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TASK 210 – SUBSURFACE SITE INVESTIGATION REPORT

CONNECTICUT DEPARTMENT OF TRANSPORTATION
REPLACEMENT OF BRIDGE NO. 03993
OVER P&W RAILROAD, WEST STREET
MIDDLETOWN, CONNECTICUT

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BL Companies Project Number 14EC0058
ConnDOT Project No. 0082-0305
Assignment No. 314-5554

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1.0 INTRODUCTION

BL Companies was retained by the State of Connecticut Department of Transportation (ConnDOT) to conduct a Task 210 Subsurface Site Investigation (SSI) in support of ConnDOT Project No. 0082-0305, Replacement of Bridge No. 03993 in Middletown, Connecticut. This report provides a brief description and history of the project area, 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 at Bridge No. 03993 which carries West Street over the P&W Railroad in Middletown Connecticut. This project consists of the replacement of the bridge structure with a new 26-foot clear span three-sided precast concrete rigid frame supported on reinforced concrete pedestal walls that are founded on reinforced concrete spread footings. The project includes reconstruction of approximately 785 feet of approach roadways and construction of new sidewalks on an additional 360 feet along West Street. The site's location and pertinent features are depicted on the enclosed Site Location Map (**Figure 1**) and Site Investigation Plans (**ENV-01** and **ENV-02**).

The purpose of this Task 210 SSI is to attain soil and groundwater data to evaluate whether the proposed construction activities require management of contaminated soil and/or groundwater.

1.2 Scope of Work

BL Companies completed a Task 210 SSI work plan, dated June 5, 2017, which was approved by ConnDOT. The scope of work included the following tasks:

- Pre-drilling activities (1) obtain a Encroachment Permit from the City of Middletown (2) mark the location of each proposed drilling location with white paint, (2) contact Call-Before-You-Dig to request mark outs of subsurface utilities and review existing utility plans, and (3) meet on-site to discuss proposed drilling locations with representatives of ConnDOT, and other utility companies/agencies, if necessary;
- Completion of four soil borings B-1 through B-4 to depths ranging from 5 to 30 feet below grade (ftbg) using a Geoprobe direct push rig;
- Completion of three shallow soil borings HA-1 through HA-3 using a hand auger;
- Installation of two temporary groundwater monitoring wells at B-3 and B-4;
- Recording lithology and field screening soil samples with a photoionization detector (PID);
- Collection and laboratory analysis of two to three soil samples per boring for one or more of the following:
    - Volatile Organic Compounds (VOCs) by EPA Method 8260;

- Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270;
- Extractable Total Petroleum Hydrocarbons (ETPH) by CT ETPH Method;
- Total RCRA 8 Metals by EPA Methods 6010/ 7471;
- Leachable RCRA 8 Metals using the Toxicity Characteristic Leaching Procedure (TCLP);
- Leachable RCRA 8 Metals using the Synthetic Precipitation Leaching Procedure (SPLP);
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082;
- Pesticides by EPA Method 8081;
- Ignitability; Reactivity; and pH.

- Collection and laboratory analysis of groundwater samples from two temporary wells for the following:
  - VOCs by EPA Method 8260;
  - SVOCs by EPA Method 8270;
  - ETPH by CT ETPH Method;
  - PCBs by EPA Method 8082;
  - Pesticides by EPA Method 8081; and
  - Total and Dissolved Lead, Copper, and Zinc by EPA Method 6010/7471.

2.0 LOCAL ENVIRONMENT AND RECEPTORS

2.1 Surficial Geology

According to the "Surficial Materials Map of Connecticut", dated 1992, surficial materials at the Site consist of thin till. Based on observations during boring installation, surficial materials consist of reddish brown fine to coarse sand, silt, some clay, and fine to coarse gravel. Boring logs are included as **Appendix C**.

2.2 Bedrock Geology

According to the "Bedrock Geological Map of Connecticut", dated 1985, the project area is underlain by the Portland Arkose, which is described as reddish brown to maroon micaceous arkose and siltstone, and red to black fissile silty shale.

2.3 Groundwater

Based on a review of the Water Quality Classifications Map for Middletown, Connecticut, dated November 2016, the project area has been designated by Department of Energy and Environmental Protection (DEEP) as "GA" quality. The GA classification indicates that groundwater at the Site is designated for use as existing private and potential public or private supplies of water suitable for drinking without treatment and baseflow for hydraulically-connected surface water bodies. During this Task 210 SSI, groundwater was not encountered.

Based on the presence of the Coginchaug River, the general direction of groundwater flow is inferred to be west/northwest.

2.4 Surface Water

The Coginchaug River is located approximately 0.1 miles to the west/northwest of the project area. The Coginchaug River is classified as "B" surface water body, according to the above-referenced DEEP map. Class B surface waters are designated for use as habitat for fish and aquatic life and wildlife, recreation, navigation, and industrial and agricultural water supply. An unnamed pond is located to the south-southwest of the Site.

3.0 FIELD INVESTIGATION AND SAMPLING METHODS

This Task 210 SSI included the advancement of four soil borings, five shallow soil borings, installation of two temporary wells and collection and laboratory analysis of 15 soil samples and two groundwater samples. BL Companies subcontracted Cummins Envirotech, Inc., (CEI) of Old Lyme, Connecticut to advance the borings and to install the temporary wells. The soil boring locations are depicted on **ENV-01** and **ENV-02**.

Soil samples were analyzed for regulated constituents of concern associated with the roadway, and nearby property uses. **Table 1** in **Appendix B** provides a summary of the sampling rationale and the laboratory analyses requested for each soil sample. The following sections summarize the field investigation and sampling methodologies used during this investigation.

3.1 Soil Boring Installation and Sampling

On June 21, 2017, four soil borings, identified as B-1 through B-4, were advanced to a depth of 5 to 18 ftbg using a track-mounted Geoprobe direct-push drill rig. Soil samples were obtained continuously during advancement of the borings using a 2-inch diameter, 5-foot long, sampling device equipped with disposable acetate liners. In addition, shallow soil samples identified as HA-1, HA-2, and HA-3, were collected to a depth of 2 ftbg using a hand-auger. Due to the presence of elevated SVOCs and ETPH in soil boring B-1, two additional shallow soil samples identified as B-1a and B-1b were collected to a depth of 2 ftbg using a hand auger, on July 13, 2017.

A representative portion of each 5-foot soil core and shallow soil samples were screened with a PID to detect estimated quantities of total VOCs in vapor emitted from the soil. The PID was equipped with a 10.6 eV bulb and was calibrated to isobutylene standard gas (100 parts per million (ppm)). The results of the PID screening ranged from 0.0 to 0.6 ppm and are provided on the boring logs in **Appendix C**. No odors or staining were observed in any borings.

Soil samples were selected for laboratory analysis based upon observations (physical evidence of contamination and/or lithology change), the results of the field screening, and anticipated excavation depths. The samples were submitted under proper chain of custody to SGS Accutest of New England, a State of Connecticut Department of Public Health certified environmental testing laboratory.

Following soil sampling, a 1-inch diameter PVC screen and riser pipe were inserted into borings B-3/GW and B-4/GW, as temporary groundwater wells. The temporary wells remained dry; therefore, no groundwater samples were collected.

4.0 REGULATORY CRITERIA

The soil analytical results were compared to the numeric criteria listed in the Connecticut DEEP Remediation Standard Regulations (RSRs), sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies, dated June 2013, and compared to the published 2015 numeric criteria for additional polluting substances not promulgated in the June 2013 RSRs. The RSRs were developed by the DEEP to define the remediation performance standards for soil and groundwater to be protective of human health and the environment.

The RSRs apply specifically to sites at which remedial actions are required by the DEEP under Chapters 445 or 446k of the Connecticut General Statutes (CGS) such as under an administrative order, a transfer of an establishment under CGS Section 22a-134a, and sites that are enrolled in the Voluntary Remediation Program under CGS Sections 22a-133x or 22a-133y.

The Site is not regulated under any of the above State statutes; however, BL Companies used the numeric criteria stated above as guidelines to evaluate concentrations of regulated compounds detected in soil. DEEP defines polluted soil as containing any substance at a concentration above the analytical detection limit. Contaminated soil is defined as any substance whose concentration exceeds the numeric criteria of the RSRs. Both classifications require special handling, re-use, and disposal requirements.

The following sections provide a summary of the soil criteria utilized during this Task 210 SSI.

