NA	NA	91	92	89	90	87	87	93	93	93	77	87	91	89	85	91	87	92	89	93	93	93

Notes:  
 Only parameters detected are shown  
 Bolded and Shaded concentrations exceed the RDEC  
 Bolded and underlined concentrations exceed the GA PMC  
 ND = Not Detected at the indicated detection limit  
 NE = None Established  
 NA = Not Analyzed or Not Applicable  
 RSR = Remediation Standard Regulations  
 RDEC = Residential Direct Exposure Criteria  
 PMC = Pollutant Mobility Criteria

Italicized compounds and criteria are based on Table 10: DEEP Recommended Criteria Values for Common Additional Polluting Substances and Alternative Criteria Requests

ETPH = Extractable Total Petroleum Hydrocarbons

## **APPENDIX A**

### **Soil Boring Logs**



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DELIVERING PROJECTS WITH INNOVATION & INTEGRITY

Project No.: 17-141-06E

P. Manager: Mark Burno

**Subsurface Log**

Sheet  
1 of 1

Date started: 8-27-2018  
Date Completed: 8-28-2018

**BORING No. B-1**

Project: I-84 West Hartford/ New Britian  
Location: I-84 West Hartford/ New Britian, North of Rt. 9 to exit 44  
Drilling Co.: LES  
Geologist: DS

Method of Investigation:  
2" Direct Push Tooling

Drill Rig: Track Mounted Probe  
Weather: Partly Cloudy, 95°F

Depth (ft.)	Sample		Recovery (in.)	Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)				
0-4'	1	0'-2'	40	24" of brown SAND and clay with mix of gravel	0.0	Not encountered
	2	2'-4'		16" of SAA 8" of No Recovery	0.0	

Notes:  
Samples collected with a 4-foot Macro Core  
Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
SAA = Same as Above



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Project No.: 17-141-06E

P. Manager: Mark Burno

**Subsurface Log**

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Date started: 8-27-2018  
Date Completed: 8-28-2018

**BORING No. B-2**

Project: I-84 West Hartford/ New Britian  
Location: I-84 West Hartford/ New Britian, North of Rt. 9 to exit 44  
Drilling Co.: LES  
Geologist: DS

Method of Investigation:  
2" Direct Push Tooling

Drill Rig: Track Mounted Probe  
Weather: Partly Cloudy, 95°F

Depth (ft.)	Sample		Recovery (in.)	Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)				
0'-4'	1	0'-2'	48	24" of Asphalt and gravel (FILL)	0.0	Not encountered
	2	2'-4'		24" of Reddish brown CLAY and silt	0.0	

Notes:  
 Samples collected with a 4-foot Macro Core  
 Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
 SAA = Same as Above



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Project No.: 17-141-06E

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Subsurface Log

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Date started: 8-27-2018  
Date Completed: 8-28-2018

**BORING  
No. B-3**

Project: I-84 West Hartford/ New Britian  
Location: I-84 West Hartford/ New Britian, North of Rt. 9 to exit 44  
Drilling Co.: LES  
Geologist: DS

Method of Investigation:  
2" Direct Push Tooling

Drill Rig: Track Mounted Probe  
Weather: Partly Cloudy, 95°F

Depth (ft.)	Sample		Recovery (in.)	Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)				
0'-4'	1	0'-2'	36	6" Asphalt	0.0	Not encountered
				4" of gravel (FILL) to 14" of brown CLAY and silt mix of rock fragments	0.0	
	2	2'-4'		12" of Dark gray CLAY and silt	0.0	
				12" of No Recovery		

Notes:  
Samples collected with a 4-foot Macro Core  
Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
SAA = Same as Above



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Date started: 8-27-2018  
Date Completed: 8-28-2018

**BORING No. B-4**

Project: I-84 West Hartford/ New Britian  
Location: I-84 West Hartford/ New Britian, North of Rt. 9 to exit 44  
Drilling Co.: LES  
Geologist: DS

Method of Investigation:  
2" Direct Push Tooling

Drill Rig: Track Mounted Probe  
Weather: Partly Cloudy, 95°F

Driller: Cindy  
D. Helper: Wayne

Depth (ft.)	Sample		Recovery (in.)	Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)				
0'-4'	1	0'-2'	32	4" Topsoil	0.0	Wet at 28"
				20" of brown SAND and silt with mix of rock fragments	0.0	
	2	2'-4'		8" of SAA	0.0	
				16" of No Recovery		

Notes:  
 Samples collected with a 4-foot Macro Core  
 Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
 SAA = Same as Above



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*Date started:* 8-27-2018  
*Date Completed:* 8-28-2018

**BORING No. B-5**

*Project:* I-84 West Hartford/ New Britain  
*Location:* I-84 West Hartford/ New Britain, North of Rt. 9 to exit 44

*Method of Investigation:*  
2" Direct Push Tooling

*Drilling Co.:* LES  
*Geologist:* DS  
*Driller:* Cindy  
*D. Helper:* Wayne

*Drill Rig:* Track Mounted Probe  
*Weather:* Partly Cloudy, 95°F

Depth (ft.)	Sample			Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)	Recovery (in.)			
0'-4'	1	0'-2'	10	4" Topsoil	0.0	Not encountered
				4" of Asphalt fill to 2" of brown SAND and silt	0.0	
	2	2'-4'		38" of No Recovery	0.0	

Notes:  
 Samples collected with a 4-foot Macro Core  
 Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
 SAA = Same as Above



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*Date started:* 8-27-2018  
*Date Completed:* 8-28-2018

**BORING No. B-6**

*Project:* I-84 West Hartford/ New Britain  
*Location:* I-84 West Hartford/ New Britain, North of Rt. 9 to exit 44

*Method of Investigation:*  
2" Direct Push Tooling

*Drilling Co.:* LES

*Driller:* Cindy

*Drill Rig:*  
Track Mounted Probe

*Weather:*  
Partly Cloudy,  
95°F

*Geologist:* DS

*D. Helper:* Wayne

Depth (ft.)	Sample			Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)	Recovery (in.)			
0'-4'	1	0'-2'	48	24" of Asphalt and gravel (FILL)	0.0	Not encountered
	2	2'-4'		24" of Reddish brown SAND and clay	0.0	

Notes:

Samples collected with a 4-foot Macro Core  
Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
SAA = Same as Above





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*Date started:* 8-27-2018  
*Date Completed:* 8-28-2018

**BORING No. B-7**

*Project:* I-84 West Hartford/ New Britain  
*Location:* I-84 West Hartford/ New Britain, North of Rt. 9 to exit 44

*Method of Investigation:*  
2" Direct Push Tooling

*Drilling Co.:* LES

*Driller:* Cindy

*Drill Rig:*  
Track Mounted Probe

*Weather:*  
Partly Cloudy,  
95°F

*Geologist:* DS

*D. Helper:* Wayne

Depth (ft.)	Sample			Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)	Recovery (in.)			
0'-4'	1	0'-2'	36	24" of Asphalt and gravel (FILL)	0.0	Not encountered
	2	2'-4'		10" of SAA to 2" of Reddish brown SAND and clay 12" of No Recovery	0.0	

Notes:

Samples collected with a 4-foot Macro Core  
Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
SAA = Same as Above



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*Date started:* 8-27-2018  
*Date Completed:* 8-28-2018

**BORING No. B-8**

*Project:* I-84 West Hartford/ New Britain  
*Location:* I-84 West Hartford/ New Britain, North of Rt. 9 to exit 44

*Method of Investigation:*  
2" Direct Push Tooling

*Drilling Co.:* LES

*Driller:* Cindy

*Drill Rig:*

*Weather:*

*Geologist:* DS

*D. Helper:* Wayne

Track Mounted Probe

Partly Cloudy, 95°F

Depth (ft.)	Sample			Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)	Recovery (in.)			
0'-4'	1	0'-2'	30	4" Topsoil	0.0	Not encountered
				20" of Reddish brown CLAY and silt	0.0	
	2	2'-4'		6" of SAA	0.0	
				18" of No Recovery		

Notes:

Samples collected with a 4-foot Macro Core

Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)

SAA = Same as Above



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<b>Subsurface Log</b>	<b>Sheet</b> 1 of 1	<i>Date started:</i> 8-27-2018 <i>Date Completed:</i> 8-28-2018	<b>BORING No. B-9</b>
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<i>Project:</i> I-84 West Hartford/ New Britain <i>Location:</i> I-84 West Hartford/ New Britain, North of Rt. 9 to exit 44	<i>Method of Investigation:</i> 2" Direct Push Tooling
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<i>Drilling Co.:</i> LES <i>Geologist:</i> DS	<i>Driller:</i> Cindy <i>D. Helper:</i> Wayne	<i>Drill Rig:</i> Track Mounted Probe	<i>Weather:</i> Partly Cloudy, 95°F
--	--	--	---

Depth (ft.)	Sample			Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)	Recovery (in.)			
0'-4'	1	0'-2'	48	4" Topsoil	0.0	Not encountered
				20" of Reddish brown CLAY and silt with mix of rock fragments	0.0	
	2	2'-4'		24" of SAA	0.0	

Notes:  
 Samples collected with a 4-foot Macro Core  
 Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
 SAA = Same as Above



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*Date started:* 8-27-2018  
*Date Completed:* 8-28-2018

**BORING No. B-10**

*Project:* I-84 West Hartford/ New Britain  
*Location:* I-84 West Hartford/ New Britain, North of Rt. 9 to exit 44

*Method of Investigation:*  
2" Direct Push Tooling

*Drilling Co.:* LES

*Driller:* Cindy

*Drill Rig:*  
Track Mounted Probe

*Weather:*  
Partly Cloudy,  
95°F

*Geologist:* DS

*D. Helper:* Wayne

Depth (ft.)	Sample			Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)	Recovery (in.)			
0'-4'	1	0'-2'	36	6" Asphalt	0.0	Not encountered
				10" of Reddish brown SAND with mix of rock fragments, to 8" of Dark gray CLAY and silt (Organic Odor)	0.0	
	2	2'-4'		12" of Dark gray CLAY and silt	0.0	
				12" of No Recovery		

Notes:

Samples collected with a 4-foot Macro Core

Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)

SAA = Same as Above



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*Date started:* 8-27-2018  
*Date Completed:* 8-28-2018

**BORING No. B-11**

*Project:* I-84 West Hartford/ New Britain  
*Location:* I-84 West Hartford/ New Britain, North of Rt. 9 to exit 44

*Method of Investigation:*  
2" Direct Push Tooling

*Drilling Co.:* LES

*Driller:* Cindy

*Drill Rig:*  
Track Mounted Probe

*Weather:*  
Partly Cloudy,  
95°F

*Geologist:* DS

*D. Helper:* Wayne

Depth (ft.)	Sample			Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)	Recovery (in.)			
0'-4'	1	0'-2'	38	4" Topsoil	0.0	Not encountered
				4" of Asphalt fill to 16" brown SAND and clay with mix of large rock fragments	0.0	
	2	2'-4'		14" of brown SAND and clay with mix of large rock fragments	0.0	
				10" of No Recovery		

Notes:

Samples collected with a 4-foot Macro Core

Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)

SAA = Same as Above



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Date started: 8-27-2018  
Date Completed: 8-28-2018

**BORING  
No. B-12**

Project: I-84 West Hartford/ New Britian  
Location: I-84 West Hartford/ New Britian, North of Rt. 9 to exit 44  
Drilling Co.: LES  
Geologist: DS

Method of Investigation:  
2" Direct Push Tooling  
Drill Rig: Track Mounted Probe  
Weather: Partly Cloudy, 95°F

Driller: Cindy  
D. Helper: Wayne

Depth (ft.)	Sample		Recovery (in.)	Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)				
0'-4'	1	0'-2'	35	10" Asphalt	0.0	Not encountered
				14" of brown SAND and silt with mix of rock fragments	0.0	
	2	2'-4'		11" of SAA	0.0	
				13" of No Recovery		

Notes:  
Samples collected with a 4-foot Macro Core  
Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
SAA = Same as Above



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Date started: 8-27-2018

Date Completed: 8-28-2018

**BORING**

**No.**

**B-13**

Project: I-84 West Hartford/ New Britian

Location: I-84 West Hartford/ New Britian, North of Rt. 9 to exit 44

Drilling Co.: LES

Geologist: DS

Driller: Cindy

D. Helper: Wayne

Method of Investigation:

2" Direct Push Tooling

Drill Rig:

Track Mounted  
Probe

Weather:

Partly Cloudy,  
95°F

Depth (ft.)	Sample		Recovery (in.)	Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)				
0'-4'	1	0'-2'	48	8" Asphalt	0.0	Not encountered
				16" of Dark brown / Tan SAND and gravel (FILL)	0.0	
	2	2'-4'		4" of SAA, to 20" of reddish brown SILT and clay	0.0	

Notes:

Samples collected with a 4-foot Macro Core

Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)

SAA = Same as Above



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Date started: 8-27-2018  
Date Completed: 8-28-2018

**BORING  
No. B-14**

Project: I-84 West Hartford/ New Britian  
Location: I-84 West Hartford/ New Britian, North of Rt. 9 to exit 44  
Drilling Co.: LES  
Geologist: DS

Method of Investigation:  
2" Direct Push Tooling  
Drill Rig: Track Mounted Probe  
Weather: Partly Cloudy, 95°F

Driller: Cindy  
D. Helper: Wayne

Depth (ft.)	Sample		Recovery (in.)	Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)				
0'-4'	1	0'-2'	46	12" Asphalt Fill	0.0	Not encountered
				12" of Reddish brown CLAY and silt with mix of rock fragments	0.0	
	2	2'-4'		22" of SAA	0.0	
				2" of No Recovery		

Notes:  
Samples collected with a 4-foot Macro Core  
Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
SAA = Same as Above





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P. Manager: Mark Burno

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Date started: 8-27-2018  
Date Completed: 8-28-2018

**BORING No. B-15**

Project: I-84 West Hartford/ New Britian  
Location: I-84 West Hartford/ New Britian, North of Rt. 9 to exit 44  
Drilling Co.: LES  
Geologist: DS

Method of Investigation:  
2" Direct Push Tooling

Drill Rig: Track Mounted Probe  
Weather: Partly Cloudy, 95°F

Driller: Cindy  
D. Helper: Wayne

Depth (ft.)	Sample		Recovery (in.)	Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)				
0'-4'	1	0'-2'	30	10" Asphalt	0.0	Not encountered
				14" of light brown SAND and clay	0.0	
	2	2'-4'		6" of SAA	0.0	
				18" of No Recovery		

Notes:  
 Samples collected with a 4-foot Macro Core  
 Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
 SAA = Same as Above



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Date started: 8-27-2018  
Date Completed: 8-28-2018

**BORING No. B-16**

Project: I-84 West Hartford/ New Britian  
Location: I-84 West Hartford/ New Britian, North of Rt. 9 to exit 44  
Drilling Co.: LES  
Geologist: DS

Method of Investigation: 2" Direct Push Tooling  
Drill Rig: Track Mounted Probe  
Weather: Partly Cloudy, 95°F

Driller: Cindy  
D. Helper: Wayne

Depth (ft.)	Sample		Recovery (in.)	Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)				
0'-4'	1	0'-2'	30	10" Asphalt	0.0	Not encountered
				10" of Dark brown SAND and gravel (FILL) to 4" of brown sand with mix of rock	0.0	
	2	2'-4'		6" of brown sand with mix of rock	0.0	
				18" of No Recovery		

Notes:  
Samples collected with a 4-foot Macro Core  
Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
SAA = Same as Above



ENGINEER  
CONSULT  
MANAGE

DELIVERING PROJECTS WITH INNOVATION & INTEGRITY

Project No.: 17-141-06E

P. Manager: Mark Burno

Subsurface Log

Sheet  
1 of 1

Date started: 8-27-2018  
Date Completed: 8-28-2018

**BORING  
No. B-17**

Project: I-84 West Hartford/ New Britian  
Location: I-84 West Hartford/ New Britian, North of Rt. 9 to exit 44  
Drilling Co.: LES  
Geologist: DS

Method of Investigation:  
2" Direct Push Tooling  
Drill Rig: Track Mounted Probe  
Weather: Partly Cloudy, 95°F

Driller: Cindy  
D. Helper: Wayne

Depth (ft.)	Sample		Recovery (in.)	Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)				
0'-4'	1	0'-2'	24	12" Asphalt	0.0	Not encountered
				12" of brown SAND and rock fragments	0.0	
	2	2'-4'		24" of No Recovery	0.0	

Notes:  
Samples collected with a 4-foot Macro Core  
Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
SAA = Same as Above



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DELIVERING PROJECTS WITH INNOVATION & INTEGRITY

Project No.: 17-141-06E

P. Manager: Mark Burno

**Subsurface Log**

Sheet

1 of 1

Date started: 8-27-2018

Date Completed: 8-28-2018

**BORING**

**No.**

**B-18**

Project: I-84 West Hartford/ New Britain

Location: I-84 West Hartford/ New Britain, North of Rt. 9 to exit 44

Drilling Co.: LES

Geologist: DS

Method of Investigation:

2" Direct Push Tooling

Drill Rig:

Track Mounted  
Probe

Weather:

Partly Cloudy,  
95°F

Depth (ft.)	Sample		Recovery (in.)	Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)				
0'-4'	1	0'-2'	46	10" Topsoil	0.0	Wet at 40"
				14" of Tan and gray SAND and gravel (FILL)	0.0	
	2	2'-4'		6" of SAA, to 16" of reddish brown SILT and clay	0.0	
				2" of No Recovery		

Notes:  
 Samples collected with a 4-foot Macro Core  
 Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
 SAA = Same as Above



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DELIVERING PROJECTS WITH INNOVATION & INTEGRITY

Project No.: 17-141-06E

P. Manager: Mark Burno

**Subsurface Log**

Sheet  
1 of 1

Date started: 8-27-2018  
Date Completed: 8-28-2018

**BORING No. B-19**

Project: I-84 West Hartford/ New Britian  
Location: I-84 West Hartford/ New Britian, North of Rt. 9 to exit 44  
Drilling Co.: LES  
Geologist: DS

Method of Investigation: 2" Direct Push Tooling  
Drill Rig: Track Mounted Probe  
Weather: Partly Cloudy, 95°F

Driller: Cindy  
D. Helper: Wayne

Depth (ft.)	Sample		Recovery (in.)	Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)				
0'-4'	1	0'-2'	38	10" Asphalt	0.0	Not encountered
				14" of Reddish brown SAND and silt with a mix of rock	0.0	
	2	2'-4'		16" of SAA	0.0	
				14" of No Recovery		

Notes:  
 Samples collected with a 4-foot Macro Core  
 Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
 SAA = Same as Above



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DELIVERING PROJECTS WITH INNOVATION & INTEGRITY

Project No.: 17-141-06E

P. Manager: Mark Burno

Subsurface Log

Sheet  
1 of 1

Date started: 8-27-2018  
Date Completed: 8-28-2018

**BORING No. B-20**

Project: I-84 West Hartford/ New Britian  
Location: I-84 West Hartford/ New Britian, North of Rt. 9 to exit 44  
Drilling Co.: LES  
Geologist: DS

Method of Investigation: 2" Direct Push Tooling  
Drill Rig: Track Mounted Probe  
Weather: Partly Cloudy, 95°F

Driller: Cindy  
D. Helper: Wayne

Depth (ft.)	Sample		Recovery (in.)	Sample Description	PID Readings (ppm)	Groundwater Observations
	No.	Depth (ft.)				
0'-4'	1	0'-2'	30	10" Topsoil	0.0	Not encountered
				14" of Reddish brown SAND and silt	0.0	
	2	2'-4'		6" of SAA	0.0	
				18" of No Recovery		

Notes:  
Samples collected with a 4-foot Macro Core  
Soil component percentages visually estimated (1-10% = trace, 10-20% = little, 20-35% = some, 35-50% = and)  
SAA = Same as Above

## **APPENDIX B**

### **Soil Analytical Laboratory Reports**



Wednesday, September 05, 2018

Attn: Mr. Ethan Stewart  
Diversified Tech. Consultants  
2321 Whitney Avenue 3rd floor  
Hamden Center II  
Hamden CT 06518

Project ID: DTC #17-141-06E  
Sample ID#s: CB21541 - CB21560

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

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

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

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

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

Sincerely yours,

A handwritten signature in black ink that reads "Phyllis Shiller". The signature is written in a cursive style.

Phyllis/Shiller  
Laboratory Director

NELAC - #NY11301  
CT Lab Registration #PH-0618  
MA Lab Registration #M-CT007  
ME Lab Registration #CT-007  
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003  
NY Lab Registration #11301  
PA Lab Registration #68-03530  
RI Lab Registration #63  
UT Lab Registration #CT00007  
VT Lab Registration #VT11301





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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/27/18  
 08/29/18

Time

8:00  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21541

Project ID: DTC #17-141-06E  
 Client ID: B1 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.35	0.35	mg/Kg	1	08/30/18	EK	SW6010C
Arsenic	3.02	0.70	mg/Kg	1	08/30/18	EK	SW6010C
Barium	77.3	0.35	mg/Kg	1	08/30/18	EK	SW6010C
Cadmium	0.36	0.35	mg/Kg	1	08/30/18	EK	SW6010C
Chromium	17.4	0.35	mg/Kg	1	08/30/18	EK	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	9.77	0.35	mg/Kg	1	08/30/18	EK	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	91		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	T/AG	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	98	54	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	76		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1221	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1232	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1242	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1248	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1254	ND	360	ug/Kg	10	09/01/18	AW	SW8082A

Client ID: B1 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1262	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1268	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	81		%	10	09/01/18	AW	30 - 150 %
% TCMX	84		%	10	09/01/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	23	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	230	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B1 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	2.8	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.2	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	9.2	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.2	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.2	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	9.2	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	102		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	95		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	88		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	102		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Acenaphthene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Anthracene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(b)fluoranthene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Chrysene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Fluoranthene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Fluorene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Phenanthrene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Pyrene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	67		%	1	08/30/18	HM	30 - 130 %
% Nitrobenzene-d5	62		%	1	08/30/18	HM	30 - 130 %
% Terphenyl-d14	59		%	1	08/30/18	HM	30 - 130 %
Field Extraction	Completed				08/27/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

**Volatle Comment:**

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

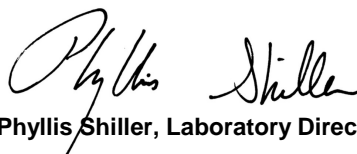
**TPH Comment:**

\*\*Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C14 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

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

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

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



**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/28/18  
 08/29/18

Time

8:20  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21542

Project ID: DTC #17-141-06E  
 Client ID: B2 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	2.15	0.72	mg/Kg	1	08/30/18	TH	SW6010C
Barium	34.7	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.75	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	10.7	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	3.20	0.36	mg/Kg	1	08/30/18	EK	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	92		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	54	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	77		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1221	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1232	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1242	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1248	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1254	ND	360	ug/Kg	10	09/01/18	AW	SW8082A