4.1 Soil Criteria

Direct Exposure Criteria (DEC)

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.

The RSRs provide two sets of DEC, one for residential land use (RES DEC) and another for industrial/commercial land use (I/C DEC). The CTDEEP RSRs define "residential activity" under CGS Section 22a-133k-1(a) to include any activity related to a residence or dwelling, or to a school, hospital, day care center, playground, or outdoor recreation area. Remediation to the RES DEC is required unless an ELUR is recorded that restricts residential use. For this project, BL Companies compared the soil analytical results to both the RES DEC and I/C DEC.

Pollutant Mobility Criteria (PMC)

The PMC are designed to protect groundwater quality by reducing or eliminating the potential for migration of pollutants to groundwater from contaminated soil. The RSRs provide two sets of PMC based on the groundwater classification of the Site, as designated by DEEP. The project is in a "GA" designated area. Therefore, soil analytical results were compared to the GA PMC, which apply to soil located from the ground surface to the depth of the seasonal low water table.

5.0 SUMMARY AND EVALUATION OF ANALYTICAL DATA

5.1 Soil Sample Analytical Results

Soil analytical results are summarized in **Table 2** in **Appendix B** along with the regulatory criteria. The soil analytical laboratory reports are included in **Appendix D**.

VOCs

All soil samples were analyzed for VOCs by EPA Method 8260. Acetone, a common laboratory contaminant, was detected in shallow soil sample HA-3 (0-2') at a concentration of 0.124 milligrams per kilogram (mg/kg), which is below the RSR criteria. VOCs were not detected in any other samples.

SVOCs

All soil samples were analyzed for SVOCs by EPA Method 8270. SVOCs were detected in samples B-1 (0-2'), HA-1 (0-2'), and HA-2 (0-2') at concentrations above the RSR criteria. SVOCs were detected in samples B-1 (2-4'), B-4 (1-3'), B-4 (4-6'), B-4 (10-12'), B-4 (14-16'), and HA-3 (0-2') at concentrations below the RSR criteria. SVOCs were not detected in any other samples.

In addition, several SVOCs were detected in soil sample B-1 (0-2') at concentrations 15 to 30 times the RES DEC and/or I/C DEC of 1 mg/kg. Since the soil was collected from surficial soil (top 2 feet), a significant environmental Hazard (SEH) condition is present. To determine if the SEH condition was due to the presence of asphalt within the sample, BL Companies collected to shallow surficial soil samples adjacent to B-1, identified as B-1a and B-1b. Analytical results confirmed several SVOCs were present at concentrations 15 to 30 times the RES DEC and/or I/C DEC, confirming the presence of an SEH condition at B-1.

ETPH

All soil samples were analyzed for ETPH by CT ETPH Method. ETPH was detected in soil sample B-1 (0-2') at a concentration above the RES DEC, I/C DEC, and GA PMC. ETPH was detected in soil samples B-1 (2-4'), B-2 (1-3'), B-3 (10-12'), B-4 (1-3'), B-4 (4-6'), B-4 (10-12'), B-4 (14-16'), HA-1 (0-2'), HA-2 (0-2'), and HA-3 (0-2') at concentrations below the RSR criteria. ETPH was not detected in any other samples.

Metals

All soil samples were analyzed for total RCRA 8 metals for comparison to the DEC.

- Arsenic was detected in all samples at concentrations ranging from 2.4 to 5.2 mg/kg, which are below the RES DEC and I/C DEC.
- Barium was detected in all samples at concentrations ranging from 30 to 103 mg/kg, which are below the RES DEC and I/C DEC.

- Cadmium was detected in soil sample B-3 (10-12') at a concentration of 0.67 mg/kg, which is below the RES DEC and I/C DEC. Cadmium was not detected in any other samples.
- Chromium was detected in all soil samples at concentrations ranging from 11.6 to 20.5 mg/kg, which are below the RES DEC and I/C DEC.
- Lead was detected in all soil samples at concentrations ranging from 6.3 to 263 mg/kg, which are below the RES DEC and I/C DEC.
- Mercury was detected in five soil samples at concentrations ranging from 0.037 to 0.15 mg/kg, which are below the RES DEC and I/C DEC.
- Silver and selenium were not detected in any soil samples.

The soil samples were additionally analyzed for leachable RCRA 8 metals by SPLP for comparison to the GA PMC.

- SPLP lead was detected in seven soil samples at concentrations ranging from 0.016 to 0.097 mg/L, exceeding the GA PMC. SPLP lead was not detected in any other soil samples.
- SPLP arsenic, barium, cadmium, chromium, mercury, selenium, and silver were not detected in any soil samples.

PCBs

All soil samples were analyzed for PCBs by EPA Method 8082. Aroclor 1260 was detected in sample B-1 (0-2') at a concentration of 0.0894 mg/kg, below RSR criteria. No PCBs were detected in any other soil samples.

Pesticides

All soil samples were analyzed for pesticides by EPA Method 8081.

- 4,4'-DDE was detected in soil samples B-1 (0-2') and HA-2 (0-2') at concentrations above the GA PMC, but below the RES DEC and I/C DEC.
- 4,4'-DDT was detected in soil samples B-1 (0-2'), B-1 (2-4'), HA-1 (0-2'), HA-2 (0-2'), and HA-3 (0-2') at concentrations above the GA PMC, but below the RES DEC and I/C DEC.
- Pesticides were not detected above laboratory reporting limits in the remaining soil samples analyzed.

Reactivity, Ignitability, and Corrosivity

Select soil samples were analyzed for reactive cyanide and sulfide, ignitability, and pH. Reactive sulfide and cyanide were detected at low levels in all samples. Based on the laboratory results, the soil does not exhibit hazardous characteristics of reactivity, ignitability, and corrosivity.

5.2 Quality Assurance (QA)/Quality Control (QC) Results

All samples were analyzed using the DEEP Reasonable Confidence Protocol (RCP), where applicable, and meet the RCP requirements. BL Companies also reviewed the laboratory RCP Certification Report to evaluate the reliability of the analytical data. The case narratives do not indicate any non-conformances that would affect the usability of the data.

Soil

A trip blank sample was prepared at the laboratory and accompanied the sample containers during transport to evaluate the potential for cross-contamination from the surrounding environment during transport. The trip blank samples were analyzed for VOCs. VOCs were not detected in any of the trip blank samples, indicating that there was likely no cross-contamination of the samples during transportation.

A duplicate soil sample was collected from one randomly selected soil sample location, B-4 (4-6'), to evaluate the accuracy of the laboratory analytical data, measured as Relative Percent Difference (RPD) as defined by the DEEP Laboratory Quality Assurance and Quality Control Guidance Document, dated May 2009, revised December 2010. The duplicate was analyzed for VOCs, SVOCs, ETPH, PCBs, pesticides, and total and SPLP RCRA 8 metals. There were no RPDs greater than the acceptable RPD of 50 for non-aqueous samples based on the analytical results.

6.0 POTENTIAL SOURCES OF CONTAMINATION, RECEPTORS, 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, an evaluation of potential pathways for migration, and the identification of preliminary Areas of Environmental Concern (AOECs) within the project area.

Based on the Task 210 SSI results, the following AOECs were identified:

AOEC 1 (Site-Wide) – Contaminated Soil in the Vicinity of Borings B-2, B-4, HA-1, HA-2, and HA-3

SVOCs, ETPH, pesticides, and SPLP lead were detected at concentrations exceeding RSR criteria in soil samples collected at depths ranging from 0 to 4 ftbg. Therefore, any soil removed from AOEC 1 should be reused onsite within AOEC 1 or handled as controlled material. The source of the elevated levels is likely associated with fill material used during construction of the bridge and typical roadway operations.

Proposed work within AOEC 1 includes the replacement of the bridge structure, as well as, the reconstruction of approximately 785 feet of approach roadways and construction of new sidewalks on an additional 360 feet along West Street. Potential receptors of the impacted soil include workers involved in the construction activities.

SEH AOEC (B-1) – Contaminated Soil in the Vicinity of Boring B-1

SVOCs were detected at concentrations exceeding the SEH threshold values from 0 to 2 ftbg. ETPH, pesticides, and SPLP lead were detected at concentrations exceeding RSR criteria in soil samples collected at depths from 0 to 2 ftbg. The source of the elevated levels is unknown but likely associated with fill material or runoff from the adjacent roadway. BL Companies will prepare a separate written report to notify DEEP of the SEH condition with recommendations to address the condition during construction.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the analytical data collected by BL Companies, a preliminary site wide AOEC and SEH AOEC were identified within the project area, as summarized below:

- Soil within AOEC 1 (Site-Wide) contains SVOCs, ETPH, pesticides, and SPLP lead at concentrations above RSR criteria and therefore should be handled or managed as contaminated material.

- Soil within SEH AOEC (B-1) contains SVOCs at concentrations above SEH threshold values, ETPH, lead, and pesticides above RSR criteria, and therefore should be handled or managed as contaminated material.

Based on the results of this Task 210 SSI, BL Companies recommends that a Task 310 – Plans, Specifications, and Estimates be assigned to prepare plans and specifications for the proper management and/or disposal of contaminated materials (soil) that may be reused, removed, handled, transported, or disposed during construction activities and for the establishment of appropriate worker health and safety protocols.

Additionally, documentation notifying DEEP of the SEH condition with a plan to address the SHE Condition is required.

8.0 LIMITATIONS

The conclusions stated above are based solely on the information described in this report. The data and observations generated during this investigation reflect the conditions found on the project site on the dates and at the locations specified. Where visual observations are included in the report, they represent conditions at the time of investigation, and may not be indicative of past or future conditions. The data cannot be extrapolated to locations on the site that were not tested, or to compounds for which tests were not conducted.

Latent conditions and other information may become evident in the future based on currently unavailable evidence. BL Companies assumes no responsibility for such conditions or for the inspection, engineering, or repair that might be required to discover or correct such factors. Should such evidence arise, it should be forwarded to BL Companies so that additional conclusions and recommendations may be evaluated as necessary.

This report has been completed solely for the benefit and individual use of the client. No part thereof, nor any copy of the same, shall be used for any purpose by anyone other than the client. No disclosure or reliance of this report may be made without the prior written consent of BL Companies.

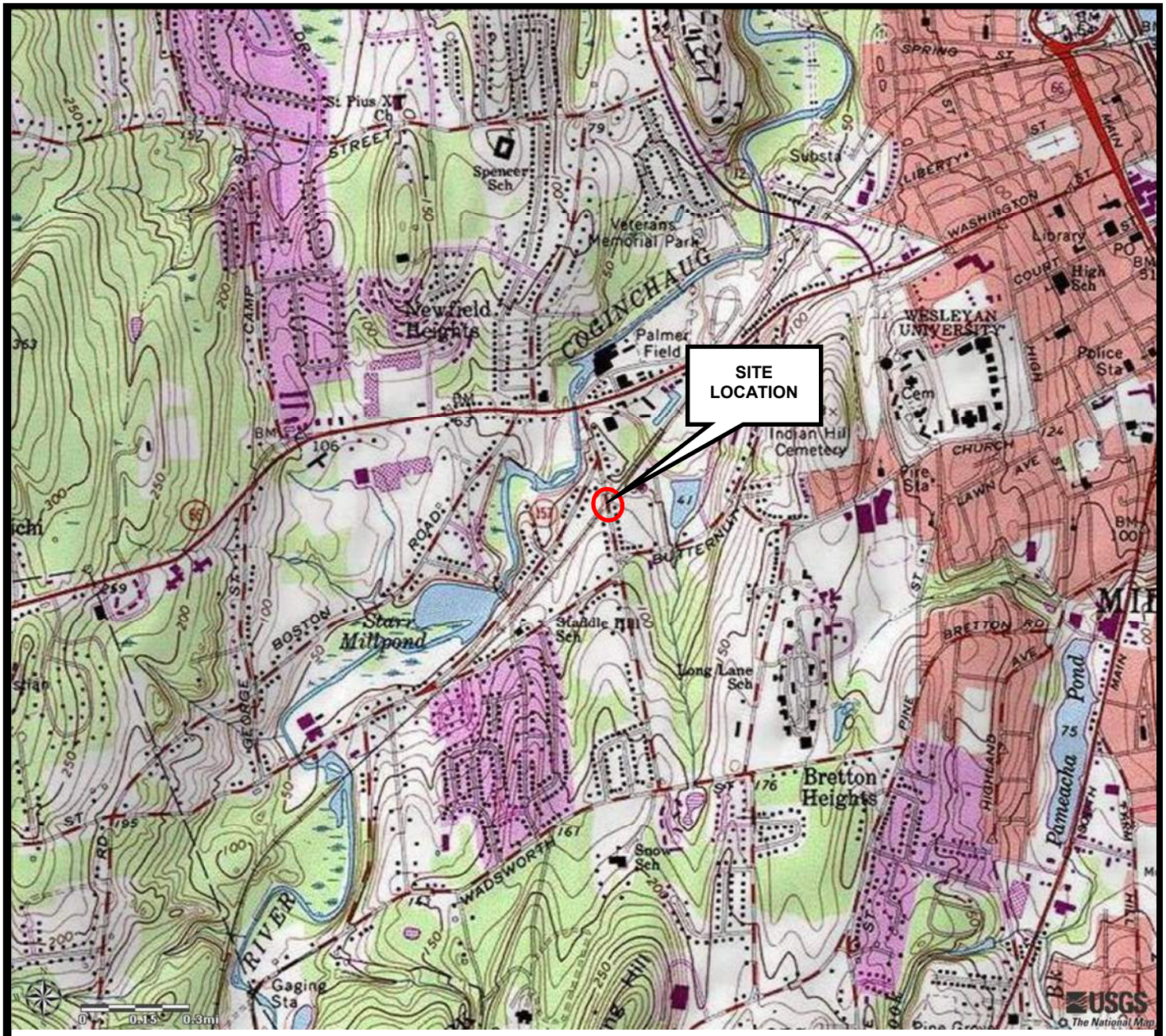
9.0 REFERENCES

1. State of Connecticut Department of Energy and Environmental Protection (CTDEEP), Remediation Standard Regulations, Sections 22a-133k-1 through –3 of the Regulations of Connecticut State Agencies, June 2013.
2. CTDEEP, "Water Quality Classifications Map of Middletown", November 2016.
3. CTDEEP, "Recommended Numeric Criteria for Common Additional Polluting Substances and Certain Alternative Criteria", December 10, 2015.
4. State of Connecticut Department of Transportation, Division of Environmental Compliance, "On-Call Contaminated Soil/Groundwater Scopes" manual, dated 2010.
5. Rogers, John, USGS, "Bedrock Geological Map of Connecticut", dated 1985.
6. Stone, J., USGS, "Surficial Materials Map of Connecticut", dated 1992.

APPENDIX A

FIGURES

Figure 1 – Site Location Map
ENV-01 – Site Investigation Plan
ENV-02 – Site Investigation Plan



Base map is a reproduction of the U.S.G.S. 7.5 Minute Middletown Quadrangle

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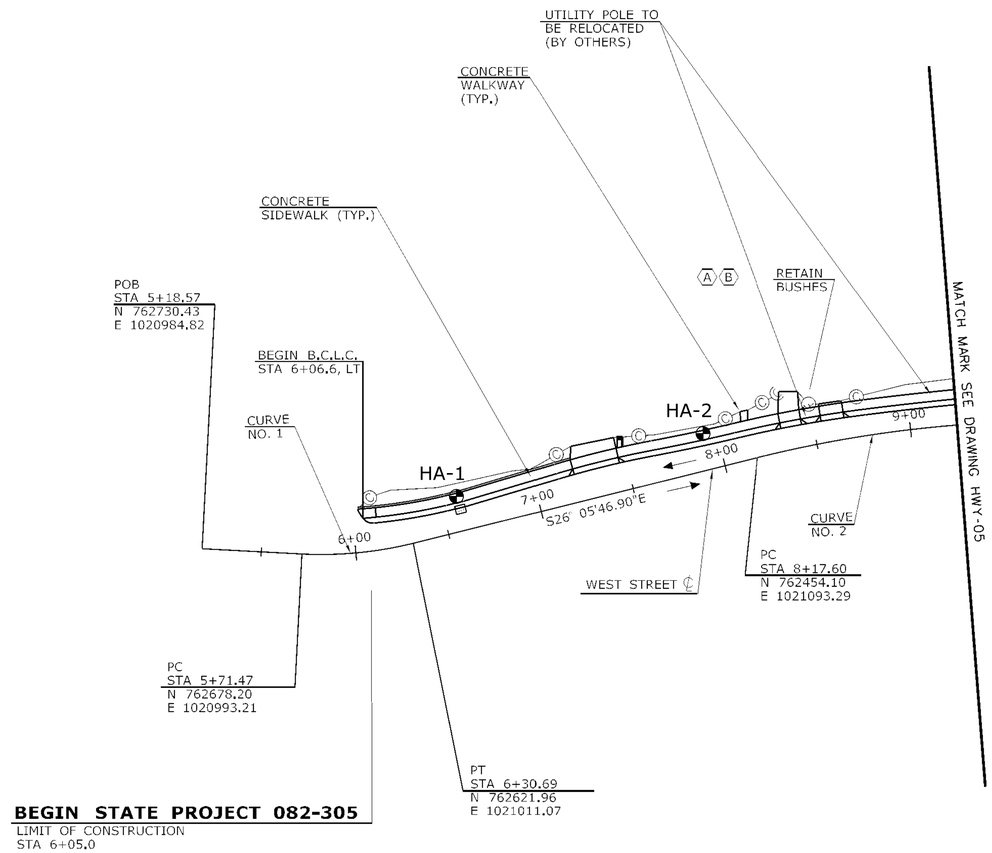
FIGURE 1
SITE LOCATION MAP