Client ID: B2 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1262	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1268	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	89		%	10	09/01/18	AW	30 - 150 %
% TCMX	95		%	10	09/01/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	33	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	33	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	330	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B2 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	40	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	13	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	13	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	13	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	6.6	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	95		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	96		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	100		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	90		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Acenaphthene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Anthracene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(b)fluoranthene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Chrysene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Fluoranthene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Fluorene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Phenanthrene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
Pyrene	ND	250	ug/Kg	1	08/30/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	68		%	1	08/30/18	HM	30 - 130 %
% Nitrobenzene-d5	63		%	1	08/30/18	HM	30 - 130 %
% Terphenyl-d14	62		%	1	08/30/18	HM	30 - 130 %
Field Extraction	Completed				08/28/18		SW5035A

B\* = Present in blank, a bias is possible.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**


**Volatile Comment:**

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

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

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

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**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**





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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/28/18  
 08/29/18

Time

8:40  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21543

Project ID: DTC #17-141-06E  
 Client ID: B3 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	2.66	0.71	mg/Kg	1	08/30/18	TH	SW6010C
Barium	78.1	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.56	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	19.7	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	16.4	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	89		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	270	mg/Kg	5	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	5	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	80		%	5	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1221	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1232	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1242	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1248	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1254	ND	360	ug/Kg	10	09/01/18	AW	SW8082A

Client ID: B3 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1262	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1268	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	83		%	10	09/01/18	AW	30 - 150 %
% TCMX	83		%	10	09/01/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	35	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	35	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	350	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B3 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	4.1	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	41	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	14	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	14	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	14	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	14	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	14	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	6.9	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	99		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	98		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	88		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	101		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Acenaphthene	390	260	ug/Kg	1	08/30/18	HM	SW8270D
Acenaphthylene	660	260	ug/Kg	1	08/30/18	HM	SW8270D
Anthracene	980	260	ug/Kg	1	08/30/18	HM	SW8270D
Benz(a)anthracene	2200	260	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(a)pyrene	3100	260	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(b)fluoranthene	3000	260	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(ghi)perylene	1400	260	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(k)fluoranthene	2400	260	ug/Kg	1	08/30/18	HM	SW8270D
Chrysene	2700	260	ug/Kg	1	08/30/18	HM	SW8270D
Dibenz(a,h)anthracene	430	260	ug/Kg	1	08/30/18	HM	SW8270D
Fluoranthene	5000	260	ug/Kg	1	08/30/18	HM	SW8270D
Fluorene	550	260	ug/Kg	1	08/30/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	1600	260	ug/Kg	1	08/30/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Phenanthrene	3400	260	ug/Kg	1	08/30/18	HM	SW8270D
Pyrene	5800	260	ug/Kg	1	08/30/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	66		%	1	08/30/18	HM	30 - 130 %
% Nitrobenzene-d5	60		%	1	08/30/18	HM	30 - 130 %
% Terphenyl-d14	64		%	1	08/30/18	HM	30 - 130 %
Field Extraction	Completed				08/28/18		SW5035A

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**


Volatile Comment:

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

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

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

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**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/27/18  
 08/29/18

Time

9:00  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21544

Project ID: DTC #17-141-06E  
 Client ID: B4 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	2.55	0.66	mg/Kg	1	08/30/18	TH	SW6010C
Barium	70.3	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.43	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	17.9	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	9.70	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Selenium	< 1.3	1.3	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	90		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	54	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	81		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1221	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1232	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1242	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1248	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1254	ND	370	ug/Kg	10	09/01/18	AW	SW8082A

Client ID: B4 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1262	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1268	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	81		%	10	09/01/18	AW	30 - 150 %
% TCMX	79		%	10	09/01/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	20	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	20	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	200	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B4 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	2.4	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	24	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.0	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	8.0	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.0	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.0	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	8.0	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	4.0	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	94		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	98		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	107		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	86		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Acenaphthene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Acenaphthylene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Anthracene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Benz(a)anthracene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(a)pyrene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(b)fluoranthene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(ghi)perylene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(k)fluoranthene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Chrysene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Fluoranthene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Fluorene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Phenanthrene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Pyrene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	57		%	1	08/30/18	HM	30 - 130 %
% Nitrobenzene-d5	48		%	1	08/30/18	HM	30 - 130 %
% Terphenyl-d14	54		%	1	08/30/18	HM	30 - 130 %
Field Extraction	Completed				08/27/18		SW5035A

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

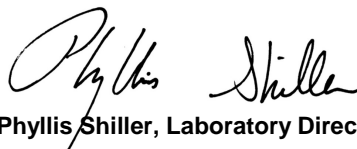
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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

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

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



**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**





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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/27/18  
 08/29/18

Time

9:20  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21545

Project ID: DTC #17-141-06E  
 Client ID: B5 0-2 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.35	0.35	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	1.59	0.71	mg/Kg	1	08/30/18	TH	SW6010C
Barium	57.5	0.35	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.72	0.35	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	29.6	0.35	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	66.2	0.35	mg/Kg	1	08/30/18	TH	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	87		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	280	mg/Kg	5	09/04/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	5	09/04/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	80		%	5	09/04/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	380	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1221	ND	380	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1232	ND	380	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1242	ND	380	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1248	ND	380	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1254	ND	380	ug/Kg	10	09/01/18	AW	SW8082A

Client ID: B5 0-2 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	380	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1262	ND	380	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1268	ND	380	ug/Kg	10	09/01/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	71		%	10	09/01/18	AW	30 - 150 %
% TCMX	75		%	10	09/01/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	7.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	39	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	39	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	390	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	47	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	16	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	16	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	16	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	16	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	16	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	7.8	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	96		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	83		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	112		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	86		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Acenaphthene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Acenaphthylene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Anthracene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Benz(a)anthracene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(a)pyrene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(b)fluoranthene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(ghi)perylene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(k)fluoranthene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Chrysene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Fluoranthene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Fluorene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Phenanthrene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
Pyrene	ND	260	ug/Kg	1	08/30/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	56		%	1	08/30/18	HM	30 - 130 %
% Nitrobenzene-d5	60		%	1	08/30/18	HM	30 - 130 %
% Terphenyl-d14	55		%	1	08/30/18	HM	30 - 130 %
Field Extraction	Completed				08/27/18		SW5035A

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

**Volatile Comment:**

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

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

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

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**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/28/18  
 08/29/18

Time

9:40  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21546

Project ID: DTC #17-141-06E  
 Client ID: B6 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.41	0.41	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	3.66	0.82	mg/Kg	1	08/30/18	TH	SW6010C
Barium	186	0.41	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.58	0.41	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	27.3	0.41	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	11.7	0.41	mg/Kg	1	08/30/18	TH	SW6010C
Selenium	< 1.6	1.6	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	87		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	56	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	79		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1221	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1232	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1242	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1248	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1254	ND	370	ug/Kg	10	09/01/18	AW	SW8082A

Client ID: B6 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1262	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1268	ND	370	ug/Kg	10	09/01/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	86		%	10	09/01/18	AW	30 - 150 %
% TCMX	89		%	10	09/01/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	24	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	24	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	240	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B6 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	2.8	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.4	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	9.4	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.4	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.4	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	9.4	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	98		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	97		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	101		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	89		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	60		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	55		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	56		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/28/18		SW5035A

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

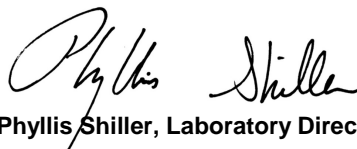
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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

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

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**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**





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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/28/18  
 08/29/18

Time

10:00  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21547

Project ID: DTC #17-141-06E  
 Client ID: B7 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	0.68	0.68	mg/Kg	1	08/30/18	TH	SW6010C
Barium	10.9	0.34	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.56	0.34	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	7.52	0.34	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	1.75	0.34	mg/Kg	1	08/30/18	EK	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	93		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	260	mg/Kg	5	09/01/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	5	09/01/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	56		%	5	09/01/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	350	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1221	ND	350	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1232	ND	350	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1242	ND	350	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1248	ND	350	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1254	ND	350	ug/Kg	10	09/01/18	AW	SW8082A

Client ID: B7 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	350	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1262	ND	350	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1268	ND	350	ug/Kg	10	09/01/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	83		%	10	09/01/18	AW	30 - 150 %
% TCMX	89		%	10	09/01/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	31	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	31	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	310	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B7 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	3.7	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	37	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	12	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	12	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	6.2	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	91		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	83		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	121		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	78		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	56		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	59		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	58		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/28/18		SW5035A

B\* = Present in blank, a bias is possible.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**


Volatile Comment:

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

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

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

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**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/28/18  
 08/29/18

Time

10:20  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21548

Project ID: DTC #17-141-06E  
 Client ID: B8 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	5.16	0.74	mg/Kg	1	08/30/18	TH	SW6010C
Barium	108	0.37	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.57	0.37	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	23.2	0.37	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	12.0	0.37	mg/Kg	1	08/30/18	TH	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	08/30/18	CPP	SW6010C
Percent Solid	93		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	52	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	74		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1221	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1232	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1242	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1248	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1254	ND	360	ug/Kg	10	09/01/18	AW	SW8082A

Client ID: B8 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1262	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
PCB-1268	ND	360	ug/Kg	10	09/01/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	82		%	10	09/01/18	AW	30 - 150 %
% TCMX	88		%	10	09/01/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	24	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	24	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	240	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B8 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	2.9	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	29	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.7	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	9.7	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.7	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.7	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	9.7	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	97		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	95		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	110		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	89		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	240	ug/Kg	1	08/31/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	64		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	62		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	64		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/28/18		SW5035A

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

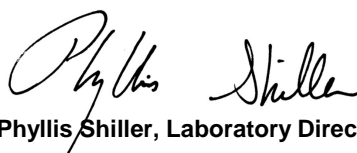
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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

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

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**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**





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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date                      Time  
 08/28/18                      10:40  
 08/29/18                      15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21549

Project ID: DTC #17-141-06E  
 Client ID: B9 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	3.14	0.66	mg/Kg	1	08/30/18	TH	SW6010C
Barium	95.0	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.57	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	20.4	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	9.57	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Selenium	< 1.3	1.3	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	93		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	52	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	80		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1221	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1232	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1242	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1248	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1254	ND	350	ug/Kg	10	08/31/18	AW	SW8082A

Client ID: B9 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1262	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1268	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	77		%	10	08/31/18	AW	30 - 150 %
% TCMX	81		%	10	08/31/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	23	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	230	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B9 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	2.8	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.4	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	9.4	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.4	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.4	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	9.4	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	99		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	96		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	109		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	89		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	63		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	59		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	63		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/28/18		SW5035A

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

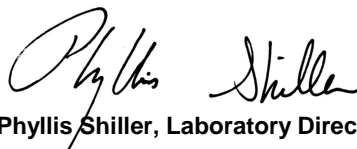
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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

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

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**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date                      Time  
 08/28/18                      11:00  
 08/29/18                      15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21550

Project ID: DTC #17-141-06E  
 Client ID: B10 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.44	0.44	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	1.68	0.89	mg/Kg	1	08/30/18	TH	SW6010C
Barium	191	0.44	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	< 0.44	0.44	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	17.7	0.44	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	0.08	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	19.2	0.44	mg/Kg	1	08/30/18	TH	SW6010C
Selenium	< 1.8	1.8	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	77		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	63	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	78		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	430	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1221	ND	430	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1232	ND	430	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1242	ND	430	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1248	ND	430	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1254	ND	430	ug/Kg	10	09/04/18	AW	SW8082A