Replacement of Bridge No. 03993
West Street over P&W Railroad
Middletown, CT

Project No.
14EC0058

BL Companies



LEGEND

- SOIL BORING
- SOIL BORING/TEMPORARY WELL

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

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BL Companies
ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING

PROJECT TITLE:

REPLACEMENT OF BRIDGE NO. 03993 - WEST STREET OVER THE P&W RAILROAD

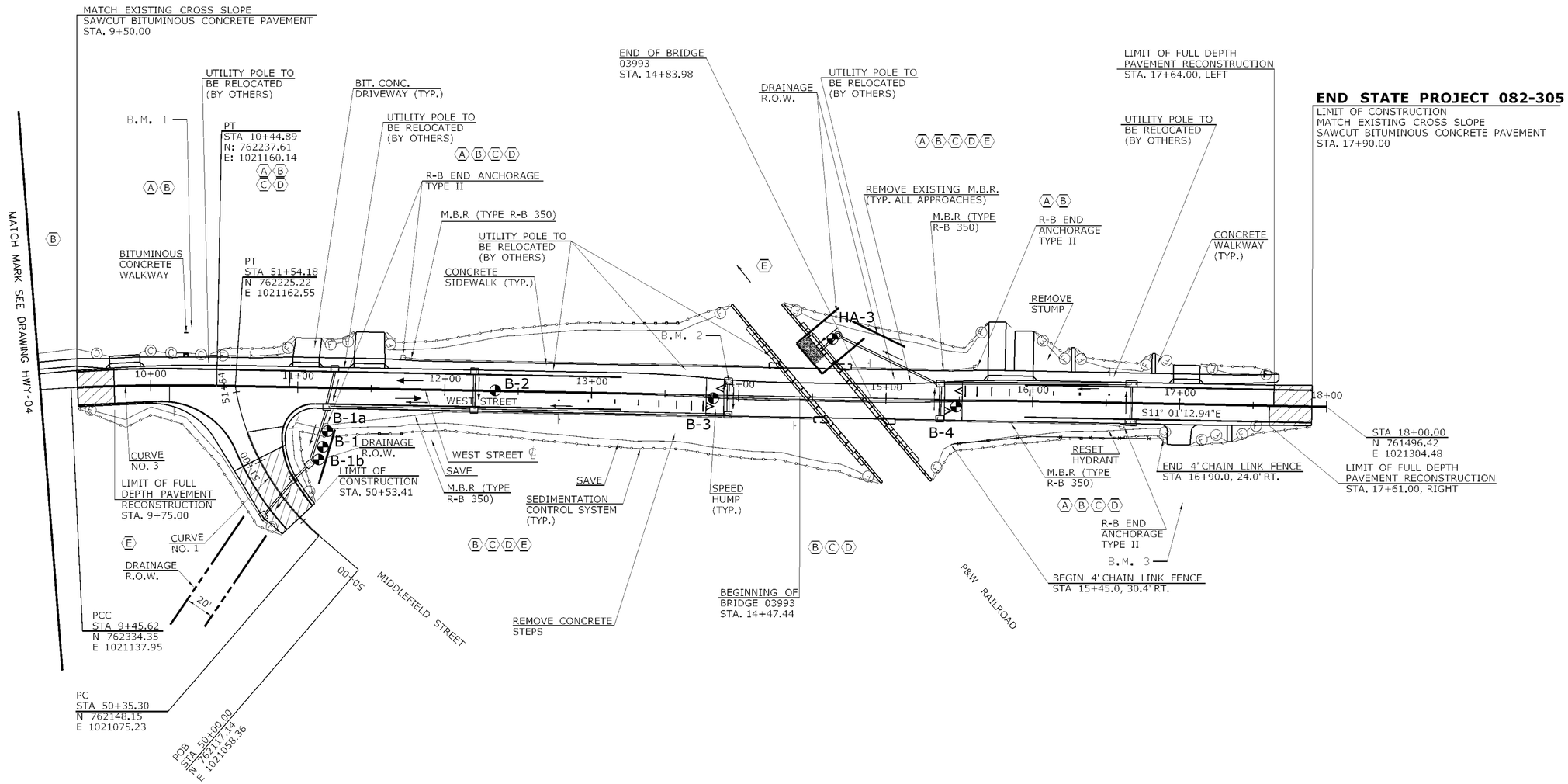
TOWN: **MIDDLETOWN**

DRAWING TITLE: **SITE INVESTIGATION PLAN**

PROJECT NO. **082-305**

DRAWING NO. **ENV-01**

SHEET NO.



LEGEND

- SOIL BORING
- SOIL BORING/TEMPORARY WELL

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 7/18/2017

DESIGNER/DRAFTER: JO/JK

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DEPARTMENT OF TRANSPORTATION

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BL Companies
ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING

PROJECT TITLE:

REPLACEMENT OF BRIDGE NO. 03993 - WEST STREET OVER THE P&W RAILROAD

TOWN: **MIDDLETOWN**

DRAWING TITLE: **SITE INVESTIGATION PLAN**

PROJECT NO. **082-305**

DRAWING NO. **ENV-02**

SHEET NO.

APPENDIX B

TABLES

Table 1 – Sample Location Rationale and Selected Analyses
Table 2 – Soil Analytical Results

Table 1
Sample Location Rationale and Selected Analyses
Replacement of Bridge No. 03993 - West Street Over P and W Railroad
Middletown, Connecticut
ConnDOT Project No. 0082-0305

Sample Identification	Matrix	Sample Interval	Location Rationale	VOCs (8260)	SVOCs (8270)	ETPH	PCBs (8082)	Pesticides (8081)	Total RCRA 8 Metals	SPLP RCRA 8 Metals	Ignitability, Reactivity, pH
B-1	Soil	0'-2'	Intersection of West Street and Middlefield Street in the vicinity of proposed drainage structures.	X	X	X	X	X	X	X	X
		2'-4'		X	X	X	X	X	X	X	
B-2	Soil	1'-3'	North of bridge within West Street/proposed roadway reconstruction.	X	X	X	X	X	X	X	X
		3'-5'		X	X	X	X	X	X	X	
B-3	Soil	2'-4'	North of bridge within West Street/proposed roadway reconstruction.	X	X	X	X	X	X	X	X
		6'-8'		X	X	X	X	X	X	X	
		10'-12'		X	X	X	X	X	X	X	
		15'-17'		X	X	X	X	X	X	X	
B-4	Soil	1'-3'	South of Bridge, East side of West Street/proposed roadway reconstruction	X	X	X	X	X	X	X	X
		4'-6'		X	X	X	X	X	X	X	
		10'-12'		X	X	X	X	X	X	X	
		14'-16'		X	X	X	X	X	X	X	
HA-1	Soil	0'-2'	East side of West St, within proposed sidewalk and cut area.	X	X	X	X	X	X	X	X
HA-2	Soil	0'-2'	East side of West St, within proposed sidewalk and cut area.	X	X	X	X	X	X	X	X
HA-3	Soil	0'-2'	East Side of West St and south of P&W train tracks, within drainage R.O.W.	X	X	X	X	X	X	X	X

Table 2
Soil Analytical Results
Replacement of Bridge No. 03993 - West St over P and W Railroad
Middletown, Connecticut
ConnDOT Project No. 0082-0305

Parameters	CTDEEP RSR Numeric Criteria			Concentration of Compound in Sample																		
	RES DEC	I/C DEC	GA PMC	B-1 0-2' 6/22/2017	B-1a 0-2' 7/13/2017	B-1b 0-2' 7/13/2017	B-1 2-4' 6/22/2017	B-2 1-3' 6/22/2017	B-2 3-5' 6/22/2017	B-3 2-4' 6/22/2017	B-3 6-8' 6/22/2017	B-3 10-12' 6/22/2017	B-3 15-17' 6/22/2017	B-4 1-3' 6/22/2017	B-4 4-6' 6/22/2017	B-4 4-6' DUP 6/22/2017	B-4 10-12' 6/22/2017	B-4 14-16' 6/22/2017	HA-1 0-2' 6/22/2017	HA-2 0-2' 6/22/2017	HA-3 0-2' 6/22/2017	Trip Blank 6/22/2017
ETPH (mg/kg)	500	2,500	500	**4,310**	222	**2,050**	262	23	ND	ND	ND	255	ND	120	192	286	270	315	135	206	176	NA
VOCs (mg/kg)																						
Acetone	500	1,000	14	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.124	ND
SVOCs (mg/kg)																						
Acenaphthene	1,000*	2,500*	8.4*	0.789	0.889	0.904	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Acenaphthylene	1,000	2,500	8.4	**14.1**	1.22	**15**	0.257	ND	ND	ND	ND	ND	ND	0.323	0.226	0.182	ND	0.116	0.745	1.5	0.32	NA
Anthracene	1,000	2,500	40	11.1	0.845	7.94	ND	ND	ND	ND	ND	ND	ND	0.152	0.15	ND	ND	ND	0.386	0.824	0.218	NA
Benzo(a)anthracene	1	7.8	1	**33.2**	**2.86**	**24.4**	0.338	ND	ND	ND	ND	ND	ND	0.616	0.705	0.509	0.274	0.289	**1.36**	**3.6**	0.754	NA
Benzo(a)pyrene	1	1	1	**35.6**	**3.29**	**35.3**	0.494	ND	ND	ND	ND	ND	ND	0.784	0.843	0.628	0.342	0.369	**1.77**	**4.9**	0.943	NA
Benzo(b)fluoranthene	1	7.8	1	**37.2**	**3.35**	**33.9**	0.511	ND	ND	ND	ND	ND	ND	0.74	0.792	0.631	0.33	0.379	**1.5**	**4.85**	0.934	NA
Benzo(g,h,i)perylene	8.4*	78*	1*	**22.1**	**2.4**	**32**	0.399	ND	ND	ND	ND	ND	ND	0.484	0.493	0.394	0.221	0.24	**1.21**	**3.4**	0.651	NA
Benzo(k)fluoranthene	8.4	78	1	**27.1**	**2.58**	**30.5**	0.461	ND	ND	ND	ND	ND	ND	0.701	0.797	0.587	0.34	0.336	**1.4**	**3.55**	0.878	NA
Carbazole	31*	290*	0.2*	**2.56**	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.234**	ND	NA
Chrysene	84*	780*	1*	**38.8**	**3.67**	**34.2**	0.519	ND	ND	ND	ND	ND	ND	0.75	0.89	0.66	0.379	0.407	**1.44**	**4.24**	0.914	NA
Dibenz(a,h)anthracene	1*	1*	1*	**7.29**	0.788	**8.47**	ND	ND	ND	ND	ND	ND	ND	0.18	0.187	0.144	ND	ND	0.416	0.96	0.187	NA
Dibenzofuran	68*	1,000*	0.2*	**0.978**	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Fluoranthene	1,000	2,500	5.6	**72**	**6.06**	**62.8**	0.808	ND	ND	ND	ND	ND	ND	0.971	1.37	1.04	0.603	0.619	1.79	**7.85**	1.55	NA
Fluorene	1,000	2,500	5.6	3.04	0.145	**1.25**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Indeno(1,2,3-cd)pyrene	1*	7.8*	1*	**22.6**	**2.2**	**28.8**	0.43	ND	ND	ND	ND	ND	ND	0.528	0.537	0.422	ND	ND	**1.29**	**3.67**	0.701	NA
2-Methylnaphthalene	270*	1,000*	0.56*	**0.736**	NA	0.288	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Naphthalene	1,000	2,500	5.6	1.08	0.0915	0.75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Phenanthrene	1,000	2,500	4	**44.4**	2.38	**20.1**	0.335	ND	ND	ND	ND	ND	ND	0.267	0.481	0.344	0.194	0.213	0.43	2.53	0.623	NA
Pyrene	1,000	2,500	4	**74.7**	**5.26**	**53.9**	0.897	ND	ND	ND	ND	ND	ND	1.06	1.4	1.01	0.583	0.613	2.18	**7.79**	1.55	NA
Total RCRA 8 Metals (mg/kg)																						
Arsenic	10	10	--	2.4	NA	NA	4.6	3.3	3	5.2	3	3.2	2.9	2.9	3.3	4.8	3.1	3.1	3.1	2.6	3.2	NA
Barium	4,700	140,000	--	30	NA	NA	78.3	103	38.4	47.8	73.1	52.4	48.3	30.5	41.5	43.1	32.7	44.5	50.4	35.6	42.6	NA
Cadmium	34	1,000	--	ND	NA	NA	ND	ND	ND	ND	ND	0.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Chromium, Total	100**	100**	--	15.4	NA	NA	20.5	14.1	13.3	14.3	14.9	20.5	13.5	11.6	14.2	16.9	12.1	19.9	17.6	18.1	18.8	NA
Lead	400	1,000	--	263	NA	NA	196	32.3	6.3	11.1	9.4	21	6.3	32	35.1	42.1	10.3	13	28.2	118	136	NA
Mercury	20	610	--	ND	NA	NA	0.15	0.037	ND	ND	ND	ND	ND	0.038	ND	ND	ND	ND	ND	0.089	0.053	NA
SPLP RCRA 8 Metals (mg/L)																						
Lead	--	--	0.015	**0.058**	NA	NA	**0.024**	**0.019**	ND	ND	ND	ND	ND	**0.023**	ND	ND	ND	ND	**0.016**	**0.097**	**0.024**	NA
PCBs (mg/kg)	1	10	--																			
Aroclor 1260	1	10	--	0.0894	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Pesticides (mg/kg)																						
4,4' - DDE	1.8*	17*	0.003*	**0.0242**	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0236**	ND	NA
4,4' - DDT	1.8*	17*	0.003*	**1.08**	NA	NA	**0.0141**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0118**	**0.0461**	0.0101	NA
Ignitability (degrees F)	--	--	--	>200	NA	NA	NA	>200	NA	>200	NA	NA	NA	>200	NA	NA	NA	NA	>200	>200	>200	NA
pH	--	--	--	5.99	NA	NA	NA	7.37	NA	5.49	NA	NA	NA	6.45	NA	NA	NA	NA	6.12	6.68	5.17	NA
Reactivity Cyanide (mg/kg)	--	--	--	<11	NA	NA	NA	<11	NA	<11	NA	NA	NA	<11	NA	NA	NA	NA	<11	<11	<12	NA
Reactivity Sulfide (mg/kg)	--	--	--	<110	NA	NA	NA	<110	NA	<110	NA	NA	NA	<110	NA	NA	NA	NA	<110	<110	<120	NA

CTDEEP = Connecticut Department of Energy and Environmental Protection
RSR = Remediation Standard Regulations
RES DEC = Residential Direct Exposure Criteria
I/C DEC = Industrial-Commercial Direct Exposure Criteria
GA PMC = GA Pollutant Mobility Criteria
mg/kg = milligrams per kilogram
mg/L = milligrams per liters
ND = Not detected above laboratory reporting limits
ND < = Not detected (noted when Detection Limit > Criteria)

NA = Not Analyzed
NE = Not Established
* = published 2015 numeric criteria for additional polluting substances not established in 2013 RSRs
** = hexavalent chromium criteria
-- = criteria does not apply
Only detected compounds are listed on table
Shade/Bold = Exceeds Numeric Criteria
= Exceeds Significant Environmental Hazard threshold values.