Client ID: B10 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	430	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1262	ND	430	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1268	ND	430	ug/Kg	10	09/04/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	90		%	10	09/04/18	AW	30 - 150 %
% TCMX	97		%	10	09/04/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	31	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	31	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	310	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B10 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	3.8	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	38	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	13	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	13	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	13	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	6.3	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	98		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	97		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	90		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	102		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	570	300	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	300	ug/Kg	1	08/31/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	57		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	51		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	61		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/28/18		SW5035A

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**


**Volatile Comment:**

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

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

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

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



**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**





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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/27/18  
 08/29/18

Time

11:20  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21551

Project ID: DTC #17-141-06E  
 Client ID: B11 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.38	0.38	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	3.27	0.76	mg/Kg	1	08/30/18	TH	SW6010C
Barium	101	0.38	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.51	0.38	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	24.0	0.38	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	10.5	0.38	mg/Kg	1	08/30/18	TH	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	87		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	56	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	68		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	370	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1221	ND	370	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1232	ND	370	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1242	ND	370	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1248	ND	370	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1254	ND	370	ug/Kg	10	09/04/18	AW	SW8082A

Client ID: B11 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	370	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1262	ND	370	ug/Kg	10	09/04/18	AW	SW8082A
PCB-1268	ND	370	ug/Kg	10	09/04/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	90		%	10	09/04/18	AW	30 - 150 %
% TCMX	94		%	10	09/04/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	25	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	250	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	3.0	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	30	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	96		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	92		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	104		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	88		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
<b>QA/QC Surrogates</b>							
% 2-Fluorobiphenyl	36		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	31		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	28		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/27/18		SW5035A

3

3 = This parameter exceeds laboratory specified limits.

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

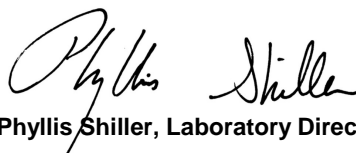
Semi-Volatile Comment:

Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

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

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

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



**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date                      Time  
 08/27/18                      11:40  
 08/29/18                      15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21552

Project ID: DTC #17-141-06E  
 Client ID: B12 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	2.16	0.68	mg/Kg	1	08/30/18	TH	SW6010C
Barium	95.1	0.34	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.43	0.34	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	20.1	0.34	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	7.77	0.34	mg/Kg	1	08/30/18	TH	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	91		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	54	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	67		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1221	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1232	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1242	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1248	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1254	ND	360	ug/Kg	10	08/31/18	AW	SW8082A

Client ID: B12 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1262	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1268	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	87		%	10	08/31/18	AW	30 - 150 %
% TCMX	77		%	10	08/31/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	23	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	230	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B12 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	2.7	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	27	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.0	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	9.0	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.0	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.0	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	9.0	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	4.5	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	96		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	96		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	102		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	90		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	65		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	63		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	61		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/27/18		SW5035A

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

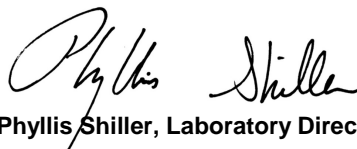
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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

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

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



**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**





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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date                      Time  
 08/28/18                      12:00  
 08/29/18                      15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21553

Project ID: DTC #17-141-06E  
 Client ID: B13 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	3.70	0.66	mg/Kg	1	08/30/18	TH	SW6010C
Barium	89.7	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.49	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	25.1	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	11.5	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Selenium	< 1.3	1.3	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	89		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	55	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	63		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1221	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1232	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1242	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1248	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1254	ND	370	ug/Kg	10	08/31/18	AW	SW8082A

Client ID: B13 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1262	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1268	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	83		%	10	08/31/18	AW	30 - 150 %
% TCMX	81		%	10	08/31/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	21	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	21	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	210	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B13 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	2.6	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	26	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.5	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	8.5	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.5	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.5	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	8.5	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	4.3	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	100		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	96		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	92		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	101		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	55		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	55		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	57		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/28/18		SW5035A

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

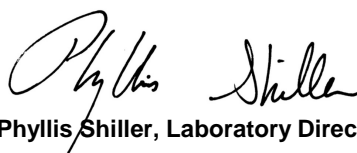
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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

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

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**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/28/18  
 08/29/18

Time

12:20  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21554

Project ID: DTC #17-141-06E  
 Client ID: B14 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.41	0.41	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	3.81	0.82	mg/Kg	1	08/30/18	TH	SW6010C
Barium	280	0.41	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.59	0.41	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	29.7	0.41	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	12.0	0.41	mg/Kg	1	08/30/18	TH	SW6010C
Selenium	< 1.6	1.6	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	85		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	R/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	57	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	66		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	390	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1221	ND	390	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1232	ND	390	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1242	ND	390	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1248	ND	390	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1254	ND	390	ug/Kg	10	08/31/18	AW	SW8082A

Client ID: B14 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	390	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1262	ND	390	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1268	ND	390	ug/Kg	10	08/31/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	80		%	10	08/31/18	AW	30 - 150 %
% TCMX	77		%	10	08/31/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	23	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	230	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B14 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	2.8	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.2	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	9.2	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.2	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.2	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	9.2	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	4.6	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	105		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	91		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	110		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	89		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	59		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	56		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	62		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/28/18		SW5035A

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

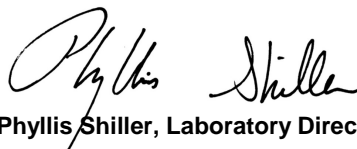
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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

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

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**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**





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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/27/18  
 08/29/18

Time

12:40  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21555

Project ID: DTC #17-141-06E  
 Client ID: B15 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	1.75	0.66	mg/Kg	1	08/30/18	TH	SW6010C
Barium	57.5	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.34	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	14.2	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	5.96	0.33	mg/Kg	1	08/30/18	TH	SW6010C
Selenium	< 1.3	1.3	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	91		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	BA/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/IG	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	54	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	66		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1221	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1232	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1242	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1248	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1254	ND	350	ug/Kg	10	08/31/18	AW	SW8082A

Client ID: B15 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1262	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1268	ND	350	ug/Kg	10	08/31/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	46		%	10	08/31/18	AW	30 - 150 %
% TCMX	39		%	10	08/31/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	27	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	27	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	270	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B15 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	3.2	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	32	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	11	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	11	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	5.4	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	95		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	95		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	98		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	89		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	61		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	61		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	63		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/27/18		SW5035A

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

**Volatile Comment:**

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

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

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

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



**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/28/18  
 08/29/18

Time

13:00  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21556

Project ID: DTC #17-141-06E  
 Client ID: B16 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	< 0.73	0.73	mg/Kg	1	08/30/18	TH	SW6010C
Barium	64.5	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	< 0.36	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	10.3	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	2.04	0.36	mg/Kg	1	08/30/18	EK	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	87		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	BA/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/I	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	56	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	64		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	380	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1221	ND	380	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1232	ND	380	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1242	ND	380	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1248	ND	380	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1254	ND	380	ug/Kg	10	08/31/18	AW	SW8082A

Client ID: B16 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	380	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1262	ND	380	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1268	ND	380	ug/Kg	10	08/31/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	91		%	10	08/31/18	AW	30 - 150 %
% TCMX	76		%	10	08/31/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	27	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	27	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	270	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B16 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	3.2	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	32	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	11	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	11	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	5.3	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	94		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	95		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	104		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	90		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	270	ug/Kg	1	08/31/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	64		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	58		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	63		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/28/18		SW5035A

B\* = Present in blank, a bias is possible.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**


Volatile Comment:

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

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

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

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**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**





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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date                      Time  
 08/27/18                      13:20  
 08/29/18                      15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21557

Project ID: DTC #17-141-06E  
 Client ID: B17 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	1.24	0.72	mg/Kg	1	08/30/18	TH	SW6010C
Barium	51.2	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	< 0.36	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	8.14	0.36	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	2.48	0.36	mg/Kg	1	08/30/18	EK	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	92		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	BA/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/I	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	54	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	66		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1221	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1232	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1242	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1248	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1254	ND	360	ug/Kg	10	08/31/18	AW	SW8082A

Client ID: B17 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1262	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1268	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	83		%	10	08/31/18	AW	30 - 150 %
% TCMX	73		%	10	08/31/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	24	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	24	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	240	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B17 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	2.8	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.5	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	9.5	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.5	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.5	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	9.5	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	4.7	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	97		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	98		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	108		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	90		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	60		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	57		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	61		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/27/18		SW5035A

B\* = Present in blank, a bias is possible.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

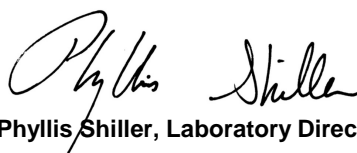
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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

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

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**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/27/18  
 08/29/18

Time

13:40  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21558

Project ID: DTC #17-141-06E  
 Client ID: B18 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	3.25	0.74	mg/Kg	1	08/30/18	TH	SW6010C
Barium	98.6	0.37	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.51	0.37	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	23.3	0.37	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	9.91	0.37	mg/Kg	1	08/30/18	TH	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	08/30/18	EK	SW6010C
Percent Solid	89		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	BA/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/30/18	R//CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/I	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	55	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	80		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1221	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1232	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1242	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1248	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1254	ND	370	ug/Kg	10	08/31/18	AW	SW8082A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1262	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1268	ND	370	ug/Kg	10	08/31/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	88		%	10	08/31/18	AW	30 - 150 %
% TCMX	80		%	10	08/31/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	26	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	260	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B18 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	3.1	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	31	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	5.1	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	108		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	88		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	107		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	89		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	260	ug/Kg	1	08/31/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	64		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	64		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	71		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/27/18		SW5035A

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**


**Volatile Comment:**

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

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

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

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**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**





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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/27/18  
 08/29/18

Time

14:00  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21559

Project ID: DTC #17-141-06E  
 Client ID: B19 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	1	08/31/18	EK	SW6010C
Arsenic	1.42	0.66	mg/Kg	1	08/31/18	EK	SW6010C
Barium	41.0	0.33	mg/Kg	1	08/31/18	EK	SW6010C
Cadmium	< 0.33	0.33	mg/Kg	1	08/31/18	EK	SW6010C
Chromium	6.14	0.33	mg/Kg	1	08/31/18	EK	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	1.79	0.33	mg/Kg	1	08/31/18	EK	SW6010C
Selenium	< 1.3	1.3	mg/Kg	1	08/31/18	CPP	SW6010C
Percent Solid	93		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	BA/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/I	SW7471B
Total Metals Digest	Completed				08/29/18	/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	52	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	76		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1221	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1232	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1242	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1248	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1254	ND	360	ug/Kg	10	08/31/18	AW	SW8082A

Client ID: B19 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1262	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1268	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	76		%	10	08/31/18	AW	30 - 150 %
% TCMX	69		%	10	08/31/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.9	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	24	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	24	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	240	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B19 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	2.9	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	29	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.6	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	9.6	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.6	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.6	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	9.6	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	4.8	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	106		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	89		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	112		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	87		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Acenaphthene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Acenaphthylene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Anthracene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Benz(a)anthracene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(a)pyrene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(b)fluoranthene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(ghi)perylene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Benzo(k)fluoranthene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Chrysene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Fluoranthene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Fluorene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Phenanthrene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
Pyrene	ND	240	ug/Kg	1	08/30/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	57		%	1	08/30/18	HM	30 - 130 %
% Nitrobenzene-d5	54		%	1	08/30/18	HM	30 - 130 %
% Terphenyl-d14	54		%	1	08/30/18	HM	30 - 130 %
Field Extraction	Completed				08/27/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