APPENDIX C

BORING LOGS

Architecture
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BL Companies

BORING LOG

Boring No.: B-1

Project No.:	14EC0058	Boring Co.:	CEI
Site Name:	West Street	Drill Rig:	7822DT
Date:	6/21/2017	Drill Method:	Direct Push
Logged by:	Wesley Johnson	Driller:	Bob Miller
Weather:	Partly Cloudy, 70°F	Borehole Dia:	3.25 Inches

Depth (ft)	Recovery (in)	Graphic Log	Description	Sample	PID	Completion Diagram	Remarks
	40		TOPSOIL (SILT and roots)(2"). Red/brown fine to coarse SAND, little silt, trace fine to coarse gravel (15").		0.0		Sample collected at 0-2'.
			Red brown SILT and CLAY, trace fine to coarse sand, damp (23").		0.0		Sample collected at 2-4'.
5			End of exploration at 5'.				
10							
15							
20							

Proportions Used: Trace = 1 to 10%, Little = 10 to 20%, Some = 20 to 30%, And = 30 to 50%

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BORING LOG

Boring No.: B-2

Project No.:	14EC0058	Boring Co.:	CEI
Site Name:	West Street	Drill Rig:	7822DT
Date:	6/21/2017	Drill Method:	Direct Push
Logged by:	Wesley Johnson	Driller:	Bob Miller
Weather:	Partly Cloudy, 70°F	Borehole Dia:	3.25 Inches

Depth (ft)	Recovery (in)	Graphic Log	Description	Sample	PID	Completion Diagram	Remarks
			ASPHALT (9").		0.2		
			Brown/gray fine to coarse GRAVEL, little fine to coarse sand, little silt (7").		0.0		
	39		Red/brown fine to coarse SAND, some silt, trace fine to coarse gravel (23").		0.0		Sample collected at 1-3'.
							Sample collected at 3-5'.
5			End of exploration at 5'.				
10							
15							
20							

Proportions Used: Trace = 1 to 10%, Little = 10 to 20%, Some = 20 to 30%, And = 30 to 50%

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BORING LOG

Boring No.: B-3/GW

Project No.:	14EC0058	Boring Co.:	CEI
Site Name:	West Street	Drill Rig:	7822DT
Date:	6/21/2017	Drill Method:	Direct Push
Logged by:	Wesley Johnson	Driller:	Bob Miller
Weather:	Partly Cloudy, 75°F	Borehole Dia:	3.25 Inches

Depth (ft)	Recovery (in)	Graphic Log	Description	Sample	PID	Completion Diagram	Remarks
	48		ASPHALT (7").		0.6		
			Grey/brown fine to coarse GRAVEL, little fine to coarse sand, trace silt (8").		0.0		
			Red/brown fine SAND and SILT, trace fine to coarse gravel, trace cobbles (33").		0.0		Sample collected at 2-4'.
5			Red/brown fine SAND and SILT, trace fine to coarse gravel, trace cobbles, damp (40").				
	40				0.0		Sample collected at 6-8'.
10	44		Red/brown fine to coarse SAND and SILT, trace fine to coarse gravel, trace cobbles, damp (34").		0.0		Sample collected at 10-12'.
			Red/brown SILT, some fine to coarse sand, trace clay, damp/wet (10").		0.0		
15	47		Red/brown SILT and fine SAND, trace fine to coarse gravel, damp/wet (41").		0.0		Sample collected at 15-17'.
			Brownstone (bedrock) (6").		0.0		Temporary well set at 18'. No water.
			Refusal at 18'.				
20							

Proportions Used: Trace = 1 to 10%, Little = 10 to 20%, Some = 20 to 30%, And = 30 to 50%

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BORING LOG

Boring No.: B-4/GW

Project No.:	14EC0058	Boring Co.:	CEI
Site Name:	West Street	Drill Rig:	7822DT
Date:	6/21/2017	Drill Method:	Direct Push
Logged by:	Wesley Johnson	Driller:	Bob Miller
Weather:	Partly Cloudy, 75°F	Borehole Dia:	3.25 Inches

Depth (ft)	Recovery (in)	Graphic Log	Description	Sample	PID	Completion Diagram	Remarks
			ASPHALT (6").				
	36		Red/brown SILT and fine SAND, trace fine to coarse gravel, damp (30").		0.0		Sample collected at 1-3'.
5	47		Red/brown fine to coarse SAND and SILT, trace fine to coarse gravel, damp (47").		0.0		Sample collected at 4-6'.
10	53		Red/brown fine to coarse SAND and SILT, trace fine to coarse gravel, damp/wet (53").		0.0		Sample collected at 10-12'.
15	24		Red/brown fine to coarse SAND and SILT, trace fine to coase gravel, damp (18").		0.0		Sample collected at 14-16'.
			BROWNSTONE (bedrock) (6"). Refusal at 16'.				Bedrock at 16'. Temporary well set at 16'. No water.
20							

Proportions Used: Trace = 1 to 10%, Little = 10 to 20%, Some = 20 to 30%, And = 30 to 50%

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BORING LOG

Boring No.: HA-1

Project No.:	14EC0058	Boring Co.:	BL Companies
Site Name:	West Street	Drill Rig:	Hand Auger
Date:	6/21/2017	Drill Method:	Hand Auger
Logged by:	Wesley Johnson	Driller:	Wesley Johnson
Weather:	Partly Cloudy, 75°F	Borehole Dia:	1.5 Inches

Depth (ft)	Recovery (in)	Graphic Log	Description	Sample	PID	Completion Diagram	Remarks
			Red/brown fine to coarse SAND, some silt, trace fine to coarse gravel (2').		0.0		Sample collected at 0-2'.
			End of exploration 2'.				
5							
10							
15							
20							

Proportions Used: Trace = 1 to 10%, Little = 10 to 20%, Some = 20 to 30%, And = 30 to 50%

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BORING LOG

Boring No.: HA-2

Project No.:	14EC0058	Boring Co.:	BL Companies
Site Name:	West Street	Drill Rig:	Hand Auger
Date:	6/21/2017	Drill Method:	Hand Auger
Logged by:	Wesley Johnson	Driller:	Wesley Johnson
Weather:	Partly Cloudy, 75°F	Borehole Dia:	1.5 Inches

Depth (ft)	Recovery (in)	Graphic Log	Description	Sample	PID	Completion Diagram	Remarks
			Red/brown fine to coarse SAND, some silt, trace fine to coarse gravel (2').		0.0		Sample collected at 0-2'.
			End of exploration 2'.				
5							
10							
15							
20							

Proportions Used: Trace = 1 to 10%, Little = 10 to 20%, Some = 20 to 30%, And = 30 to 50%

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BORING LOG

Boring No.: HA-3

Project No.:	14EC0058	Boring Co.:	BL Companies
Site Name:	West Street	Drill Rig:	Hand Auger
Date:	6/21/2017	Drill Method:	Hand Auger
Logged by:	Wesley Johnson	Driller:	Wesley Johnson
Weather:	Partly Cloudy, 75°F	Borehole Dia:	1.5 Inches

Depth (ft)	Recovery (in)	Graphic Log	Description	Sample	PID	Completion Diagram	Remarks
			Red/brown fine to coarse SAND and SILT, trace fine to coarse gravel (2').		0.0		Sample collected at 0-2'.
			End of exploration 2'.				
5							
10							
15							
20							

Proportions Used: Trace = 1 to 10%, Little = 10 to 20%, Some = 20 to 30%, And = 30 to 50%

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APPENDIX D

LABORATORY ANALYTICAL REPORTS

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e-Hardcopy 2.0
Automated Report

Technical Report for

BL Companies

Replacement of Bridge No. 03993, West Street, Middletown, CT

14EC0058

SGS Accutest Job Number: MC50728

Sampling Date: 06/21/17

Report to:

BL Companies
355 Research Parkway
Meriden, CT 06450
jkloss@blcompanies.com

ATTN: Joy Kloss

Total number of pages in report: **330**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Tammy McCloskey 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NJ (MA926) PA (6801121) LA (AI171119) ND (R-188) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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SGS Accutest

Sample Summary

BL Companies

Job No: MC50728

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC50728-1	06/21/17	12:45	WJ	06/22/17	SO	Soil	HA-1 0-2'
MC50728-1A	06/21/17	12:45	WJ	06/22/17	SO	Soil	HA-1 0-2'
MC50728-2	06/21/17	12:20	WJ	06/22/17	SO	Soil	HA-2 0-2'
MC50728-2A	06/21/17	12:20	WJ	06/22/17	SO	Soil	HA-2 0-2'
MC50728-3	06/21/17	13:05	WJ	06/22/17	SO	Soil	HA-3 0-2'
MC50728-3A	06/21/17	13:05	WJ	06/22/17	SO	Soil	HA-3 0-2'
MC50728-4	06/21/17	11:30	WJ	06/22/17	SO	Soil	B-1 0-2'
MC50728-4A	06/21/17	11:30	WJ	06/22/17	SO	Soil	B-1 0-2'
MC50728-5	06/21/17	11:30	WJ	06/22/17	SO	Soil	B-1 2-4'
MC50728-5A	06/21/17	11:30	WJ	06/22/17	SO	Soil	B-1 2-4'
MC50728-6	06/21/17	11:05	WJ	06/22/17	SO	Soil	B-2 1-3'
MC50728-6A	06/21/17	11:05	WJ	06/22/17	SO	Soil	B-2 1-3'
MC50728-7	06/21/17	11:10	WJ	06/22/17	SO	Soil	B-2 3-5'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SGS Accutest

Sample Summary
(continued)

BL Companies

Job No: MC50728

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC50728-7A	06/21/17	11:10	WJ	06/22/17	SO	Soil	B-2 3-5'
MC50728-8	06/21/17	10:10	WJ	06/22/17	SO	Soil	B-3 2-4'
MC50728-8A	06/21/17	10:10	WJ	06/22/17	SO	Soil	B-3 2-4'
MC50728-9	06/21/17	10:20	WJ	06/22/17	SO	Soil	B-3 6-8'
MC50728-9A	06/21/17	10:20	WJ	06/22/17	SO	Soil	B-3 6-8'
MC50728-10	06/21/17	10:30	WJ	06/22/17	SO	Soil	B-3 10-12'
MC50728-10A	06/21/17	10:30	WJ	06/22/17	SO	Soil	B-3 10-12'
MC50728-11	06/21/17	10:40	WJ	06/22/17	SO	Soil	B-3 15-17'
MC50728-11A	06/21/17	10:40	WJ	06/22/17	SO	Soil	B-3 15-17'
MC50728-12	06/21/17	09:10	WJ	06/22/17	SO	Soil	B-4 1-3'
MC50728-12A	06/21/17	09:10	WJ	06/22/17	SO	Soil	B-4 1-3'
MC50728-13	06/21/17	09:15	WJ	06/22/17	SO	Soil	B-4 4-6'
MC50728-13A	06/21/17	09:15	WJ	06/22/17	SO	Soil	B-4 4-6'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SGS Accutest

Sample Summary
(continued)

BL Companies

Job No: MC50728

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC50728-14	06/21/17	09:40	WJ	06/22/17	SO	Soil	B-4 10-12'
MC50728-14A	06/21/17	09:40	WJ	06/22/17	SO	Soil	B-4 10-12'
MC50728-15	06/21/17	09:50	WJ	06/22/17	SO	Soil	B-4 14-16'
MC50728-15A	06/21/17	09:50	WJ	06/22/17	SO	Soil	B-4 14-16'
MC50728-16	06/21/17	00:00	WJ	06/22/17	SO	Soil	DUP
MC50728-16A	06/21/17	00:00	WJ	06/22/17	SO	Soil	DUP
MC50728-17	06/21/17	00:00	WJ	06/22/17	SO	Trip Blank Soil	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	BL Companies	**Job No**	MC50728
Site:	Replacement of Bridge No. 03993, West Street, Middletown, CT	**Report Date**	6/30/2017 6:57:02 PM

16 Sample(s), 1 Trip Blank(s) were collected on 06/21/2017 and were received at SGS Accutest New England on 06/22/2017 properly preserved, at 3.8 Deg. C and intact. These Samples received a job number of MC50728. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: SO **Batch ID:** MSM3045

- All samples were analyzed within the recommended method holding time.
- Continuing calibration check standard for 2-butanone, tert-butylbenzene exceeds 20% Difference (biased high). Associated samples are non-detect for this compound.
- All method blanks for this batch meet method specific criteria.
- MSM3045-BS for Acetone: Outside RCP control limits (biased high).
- MC50728-4: Confirmation run.
- MC50728-4 for 4-Bromofluorobenzene: Outside control limits due to possible matrix interference.
- MC50728-3 for Acetone: Initial and Continuing Calibration Verification outside of acceptance criteria. Result may be biased high.
- Continuing Calibration for Dichlorodifluoromethane outside of acceptance criteria (biased low). Reporting Limit response verified by low-level standard.
- Initial calibration verification standard MSM3033-ICV3033 for Acetone, 2-butanone, 2-hexanone exceed 30% difference (response bias high). Associated sample may be biased high or non-detect for this compound.
- MC50728-1,3,4,5 has internal standards outside control limits due to possible matrix interference. Confirmed by reanalysis.

Matrix: SO **Batch ID:** MSM3048

- MC50728-1,3,4,5,6,7,9,10,12,16 has internal standards outside control limits due to possible matrix interference. Confirmed by reanalysis.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Continuing calibration check standard for trichlorofluoromethane, acetone, 2,2-dichloropropane, 1,1,1-trichloroethane, carbon tetrachloride, 1,2-dichloroethane exceeds 20% Difference (biased high). Associated samples are non-detect for this compound.
- Blank Spike Recovery(s) for 1,1,1-Trichloroethane, 1,2-Dichloroethane, Carbon tetrachloride are outside control limits. Associated samples are non-detect for this compound.
- MC50728-3: Confirmation run.
- MC50728-16: Confirmation run.
- MC50728-1: Confirmation run.
- MC50728-5: Confirmation run.
- MC50728-16 for Dibromofluoromethane: Outside control limits due to possible matrix interference. Confirmed by reanalysis.
- Continuing Calibration for Dichlorodifluoromethane outside of acceptance criteria (biased low). Reporting Limit response verified by low-level standard.
- MSM3048-BS for Acetone, 2,2-Dichloropropane: Outside RCP control limits (biased high).
- MC50728-9,-10,-12 for Dibromofluoromethane: Outside RCP control limits (biased high).
- MC50728-1,-4,-5 for 4-Bromofluorobenzene: Outside RCP control limits (biased high).

Matrix: SO **Batch ID:** MSM3049

Volatiles by GCMS By Method SW846 8260C

Matrix: SO	Batch ID: MSM3049

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for 1,1,1-Trichloroethane, 1,2-Dichloroethane, Bromodichloromethane, Carbon tetrachloride are outside control limits. Associated samples are non-detect for this compound.
- Continuing calibration check standard for bromomethane, trichlorofluoromethane, acetone, 2,2-dichloropropane, 1,1,1-trichloroethane, 1,2-dichloroethane, carbon tetrachloride, bromodichloromethane exceeds 20% Difference (biased high). Associated samples are non-detect for this compound.
- MC50728-12: Confirmation run.
- MC50728-9: Confirmation run.
- Continuing Calibration for Tetrahydrofuran outside of acceptance criteria (biased low). Reporting Limit response verified by low-level standard.
- MSM3049-BS for Acetone, 2,2-Dichloropropane, Trichlorofluoromethane: Outside RCP control limits (biased high).
- MC50728-9,12,16 has internal standards outside control limits due to possible matrix interference. Confirmed by reanalysis.
- MC50728-11 through MC50728-16 for Dibromofluoromethane: Outside RCP control limits (biased high).

Extractables by GCMS By Method SW846 8270D

Matrix: SO	Batch ID: OP49803

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for bis(2-Chloroethoxy)methane, bis(2-Chloroethyl)ether, bis(2-Chloroisopropyl)ether, bis(2-Ethylhexyl)phthalate, Butyl benzyl phthalate, Di-n-octyl phthalate, Isophorone, N-Nitroso-di-n-propylamine are outside control limits. Associated samples are non-detect for this compound.
- Continuing Calibration MSR1980-CC1934 for Hexachlorocyclopentadiene outside of acceptance criteriav(biased low). Reporting Limit Response verified by low-level standard.
- Continuing calibration check standard MSR1980-CC1934 for Pyridine, bis(2-Chloroethyl)ether, bis(2-chloroisopropyl)ether, Phenol, 2-nitroaniline, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate exceed 20% Difference (biased high). Associated samples are non-detect for this compound.
- OP49803-BS for Indeno(1,2,3-cd)pyrene: Blank Spike meets program technical requirements.