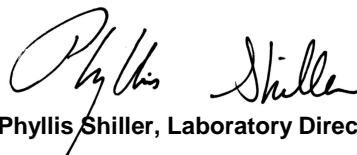
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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

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

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**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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

**Analysis Report**  
 September 05, 2018

FOR: Attn: Mr. Ethan Stewart  
 Diversified Tech. Consultants  
 2321 Whitney Avenue 3rd floor  
 Hamden Center II  
 Hamden CT 06518

Sample Information

Matrix: SOIL  
 Location Code: DTECHDAS  
 Rush Request: 72 Hour  
 P.O.#:

Custody Information

Collected by:  
 Received by: LB  
 Analyzed by: see "By" below

Date

08/27/18  
 08/29/18

Time

14:20  
 15:04

Laboratory Data

SDG ID: GCB21541  
 Phoenix ID: CB21560

Project ID: DTC #17-141-06E  
 Client ID: B20 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.32	0.32	mg/Kg	1	08/30/18	TH	SW6010C
Arsenic	0.69	0.64	mg/Kg	1	08/30/18	TH	SW6010C
Barium	48.6	0.32	mg/Kg	1	08/30/18	TH	SW6010C
Cadmium	0.32	0.32	mg/Kg	1	08/30/18	TH	SW6010C
Chromium	8.62	0.32	mg/Kg	1	08/30/18	TH	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	08/30/18	RS	SW7471B
Lead	8.16	0.32	mg/Kg	1	08/30/18	EK	SW6010C
Selenium	< 1.3	1.3	mg/Kg	1	08/30/18	CPP	SW6010C
Percent Solid	93		%		08/29/18	Q	SW846-%Solid
Soil Extraction for PCB	Completed				08/30/18	BA/V	SW3545A
Soil Extraction SVOA PAH	Completed				08/29/18	BT/CKV	SW3545A
Extraction of CT ETPH	Completed				08/29/18	BT/VCK	SW3545A
Mercury Digestion	Completed				08/30/18	IG/I	SW7471B
Total Metals Digest	Completed				08/29/18	L/AG/BF	SW3050B

**TPH by GC (Extractable Products)**

Ext. Petroleum H.C. (C9-C36)	ND	53	mg/Kg	1	08/31/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	08/31/18	JRB	CTETPH 8015D

**QA/QC Surrogates**

% n-Pentacosane	75		%	1	08/31/18	JRB	50 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1221	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1232	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1242	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1248	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1254	ND	360	ug/Kg	10	08/31/18	AW	SW8082A

Client ID: B20 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1260	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1262	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
PCB-1268	ND	360	ug/Kg	10	08/31/18	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	77		%	10	08/31/18	AW	30 - 150 %
% TCMX	72		%	10	08/31/18	AW	30 - 150 %
<b><u>Volatiles</u></b>							
1,1,1,2-Tetrachloroethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.1	ug/Kg	1	08/30/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloroethene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,1-Dichloropropene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dibromoethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloroethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,2-Dichloropropane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,3-Dichloropropane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
2,2-Dichloropropane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
2-Chlorotoluene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
2-Hexanone	ND	26	ug/Kg	1	08/30/18	JLI	SW8260C
2-Isopropyltoluene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
4-Chlorotoluene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	ug/Kg	1	08/30/18	JLI	SW8260C
Acetone	ND	260	ug/Kg	1	08/30/18	JLI	SW8260C
Acrylonitrile	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Benzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Bromobenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Bromochloromethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Bromodichloromethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Bromoform	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Bromomethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon Disulfide	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Carbon tetrachloride	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Chlorobenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Chloroform	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Chloromethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C

Client ID: B20 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromochloromethane	ND	3.1	ug/Kg	1	08/30/18	JLI	SW8260C
Dibromomethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Dichlorodifluoromethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Ethylbenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Hexachlorobutadiene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Isopropylbenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
m&p-Xylene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	31	ug/Kg	1	08/30/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Methylene chloride	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Naphthalene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
n-Butylbenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
n-Propylbenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
o-Xylene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
p-Isopropyltoluene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
sec-Butylbenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Styrene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
tert-Butylbenzene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrachloroethene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Toluene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Total Xylenes	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Trichloroethene	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorofluoromethane	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	10	ug/Kg	1	08/30/18	JLI	SW8260C
Vinyl chloride	ND	5.2	ug/Kg	1	08/30/18	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>							
% 1,2-dichlorobenzene-d4	95		%	1	08/30/18	JLI	70 - 130 %
% Bromofluorobenzene	96		%	1	08/30/18	JLI	70 - 130 %
% Dibromofluoromethane	104		%	1	08/30/18	JLI	70 - 130 %
% Toluene-d8	90		%	1	08/30/18	JLI	70 - 130 %
<b><u>Polynuclear Aromatic HC</u></b>							
2-Methylnaphthalene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(b)fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Chrysene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Fluoranthene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Fluorene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D

Client ID: B20 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Phenanthrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
Pyrene	ND	250	ug/Kg	1	08/31/18	HM	SW8270D
<b><u>QA/QC Surrogates</u></b>							
% 2-Fluorobiphenyl	59		%	1	08/31/18	HM	30 - 130 %
% Nitrobenzene-d5	53		%	1	08/31/18	HM	30 - 130 %
% Terphenyl-d14	62		%	1	08/31/18	HM	30 - 130 %
Field Extraction	Completed				08/27/18		SW5035A

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

#### Volatile Comment:

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

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

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

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



**Phyllis Shiller, Laboratory Director**

**September 05, 2018**

**Reviewed and Released by: Rashmi Makol, Project Manager**





**Environmental Laboratories, Inc.**  
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# QA/QC Report

September 05, 2018

## QA/QC Data

SDG I.D.: GCB21541

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 445415 (mg/kg), QC Sample No: CB20797 (CB21556, CB21557, CB21558, CB21559, CB21560)

Mercury - Soil	BRL	0.03	0.36	0.66	58.8	92.9	85.8	7.9	86.7			70 - 130	30
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Comment:

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

QA/QC Batch 445352 (mg/kg), QC Sample No: CB21541 (CB21541)

### ICP Metals - Soil

Arsenic	BRL	0.68	3.02	2.81	NC	95.7			83.9			75 - 125	30
Barium	BRL	0.34	77.3	85.5	10.1	105			93.8			75 - 125	30
Cadmium	BRL	0.34	0.36	0.41	NC	90.9			83.2			75 - 125	30
Chromium	BRL	0.34	17.4	19.4	10.9	105			92.2			75 - 125	30
Lead	BRL	0.34	9.77	9.16	6.40	97.0			87.0			75 - 125	30
Selenium	BRL	1.4	<1.4	<1.5	NC	81.1			68.0			75 - 125	30
Silver	BRL	0.34	<0.35	<0.37	NC	101			90.5			75 - 125	30

QA/QC Batch 445380 (mg/kg), QC Sample No: CB21548 (CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558)

### ICP Metals - Soil

Arsenic	BRL	0.63	5.16	5.60	8.20	96.4			85.6			75 - 125	30
Barium	BRL	0.32	108	90.5	17.6	106			84.7			75 - 125	30
Cadmium	BRL	0.32	0.57	0.58	NC	95.4			89.8			75 - 125	30
Chromium	BRL	0.32	23.2	24.0	3.40	109			97.7			75 - 125	30
Lead	BRL	0.32	12.0	12.0	0	106			94.4			75 - 125	30
Selenium	BRL	1.3	<1.5	<1.5	NC	80.4			94.3			75 - 125	30
Silver	BRL	0.32	<0.37	<0.38	NC	104			96.1			75 - 125	30

QA/QC Batch 445414 (mg/kg), QC Sample No: CB21548 (CB21541, CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555)

Mercury - Soil	BRL	0.03	<0.03	<0.03	NC	94.3	102	7.8	93.2			70 - 130	30
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Comment:

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

QA/QC Batch 445381 (mg/kg), QC Sample No: CB21559 (CB21559)

### ICP Metals - Soil

Arsenic	BRL	0.64	1.42	1.22	NC	89.9			86.6			75 - 125	30
Barium	BRL	0.32	41.0	40.9	0.20	100			100			75 - 125	30
Cadmium	BRL	0.32	<0.33	<0.37	NC	91.1			92.0			75 - 125	30
Chromium	BRL	0.32	6.14	5.68	7.80	104			97.1			75 - 125	30
Lead	BRL	0.32	1.79	1.49	NC	98.2			95.7			75 - 125	30
Selenium	BRL	1.3	<1.3	<1.5	NC	93.8			95.3			75 - 125	30
Silver	BRL	0.32	<0.33	<0.37	NC	101			95.2			75 - 125	30

QA/QC Batch 445379 (mg/kg), QC Sample No: CB21560 (CB21560)

### ICP Metals - Soil

Arsenic	BRL	0.62	0.69	<0.71	NC	94.5			85.9			75 - 125	30
Barium	BRL	0.31	48.6	72.3	39.2	105			85.6			75 - 125	30

QA/QC Data

SDG I.D.: GCB21541

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Cadmium	BRL	0.31	0.32	0.35	NC	97.1			92.1			75 - 125	30
Chromium	BRL	0.31	8.62	5.98	36.2	105			96.7			75 - 125	30
Lead	0.54	0.31	8.16	4.71	53.6	102			94.1			75 - 125	30
Selenium	BRL	1.2	<1.3	<1.4	NC	77.4			94.2			75 - 125	30
Silver	BRL	0.31	<0.32	<0.35	NC	103			93.8			75 - 125	30

m = This parameter is outside laboratory MS/MSD specified recovery limits.  
 r = This parameter is outside laboratory RPD specified recovery limits.



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# QA/QC Report

September 05, 2018

## QA/QC Data

SDG I.D.: GCB21541

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 445686 (ug/kg), QC Sample No: CB21364 (CB21541, CB21543, CB21550, CB21553)										
<b>Volatiles - Soil</b>										
1,1,1,2-Tetrachloroethane	ND	5.0	106	100	5.8	98	100	2.0	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	93	94	1.1	89	88	1.1	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	105	95	10.0	97	99	2.0	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	101	93	8.2	88	93	5.5	70 - 130	30
1,1-Dichloroethane	ND	5.0	96	94	2.1	81	79	2.5	70 - 130	30
1,1-Dichloroethene	ND	5.0	98	98	0.0	76	76	0.0	70 - 130	30
1,1-Dichloropropene	ND	5.0	101	104	2.9	91	90	1.1	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	103	103	0.0	85	83	2.4	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	100	91	9.4	95	97	2.1	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	105	109	3.7	86	83	3.6	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	103	106	2.9	89	88	1.1	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	99	91	8.4	104	112	7.4	70 - 130	30
1,2-Dibromoethane	ND	5.0	105	97	7.9	90	91	1.1	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	98	94	4.2	80	80	0.0	70 - 130	30
1,2-Dichloroethane	ND	5.0	101	94	7.2	96	97	1.0	70 - 130	30
1,2-Dichloropropane	ND	5.0	99	94	5.2	92	96	4.3	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	101	104	2.9	91	89	2.2	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	97	99	2.0	79	78	1.3	70 - 130	30
1,3-Dichloropropane	ND	5.0	105	96	9.0	91	93	2.2	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	95	95	0.0	76	74	2.7	70 - 130	30
2,2-Dichloropropane	ND	5.0	106	102	3.8	87	84	3.5	70 - 130	30
2-Chlorotoluene	ND	5.0	101	102	1.0	87	88	1.1	70 - 130	30
2-Hexanone	ND	25	99	86	14.1	88	91	3.4	70 - 130	30
2-Isopropyltoluene	ND	5.0	105	110	4.7	93	92	1.1	70 - 130	30
4-Chlorotoluene	ND	5.0	100	102	2.0	83	81	2.4	70 - 130	30
4-Methyl-2-pentanone	ND	25	104	91	13.3	100	103	3.0	70 - 130	30
Acetone	ND	10	76	67	12.6	64	64	0.0	70 - 130	30
Acrylonitrile	ND	5.0	88	81	8.3	76	75	1.3	70 - 130	30
Benzene	ND	1.0	99	98	1.0	89	92	3.3	70 - 130	30
Bromobenzene	ND	5.0	96	95	1.0	83	85	2.4	70 - 130	30
Bromochloromethane	ND	5.0	95	90	5.4	85	85	0.0	70 - 130	30
Bromodichloromethane	ND	5.0	103	96	7.0	94	96	2.1	70 - 130	30
Bromoform	ND	5.0	110	99	10.5	95	97	2.1	70 - 130	30
Bromomethane	ND	5.0	96	94	2.1	75	74	1.3	70 - 130	30
Carbon Disulfide	ND	5.0	98	101	3.0	71	70	1.4	70 - 130	30
Carbon tetrachloride	ND	5.0	92	95	3.2	82	83	1.2	70 - 130	30
Chlorobenzene	ND	5.0	99	97	2.0	84	84	0.0	70 - 130	30
Chloroethane	ND	5.0	101	102	1.0	78	77	1.3	70 - 130	30
Chloroform	ND	5.0	92	88	4.4	84	83	1.2	70 - 130	30
Chloromethane	ND	5.0	87	86	1.2	68	70	2.9	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	89	86	3.4	69	71	2.9	70 - 130	30

l,m

m

m

## QA/QC Data

SDG I.D.: GCB21541

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
cis-1,3-Dichloropropene	ND	5.0	104	97	7.0	87	89	2.3	70 - 130	30
Dibromochloromethane	ND	3.0	110	102	7.5	100	103	3.0	70 - 130	30
Dibromomethane	ND	5.0	102	92	10.3	90	92	2.2	70 - 130	30
Dichlorodifluoromethane	ND	5.0	77	97	23.0	60	60	0.0	70 - 130	30
Ethylbenzene	ND	1.0	99	101	2.0	87	86	1.2	70 - 130	30
Hexachlorobutadiene	ND	5.0	93	117	22.9	79	71	10.7	70 - 130	30
Isopropylbenzene	ND	1.0	104	109	4.7	96	95	1.0	70 - 130	30
m&p-Xylene	ND	2.0	104	105	1.0	90	89	1.1	70 - 130	30
Methyl ethyl ketone	ND	5.0	81	78	3.8	75	73	2.7	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	99	89	10.6	85	86	1.2	70 - 130	30
Methylene chloride	ND	5.0	83	79	4.9	73	72	1.4	70 - 130	30
Naphthalene	ND	5.0	113	105	7.3	98	101	3.0	70 - 130	30
n-Butylbenzene	ND	1.0	99	113	13.2	81	75	7.7	70 - 130	30
n-Propylbenzene	ND	1.0	100	105	4.9	86	83	3.6	70 - 130	30
o-Xylene	ND	2.0	110	110	0.0	98	100	2.0	70 - 130	30
p-Isopropyltoluene	ND	1.0	105	114	8.2	89	87	2.3	70 - 130	30
sec-Butylbenzene	ND	1.0	105	114	8.2	89	87	2.3	70 - 130	30
Styrene	ND	5.0	109	107	1.9	89	89	0.0	70 - 130	30
tert-Butylbenzene	ND	1.0	105	109	3.7	94	92	2.2	70 - 130	30
Tetrachloroethene	ND	5.0	97	101	4.0	85	84	1.2	70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	91	80	12.9	83	84	1.2	70 - 130	30
Toluene	ND	1.0	96	95	1.0	84	86	2.4	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	95	96	1.0	75	72	4.1	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	103	94	9.1	84	86	2.4	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	111	102	8.5	87	85	2.3	70 - 130	30
Trichloroethene	ND	5.0	100	102	2.0	88	88	0.0	70 - 130	30
Trichlorofluoromethane	ND	5.0	96	106	9.9	78	76	2.6	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	81	105	25.8	77	72	6.7	70 - 130	30
Vinyl chloride	ND	5.0	100	102	2.0	74	73	1.4	70 - 130	30
% 1,2-dichlorobenzene-d4	102	%	98	99	1.0	99	98	1.0	70 - 130	30
% Bromofluorobenzene	96	%	102	102	0.0	102	103	1.0	70 - 130	30
% Dibromofluoromethane	88	%	92	89	3.3	90	90	0.0	70 - 130	30
% Toluene-d8	101	%	99	98	1.0	98	98	0.0	70 - 130	30

Comment:

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

QA/QC Batch 445508 (ug/kg), QC Sample No: CB21541 (CB21542, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21551, CB21552, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560)

### Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	89	89	0.0	89	88	1.1	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	101	101	0.0	105	103	1.9	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	92	91	1.1	91	91	0.0	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	95	96	1.0	91	92	1.1	70 - 130	30
1,1-Dichloroethane	ND	5.0	105	104	1.0	106	107	0.9	70 - 130	30
1,1-Dichloroethene	ND	5.0	114	113	0.9	105	112	6.5	70 - 130	30
1,1-Dichloropropene	ND	5.0	96	97	1.0	97	98	1.0	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	93	93	0.0	89	96	7.6	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	89	88	1.1	83	87	4.7	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	89	88	1.1	84	89	5.8	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	91	89	2.2	87	89	2.3	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	99	94	5.2	93	98	5.2	70 - 130	30
1,2-Dibromoethane	ND	5.0	84	89	5.8	85	87	2.3	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	99	96	3.1	96	98	2.1	70 - 130	30

## QA/QC Data

SDG I.D.: GCB21541

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
1,2-Dichloroethane	ND	5.0	101	103	2.0	98	98	0.0	70 - 130	30
1,2-Dichloropropane	ND	5.0	101	101	0.0	98	98	0.0	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	89	87	2.3	86	89	3.4	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	92	89	3.3	89	90	1.1	70 - 130	30
1,3-Dichloropropane	ND	5.0	86	87	1.2	85	85	0.0	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	96	95	1.0	94	95	1.1	70 - 130	30
2,2-Dichloropropane	ND	5.0	101	100	1.0	98	101	3.0	70 - 130	30
2-Chlorotoluene	ND	5.0	92	91	1.1	88	91	3.4	70 - 130	30
2-Hexanone	ND	25	82	85	3.6	82	81	1.2	70 - 130	30
2-Isopropyltoluene	ND	5.0	100	99	1.0	96	99	3.1	70 - 130	30
4-Chlorotoluene	ND	5.0	87	86	1.2	84	87	3.5	70 - 130	30
4-Methyl-2-pentanone	ND	25	96	100	4.1	96	93	3.2	70 - 130	30
Acetone	ND	10	78	76	2.6	74	74	0.0	70 - 130	30
Acrylonitrile	ND	5.0	102	101	1.0	102	109	6.6	70 - 130	30
Benzene	ND	1.0	98	99	1.0	95	97	2.1	70 - 130	30
Bromobenzene	ND	5.0	96	95	1.0	92	93	1.1	70 - 130	30
Bromochloromethane	ND	5.0	92	95	3.2	94	94	0.0	70 - 130	30
Bromodichloromethane	ND	5.0	97	97	0.0	92	96	4.3	70 - 130	30
Bromoform	ND	5.0	81	79	2.5	77	77	0.0	70 - 130	30
Bromomethane	ND	5.0	117	115	1.7	109	115	5.4	70 - 130	30
Carbon Disulfide	ND	5.0	113	114	0.9	112	113	0.9	70 - 130	30
Carbon tetrachloride	ND	5.0	96	99	3.1	96	99	3.1	70 - 130	30
Chlorobenzene	ND	5.0	94	93	1.1	94	93	1.1	70 - 130	30
Chloroethane	ND	5.0	122	127	4.0	80	85	6.1	70 - 130	30
Chloroform	ND	5.0	95	95	0.0	89	92	3.3	70 - 130	30
Chloromethane	ND	5.0	109	109	0.0	116	119	2.6	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	103	103	0.0	107	107	0.0	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	97	100	3.0	93	95	2.1	70 - 130	30
Dibromochloromethane	ND	3.0	93	93	0.0	90	89	1.1	70 - 130	30
Dibromomethane	ND	5.0	100	101	1.0	96	96	0.0	70 - 130	30
Dichlorodifluoromethane	ND	5.0	118	123	4.1	121	122	0.8	70 - 130	30
Ethylbenzene	ND	1.0	91	89	2.2	91	90	1.1	70 - 130	30
Hexachlorobutadiene	ND	5.0	93	93	0.0	94	99	5.2	70 - 130	30
Isopropylbenzene	ND	1.0	92	93	1.1	88	91	3.4	70 - 130	30
m&p-Xylene	ND	2.0	86	86	0.0	86	86	0.0	70 - 130	30
Methyl ethyl ketone	ND	5.0	87	94	7.7	93	94	1.1	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	109	112	2.7	111	112	0.9	70 - 130	30
Methylene chloride	ND	5.0	93	95	2.1	95	99	4.1	70 - 130	30
Naphthalene	ND	5.0	97	98	1.0	92	98	6.3	70 - 130	30
n-Butylbenzene	ND	1.0	90	90	0.0	88	91	3.4	70 - 130	30
n-Propylbenzene	ND	1.0	91	89	2.2	90	91	1.1	70 - 130	30
o-Xylene	ND	2.0	90	90	0.0	92	91	1.1	70 - 130	30
p-Isopropyltoluene	ND	1.0	91	92	1.1	89	90	1.1	70 - 130	30
sec-Butylbenzene	ND	1.0	95	95	0.0	94	95	1.1	70 - 130	30
Styrene	ND	5.0	84	86	2.4	84	86	2.4	70 - 130	30
tert-Butylbenzene	ND	1.0	92	92	0.0	90	92	2.2	70 - 130	30
Tetrachloroethene	ND	5.0	100	98	2.0	99	100	1.0	70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	101	104	2.9	102	106	3.8	70 - 130	30
Toluene	ND	1.0	101	101	0.0	99	101	2.0	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	109	110	0.9	110	110	0.0	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	91	91	0.0	85	89	4.6	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	92	90	2.2	84	86	2.4	70 - 130	30
Trichloroethene	ND	5.0	99	101	2.0	97	96	1.0	70 - 130	30

## QA/QC Data

SDG I.D.: GCB21541

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Trichlorofluoromethane	ND	5.0	116	120	3.4	118	124	5.0	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	107	114	6.3	110	110	0.0	70 - 130	30
Vinyl chloride	ND	5.0	120	122	1.7	128	129	0.8	70 - 130	30
% 1,2-dichlorobenzene-d4	96	%	105	104	1.0	105	107	1.9	70 - 130	30
% Bromofluorobenzene	98	%	97	98	1.0	100	99	1.0	70 - 130	30
% Dibromofluoromethane	107	%	101	99	2.0	106	111	4.6	70 - 130	30
% Toluene-d8	89	%	109	109	0.0	107	110	2.8	70 - 130	30

Comment:

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

QA/QC Batch 445503 (ug/Kg), QC Sample No: CB21557 2X (CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560)

### Polychlorinated Biphenyls - Soil

PCB-1016	ND	33	89	95	6.5	67	71	5.8	40 - 140	30
PCB-1221	ND	33							40 - 140	30
PCB-1232	ND	33							40 - 140	30
PCB-1242	ND	33							40 - 140	30
PCB-1248	ND	33							40 - 140	30
PCB-1254	ND	33							40 - 140	30
PCB-1260	ND	33	85	92	7.9	68	71	4.3	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	93	%	95	105	10.0	80	86	7.2	30 - 150	30
% TCMX (Surrogate Rec)	88	%	91	98	7.4	73	81	10.4	30 - 150	30

QA/QC Batch 445407 (mg/Kg), QC Sample No: CB21559 (CB21541, CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560)

### TPH by GC (Extractable Products) - Soil

Ext. Petroleum H.C. (C9-C36)	ND	50	79	58	30.7	76	83	8.8	60 - 120	30	1,r
% n-Pentacosane	66	%	67	53	23.3	66	69	4.4	50 - 150	30	

Comment:

Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

QA/QC Batch 445406 (ug/kg), QC Sample No: CB21559 (CB21541, CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560)

### Polynuclear Aromatic HC - Soil

2-Methylnaphthalene	ND	230	60	67	11.0	61	65	6.3	30 - 130	30
Acenaphthene	ND	230	67	74	9.9	66	71	7.3	30 - 130	30
Acenaphthylene	ND	230	63	68	7.6	61	67	9.4	30 - 130	30
Anthracene	ND	230	67	76	12.6	67	72	7.2	30 - 130	30
Benz(a)anthracene	ND	230	65	74	12.9	65	71	8.8	30 - 130	30
Benzo(a)pyrene	ND	230	63	71	11.9	62	68	9.2	30 - 130	30
Benzo(b)fluoranthene	ND	230	64	76	17.1	65	72	10.2	30 - 130	30
Benzo(ghi)perylene	ND	230	59	64	8.1	58	64	9.8	30 - 130	30
Benzo(k)fluoranthene	ND	230	64	69	7.5	64	67	4.6	30 - 130	30
Chrysene	ND	230	67	76	12.6	67	73	8.6	30 - 130	30
Dibenz(a,h)anthracene	ND	230	63	71	11.9	62	69	10.7	30 - 130	30
Fluoranthene	ND	230	66	76	14.1	66	71	7.3	30 - 130	30
Fluorene	ND	230	65	73	11.6	65	71	8.8	30 - 130	30
Indeno(1,2,3-cd)pyrene	ND	230	60	67	11.0	59	65	9.7	30 - 130	30
Naphthalene	ND	230	62	68	9.2	61	66	7.9	30 - 130	30
Phenanthrene	ND	230	67	77	13.9	66	71	7.3	30 - 130	30

QA/QC Data

SDG I.D.: GCB21541

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Pyrene	ND	230	66	76	14.1	67	72	7.2	30 - 130	30
% 2-Fluorobiphenyl	61	%	56	65	14.9	57	62	8.4	30 - 130	30
% Nitrobenzene-d5	57	%	54	64	16.9	55	58	5.3	30 - 130	30
% Terphenyl-d14	57	%	52	65	22.2	57	60	5.1	30 - 130	30

Comment:

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

QA/QC Batch 445444 (ug/Kg), QC Sample No: CB21641 2X (CB21541, CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	33	97	93	4.2	81	85	4.8	40 - 140	30
PCB-1221	ND	33							40 - 140	30
PCB-1232	ND	33							40 - 140	30
PCB-1242	ND	33							40 - 140	30
PCB-1248	ND	33							40 - 140	30
PCB-1254	ND	33							40 - 140	30
PCB-1260	ND	33	87	84	3.5	74	78	5.3	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	100	%	97	92	5.3	77	81	5.1	30 - 150	30
% TCMX (Surrogate Rec)	109	%	105	99	5.9	83	87	4.7	30 - 150	30

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.

m = This parameter is outside laboratory MS/MSD specified recovery limits.

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

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

RPD - Relative Percent Difference

LCS - Laboratory Control Sample


LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

  
 Phyllis Shiller, Laboratory Director  
 September 05, 2018

Wednesday, September 05, 2018

Criteria: CT: GAM, GBM, RC

State: CT

## Sample Criteria Exceedances Report

GCB21541 - DTECHDAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL	Criteria	Analysis Units
CB21543	\$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	1600	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	3100	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	3000	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Benzo(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	2200	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Benzo(ghi)perylene	CT / RSR GA,GAA (mg/kg) / APS Organics	1400	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GA,GAA (mg/kg) / APS Organics	1600	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Chrysene	CT / RSR GA,GAA (mg/kg) / APS Organics	2700	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Benz(a)anthracene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	2200	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Benzo(a)pyrene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	3100	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Benzo(k)fluoranthene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	2400	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Pyrene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	5800	260	4000	4000	4000	ug/Kg
CB21543	\$8100SMR	Benzo(b)fluoranthene	CT / RSR GA,GAA (mg/kg) / Semivolatiles	3000	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	1400	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	2700	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	1600	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	3100	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	2400	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Benz(a)anthracene	CT / RSR GB (mg/kg) / Semivolatiles	2200	260	1000	1000	1000	ug/Kg
CB21543	\$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	3000	260	1000	1000	1000	ug/Kg

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





## REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

**Laboratory Name:** Phoenix Environmental Labs, Inc.

**Client:** Diversified Tech. Consultants

**Project Location:** DTC #17-141-06E

**Project Number:**

**Laboratory Sample ID(s):** CB21541-CB21560

**Sampling Date(s):** 8/27/2018, 8/28/2018

**List RCP Methods Used (e.g., 8260, 8270, et cetera)** 6010, 7470/7471, 8082, 8260, 8270, ETPH

<b>1</b>	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1A</b>	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1B</b>	<u><i>VPH and EPH methods only:</i></u> Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
<b>2</b>	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>3</b>	Were samples received at an appropriate temperature (< 6 Degrees C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
<b>4</b>	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? See Sections: ETPH Narration, ICP Narration, Mercury Narration, VOA Narration.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>5</b>	a) Were reporting limits specified or referenced on the chain-of-custody?  b) Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>6</b>	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>7</b>	Are project-specific matrix spikes and laboratory duplicates included in the data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

**I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.**

**Authorized Signature:** Rashmi Makol **Position:** Project Manager

**Printed Name:** Rashmi Makol **Date:** Wednesday, September 05, 201

**Name of Laboratory** Phoenix Environmental Labs, Inc.

**This certification form is to be used for RCP methods only.**



**Environmental Laboratories, Inc.**  
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## RCP Certification Report

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### SDG Comments

#### Metals Analysis:

The client requested a shorter list of elements than the 6010 RCP list. Only the RCRA 8 Metals are reported as requested on the chain of custody.

#### 8270 Semi-volatile Organics:

The client requested a short list for 8270 RCP Semivolatile. Only the PAH constituents are reported as requested on the chain-of-custody.

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### ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

**QC Batch 445407 (Samples: CB21541, CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560): ----**

**The LCS and/or the LCSD recovery is below the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Ext. Petroleum H.C. (C9-C36))**

**The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Ext. Petroleum H.C. (C9-C36))**

#### Instrument:

**AU-FID1 08/31/18-1** Jeff Bucko, Chemist 08/31/18

CB21543, CB21547

The initial calibration (ETPH723I) RSD for the compound list was less than 30% except for the following compounds: None. The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

**AU-FID1 09/04/18-1** Jeff Bucko, Chemist 09/04/18

CB21545

The initial calibration (ETPH723I) RSD for the compound list was less than 30% except for the following compounds: None. The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

**AU-FID11 08/31/18-1** Jeff Bucko, Chemist 08/31/18

CB21558, CB21560

The initial calibration (ETPH728I) RSD for the compound list was less than 30% except for the following compounds: None. The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

**AU-FID21 08/31/18-1** Jeff Bucko, Chemist 08/31/18

CB21541, CB21542, CB21544, CB21546, CB21548, CB21549, CB21550

The initial calibration (ETPH731I) RSD for the compound list was less than 30% except for the following compounds: None. The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

**AU-FID22 08/31/18-1** Jeff Bucko, Chemist 08/31/18

CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557

The initial calibration (ETPH802I) RSD for the compound list was less than 30% except for the following compounds: None. The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

**AU-XL2 08/31/18-1** Jeff Bucko, Chemist 08/31/18

CB21559



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### ***ETPH Narration***

The initial calibration (ETPH814I) RSD for the compound list was less than 30% except for the following compounds: None.  
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

#### **QC (Site Specific):**

##### **Batch 445407 (CB21559)**

CB21541, CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560

All LCS recoveries were within 60 - 120 with the following exceptions: None.

All LCSD recoveries were within 60 - 120 with the following exceptions: Ext. Petroleum H.C. (C9-C36)(58%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Ext. Petroleum H.C. (C9-C36)(30.7%)

All MS recoveries were within 50 - 150 with the following exceptions: None.

All MSD recoveries were within 50 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

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### ***Mercury Narration***

Were all QA/QC performance criteria specified in the analytical method achieved? No.

**QC Batch 445415 (Samples: CB21556, CB21557, CB21558, CB21559, CB21560): -----**

**The Sample/Duplicate RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Mercury)**

#### **Instrument:**

##### **MERLIN 08/30/18 08:14**

Rick Schweitzer, Chemist 08/30/18

CB21541, CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.

The initial calibration met all criteria including a standard run at or below the reporting level.

All calibration verification standards (ICV, CCV) met criteria.

All calibration blank verification standards (ICB, CCB) met criteria.

The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.

The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

#### **QC (Batch Specific):**

##### **Batch 445415 (CB20797)**

CB21556, CB21557, CB21558, CB21559, CB21560

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.



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### Mercury Narration

#### QC (Site Specific):

##### **Batch 445414 (CB21548)**

CB21541, CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

---

### ICP Metals Narration

Were all QA/QC performance criteria specified in the analytical method achieved? No.

#### QC Batch 445352 (Samples: CB21541): -----

The LCS/LCSD recovery is acceptable. One or more analytes in the site specific matrix spike recovery is below the method criteria, therefore a low bias is likely. (Selenium)

#### QC Batch 445379 (Samples: CB21560): -----

A trace amount of an analyte was found in blank. Due to the concentration in the blank relative to the samples, no bias is suspected. (Soil- Lead(CB21560))

The Sample/Duplicate RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Barium, Chromium, Lead)

#### QC Batch 445380 (Samples: CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558): -----

A trace amount of an analyte was found in blank. Due to the concentration in the blank relative to the samples, no bias is suspected. (Soil- Lead(CB21543, CB21544, CB21545, CB21546, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21558))

Analyte was found in blank. A high bias is suspected. (Soil- Lead(CB21542, CB21547, CB21556, CB21557))

#### Instrument:

##### **ARCOS 08/29/18 08:56**

Emily Kolominskaya, Chemist 08/29/18

CB21541

Additional criteria for CCV and ICSAB:

Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB). The linear range is defined daily by the calibration range.

The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.

The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.



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### ***ICP Metals Narration***

**ARCOS 08/30/18 09:17** Cindy Pearce, Emily Kolominskaya, Tina Hall, Chemist 08/30/

CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560

Additional criteria for CCV and ICSAB:

Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB). The linear range is defined daily by the calibration range.

The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.

The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

### **QC (Site Specific):**

#### **Batch 445352 (CB21541)**

CB21541

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: Selenium(68.0%)

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

#### **Batch 445379 (CB21560)**

CB21560

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

#### **Batch 445380 (CB21548)**

CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

#### **Batch 445381 (CB21559)**

CB21559

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

---

### ***PCB Narration***

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

#### **Instrument:**

**AU-ECD24 08/31/18-1** Adam Werner, Chemist 08/31/18

CB21541, CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548

The initial calibration (PC827AI) RSD for the compound list was less than 20% except for the following compounds: None.

The initial calibration (PC827BI) RSD for the compound list was less than 20% except for the following compounds: None.

The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

**AU-ECD24 09/04/18-1** Adam Werner, Chemist 09/04/18

CB21550, CB21551



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### PCB Narration

The initial calibration (PC827AI) RSD for the compound list was less than 20% except for the following compounds: None.  
The initial calibration (PC827BI) RSD for the compound list was less than 20% except for the following compounds: None.  
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

#### AU-ECD3 08/31/18-1

Adam Werner, Chemist 08/31/18

CB21549, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560

The initial calibration (PC605AI) RSD for the compound list was less than 20% except for the following compounds: None.  
The initial calibration (PC605BI) RSD for the compound list was less than 20% except for the following compounds: None.  
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

### QC (Batch Specific):

#### Batch 445444 (CB21641)

CB21541, CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549

All LCS recoveries were within 40 - 140 with the following exceptions: None.  
All LCSD recoveries were within 40 - 140 with the following exceptions: None.  
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

### QC (Site Specific):

#### Batch 445503 (CB21557)

CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560

All LCS recoveries were within 40 - 140 with the following exceptions: None.  
All LCSD recoveries were within 40 - 140 with the following exceptions: None.  
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.  
All MS recoveries were within 40 - 140 with the following exceptions: None.  
All MSD recoveries were within 40 - 140 with the following exceptions: None.  
All MS/MSD RPDs were less than 30% with the following exceptions: None.

---

### SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

#### Instrument:

#### CHEM06 08/30/18-2

Harry Mullin, Chemist 08/30/18

CB21541, CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560

For 8270 full list, the DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

For 8270 BN list, benzidine peak tailing was evaluated in the DFTPP tune and was found to be in control.

Initial Calibration Verification (CHEM06/bn\_0827):

93% of target compounds met criteria.

The following compounds had %RSDs >20%: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM06/0830\_24-bn\_0827):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

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### SVOA Narration

100% of target compounds met criteria.

The following compounds did not meet % deviation criteria: None.

The following compounds did not meet maximum % deviations: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet minimum response factors: None.

### QC (Site Specific):

#### **Batch 445406 (CB21559)**

CB21541, CB21542, CB21543, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21550, CB21551, CB21552, CB21553, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560

All LCS recoveries were within 30 - 130 with the following exceptions: None.

All LCSD recoveries were within 30 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 30 - 130 with the following exceptions: None.

All MSD recoveries were within 30 - 130 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

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

---

### VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

**QC Batch 445686 (Samples: CB21541, CB21543, CB21550, CB21553): -----**

**The QC recoveries for one or more analytes is below the method criteria. A slight low bias is likely. (Acetone)**

#### **Instrument:**

##### **CHEM18 08/29/18-2**

Jane Li, Chemist 08/29/18

CB21542, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21551, CB21552, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560

Initial Calibration Verification (CHEM18/VT-M0817):

96% of target compounds met criteria.

The following compounds had %RSDs >20%: 1,2,4-Trichlorobenzene 21% (20%), Acetone 34% (20%), Methyl Ethyl Ketone 23% (20%)

The following compounds did not meet recommended response factors: None.

The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM18/0829M34-VT-M0817):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

100% of target compounds met criteria.

The following compounds did not meet % deviation criteria: None.

The following compounds did not meet maximum % deviations: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet minimum response factors: None.

##### **CHEM31 08/30/18-1**

Jane Li, Chemist 08/30/18

CB21541, CB21543, CB21550, CB21553

Initial Calibration Verification (CHEM31/VT-L0828):



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### VOA Narration

98% of target compounds met criteria.

The following compounds had %RSDs >20%: Acetone 29% (20%), Chloroethane 29% (20%)

The following compounds did not meet recommended response factors: Bromoform 0.086 (0.1), Tetrachloroethene 0.123 (0.2), Trichloroethene 0.194 (0.2)

The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM31/0830\_02-VT-L0828):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

100% of target compounds met criteria.

The following compounds did not meet % deviation criteria: None.

The following compounds did not meet maximum % deviations: None.

The following compounds did not meet recommended response factors: Bromoform 0.097 (0.1)

The following compounds did not meet minimum response factors: None.

### QC (Batch Specific):

#### **Batch 445686 (CB21364)**

CB21541, CB21543, CB21550, CB21553

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: Acetone(67%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

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

### QC (Site Specific):

#### **Batch 445508 (CB21541)**

CB21542, CB21544, CB21545, CB21546, CB21547, CB21548, CB21549, CB21551, CB21552, CB21554, CB21555, CB21556, CB21557, CB21558, CB21559, CB21560

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 70 - 130 with the following exceptions: None.

All MSD recoveries were within 70 - 130 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

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

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### Temperature Narration

The samples were received at 1.2C with cooling initiated.

(Note acceptance criteria for relevant matrices is above freezing up to 6°C)





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 Client Services (860) 645-8726

**CHAIN OF CUSTODY RECORD**

Coolant: IPK  No   
 Yes  No   
 Temp 7C Pg 1 of 2

Data Delivery/Contact Options:  
 Fax:  
 Phone:  
 Email: Ethan.Stewart@TeamDTC.com

Customer: DTC  
 Address: 321 Whitney Avenue, Suite 301  
Hampden, CT 06518  
203-239-4200

Project: DTC # 17-141-06E  
 Report to: Ethan Stewart / Scott Feunick  
 Invoice to: SAME  
DAS Contract Pricing

Project P.O.:  
 This section **MUST** be completed with Bottle Quantities.

Sampler's Signature: [Signature] Date: 8/28/18  
 Client Sample Information Identification

Matrix Code:  
 DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water  
 RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil  
 B=Bulk L=Liquid

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Analysis Request
21541	B1 (2-4')	S	8-27-18	0800	X
21542	B2 (2-4')		8-28-18	0820	X
21543	B3 (2-4')		8-28-18	0840	X
21544	B4 (2-4')		8-27-18	0900	X
21545	B5 (0-2')		8-27-18	0920	X
21546	B6 (2-4')		8-28-18	0940	X
21547	B7 (2-4')		8-28-18	1000	X
21548	B8 (2-4')		8-28-18	1020	X
21549	B9 (2-4')		8-28-18	1040	X
21550	B10 (2-4')		8-28-18	1100	X
21551	B11 (2-4')		8-27-18	1120	X
21552	B12 (2-4')		8-27-18	1140	X

Relinquished by:	Accepted by:	Date:	Time:	RI	CI	MA	Data Format		
<u>[Signature]</u>	<u>[Signature]</u>	8-29-18	1:51	<input type="checkbox"/> Direct Exposure (Residential) <input type="checkbox"/> GW <input type="checkbox"/> Other	<input checked="" type="checkbox"/> RCP Cert <input checked="" type="checkbox"/> GW Protection <input type="checkbox"/> SW Protection <input checked="" type="checkbox"/> GA Mobility <input checked="" type="checkbox"/> GB Mobility <input checked="" type="checkbox"/> Residential DEC <input type="checkbox"/> I/C DEC <input type="checkbox"/> Other	<input type="checkbox"/> MCP Certification <input type="checkbox"/> GW-1 <input type="checkbox"/> GW-2 <input type="checkbox"/> GW-3 <input type="checkbox"/> S-1 <input type="checkbox"/> S-2 <input type="checkbox"/> S-3 <input type="checkbox"/> MWRA eSMART <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Excel <input checked="" type="checkbox"/> PDF <input type="checkbox"/> GIS/Key <input type="checkbox"/> EQUIS <input type="checkbox"/> Other		
Comments, Special Requirements or Regulations: <u>WEST HARTFORD I-84</u> <u>17-14-06E</u>				Turnaround: <input type="checkbox"/> 1 Day* <input type="checkbox"/> 2 Days* <input checked="" type="checkbox"/> 3 Days* <input type="checkbox"/> Standard <input type="checkbox"/> Other				Data Package: <input type="checkbox"/> Tier II Checklist <input type="checkbox"/> Full Data Package* <input checked="" type="checkbox"/> Phoenix Std Report <input type="checkbox"/> Other	
State where samples were collected: <u>CT</u>				* SURCHARGE APPLIES				* SURCHARGE APPLIES	



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**CHAIN OF CUSTODY RECORD**

Coolant: Yes  No   
 IRK  ICE   
 Temp 6 C Pg 2 of 2

Data Delivery/Contact Options:  
 Fax:  
 Phone:  
 Email: Anna.Stuart@phoenixlabs.com

Project: DTC #17-141-06E  
 Report to: Anna Stuart / Scott Feulner  
 Invoice to: Some  
DAS Contact Pricing

Customer: DTC  
 Address: 2321 Whitney Ave Suite 301  
Hartford CT 06188  
203-239-4200

Client Sample Information Identification  
 Sampler's Signature: [Signature] Date: 8/28/18

Matrix Code:  
 DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water  
 RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil  
 B=Bulk L=Liquid

Analysis Request	GL Amber 8oz. WH3PO4	GL Soil container (metal) H2O	GL Amber 1000ml [As] [HCl]	PL H2SO4 [150ml] [150ml] [1000ml]	PL HNO3 250ml	Bacteria Bottle as is
GL Amber 8oz. WH3PO4	X	X	X	X	X	
GL Soil container (metal) H2O	X	X	X	X	X	
GL Amber 1000ml [As] [HCl]	X	X	X	X	X	
PL H2SO4 [150ml] [150ml] [1000ml]	X	X	X	X	X	
PL HNO3 250ml	X	X	X	X	X	
Bacteria Bottle as is						

RI	CI	MA	Data Format
<input type="checkbox"/> Direct Exposure (Residential)	<input checked="" type="checkbox"/> RCPC Cert	<input type="checkbox"/> MCP Certification	<input checked="" type="checkbox"/> Excel
<input type="checkbox"/> GW	<input type="checkbox"/> GW Protection	<input type="checkbox"/> GW-1	<input checked="" type="checkbox"/> PDF
<input type="checkbox"/> Other	<input type="checkbox"/> SW Protection	<input type="checkbox"/> GW-2	<input type="checkbox"/> GIS/Key
	<input checked="" type="checkbox"/> GA Mobility	<input type="checkbox"/> GW-3	<input type="checkbox"/> EQUIS
	<input checked="" type="checkbox"/> GB Mobility	<input type="checkbox"/> S-1	<input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Residential DEC	<input type="checkbox"/> S-2	<b>Data Package</b>
	<input checked="" type="checkbox"/> I/C DEC	<input type="checkbox"/> S-3	<input type="checkbox"/> Tier II Checklist
	<input type="checkbox"/> Other	<input type="checkbox"/> MWRA eSMART	<input type="checkbox"/> Full Data Package*
		<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Phoenix Std Report
			<input type="checkbox"/> Other

Relinquished by: [Signature] Accepted by: [Signature]

Date: 8-29-18 Time: 1:51

Date: 8-29-18 Time: 1504

Turnaround:  
 1 Day\*  
 2 Days\*  
 3 Days\*  
 Standard  
 Other

Comments, Special Requirements or Regulations:  
West Hartford I-84  
17-141-06E

State where samples were collected: CT

\* SURCHARGE APPLIES