Extractables by GC By Method CT-ETPH 7/06

Matrix: SO	Batch ID: OP49804

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846 8081B

Matrix: SO **Batch ID:** OP49806

- Quadratic regression is employed for initial calibration standard GBE2772-ICC2772, Signal #2 for 4,4'-DDT, Methoxychlor.
- Continuing calibration check standard GBE2772-ECC2772, signal #2 for majority compounds exceed 20% Dev (biased high). Associated samples are non-detect for this compounds.
- Quadratic regression is employed for initial calibration standard GBE2773-ICC2773, signal #2 for Alachlor, 4,4'-DDT, Methoxychlor.
- Continuing calibration check standard GBE2773-ECC2773, signal #2 for Gamma-BHC, Heptachlor, Endosulfan-I exceed 20% Dev (biased high). Associated samples are non-detect for this compounds. GBE2773-ECC2773, signal #2 for 4,4'-DDT, Methoxychlor, DCB exceed 20% Dev (biased low) due to possible residual matrix interference. Confirmed by reanalysis.
- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- MC50728-1,2,5 for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- MC50728-4 for Decachlorobiphenyl: Outside control limits due to matrix interference. Confirmed by reanalysis.
- OP49806-MB for Decachlorobiphenyl (sig#1), MC50728-5 for Decachlorobiphenyl (sig#2): Outside RCP control limits (biased high).

Extractables by GC By Method SW846 8082A

Matrix: SO **Batch ID:** OP49805

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- MC50728-4 for Aroclor 1260: Confirmation value >40% RPD.

Metals By Method SW846 6010C

Matrix: LEACHATE **Batch ID:** N:MP1635

- Analysis performed at SGS Accutest, Dayton, NJ.

Matrix: SO **Batch ID:** N:MP1622

- Analysis performed at SGS Accutest, Dayton, NJ.

Metals By Method SW846 7470A

Matrix: LEACHATE **Batch ID:** N:MP1647

- Mercury: Analysis performed at SGS Accutest, Dayton, NJ.

Metals By Method SW846 7471B

Matrix: SO **Batch ID:** N:MP1642

- Mercury: Analysis performed at SGS Accutest, Dayton, NJ.

Wet Chemistry By Method SM2540 G-97

Matrix: SO **Batch ID:** N:GN66130

- Solids, Percent: Analysis performed at SGS Accutest, Dayton, NJ.

Wet Chemistry By Method SW846 1010A/ASTM D93

Matrix: SO **Batch ID:** N:GN66235

- Ignitability (Flashpoint): Analysis performed at SGS Accutest, Dayton, NJ.

Wet Chemistry By Method SW846 9045D

Matrix: SO	Batch ID: N:GN66181

- pH: Analysis performed at SGS Accutest, Dayton, NJ.

Wet Chemistry By Method SW846 CHAP7/9012 B

Matrix: SO	Batch ID: N:GP6220

- Cyanide Reactivity: Analysis performed at SGS Accutest, Dayton, NJ.

Wet Chemistry By Method SW846 CHAP7/9034

Matrix: SO	Batch ID: N:GP6219

- Sulfide Reactivity: Analysis performed at SGS Accutest, Dayton, NJ.

SGS-Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percent solids.

SGS Accutest New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC50728).

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	SGS Accutest New England	**Job No**	MC50728
Site:	BLCTM: Replacement of Bridge No. 03993, West Street, Middletow	**Report Date**	6/29/2017 3:56:29 PM

On 06/24/2017, 32 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 3.9 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of MC50728 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Please refer to certification exceptions summary for additional certification information.

Metals By Method SW846 6010C

Matrix: LEACHATE **Batch ID:** MP1635

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC50728-1AMS, MC50728-1AMSD, MC50728-1ASDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Chromium, Lead are outside control limits for sample MP1635-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: SO **Batch ID:** MP1622

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC50728-7MS, MC50728-7MSD, MC50728-7SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic, Cadmium are outside control limits for sample MP1622-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals By Method SW846 7470A

Matrix: LEACHATE **Batch ID:** MP1647

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC50728-1AMS, MC50728-1AMSD were used as the QC samples for metals.

Metals By Method SW846 7471B

Matrix: SO **Batch ID:** MP1642

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC50728-1MS, MC50728-1MSD were used as the QC samples for metals.

Wet Chemistry By Method SM2540 G-97

Matrix: SO **Batch ID:** GN66130

- The data for SM2540 G-97 meets quality control requirements.

Wet Chemistry By Method SW846 1010A/ASTM D93

Matrix: SO **Batch ID:** GN66235

- Sample(s) MC50728-1DUP were used as the QC samples for Ignitability (Flashpoint).

Wet Chemistry By Method SW846 9045D

Matrix: SO	Batch ID: GN66181

- The data for SW846 9045D meets quality control requirements.

Wet Chemistry By Method SW846 CHAP7/9012 B

Matrix: SO	Batch ID: GP6220

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC50728-1DUP were used as the QC samples for Cyanide Reactivity.
- GP6220-B1 for Cyanide Reactivity: Recovery calculated from actual instrument reading.

Wet Chemistry By Method SW846 CHAP7/9034

Matrix: SO	Batch ID: GP6219

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC50728-1DUP, MC50728-1MS were used as the QC samples for Sulfide Reactivity.
- Matrix Spike Recovery(s) for Sulfide Reactivity are outside control limits. Spike recovery indicates possible matrix interference.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS Accutest is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS Accutest indicated via signature on the report cover

Summary of Hits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

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Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC50728-1	**HA-1 0-2'**					
Acenaphthylene		745	110		ug/kg	SW846 8270D
Anthracene		386	110		ug/kg	SW846 8270D
Benzo(a)anthracene		1360	110		ug/kg	SW846 8270D
Benzo(a)pyrene		1770	270		ug/kg	SW846 8270D
Benzo(b)fluoranthene		1500	110		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		1210	110		ug/kg	SW846 8270D
Benzo(k)fluoranthene		1400	110		ug/kg	SW846 8270D
Chrysene		1440	110		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		416	110		ug/kg	SW846 8270D
Fluoranthene		1790	110		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		1290	270		ug/kg	SW846 8270D
Phenanthrene		430	110		ug/kg	SW846 8270D
Pyrene		2180	110		ug/kg	SW846 8270D
CT-ETPH (C9-C36)		135	18		mg/kg	CT-ETPH 7/06
4,4'-DDT		11.8	5.4		ug/kg	SW846 8081B
Arsenic [a]		3.1	2.3		mg/kg	SW846 6010C
Barium [a]		50.4	23		mg/kg	SW846 6010C
Chromium [a]		17.6	1.1		mg/kg	SW846 6010C
Lead [a]		28.2	2.3		mg/kg	SW846 6010C
Ignitability (Flashpoint) [a]		> 200			Deg. F	SW846 1010A/ASTM D93
pH [a]		6.12			su	SW846 9045D
MC50728-1A	**HA-1 0-2'**					
Lead [a]		0.016	0.015		mg/l	SW846 6010C
MC50728-2	**HA-2 0-2'**					
Acenaphthylene		1500	110		ug/kg	SW846 8270D
Anthracene		824	110		ug/kg	SW846 8270D
Benzo(a)anthracene		3600	110		ug/kg	SW846 8270D
Benzo(a)pyrene		4900	280		ug/kg	SW846 8270D
Benzo(b)fluoranthene		4850	110		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		3400	110		ug/kg	SW846 8270D
Benzo(k)fluoranthene		3550	110		ug/kg	SW846 8270D
Carbazole		234	110		ug/kg	SW846 8270D
Chrysene		4240	110		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		960	110		ug/kg	SW846 8270D
Fluoranthene		7850	110		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		3670	280		ug/kg	SW846 8270D
Phenanthrene		2530	110		ug/kg	SW846 8270D
Pyrene		7790	110		ug/kg	SW846 8270D
CT-ETPH (C9-C36)		206	18		mg/kg	CT-ETPH 7/06

Summary of Hits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
4,4'-DDE		23.6	5.6		ug/kg	SW846 8081B
4,4'-DDT		46.1	5.6		ug/kg	SW846 8081B
Arsenic [a]		2.6	2.2		mg/kg	SW846 6010C
Barium [a]		35.6	22		mg/kg	SW846 6010C
Chromium [a]		18.1	1.1		mg/kg	SW846 6010C
Lead [a]		118	2.2		mg/kg	SW846 6010C
Mercury [a]		0.089	0.037		mg/kg	SW846 7471B
Ignitability (Flashpoint) [a]		> 200			Deg. F	SW846 1010A/ASTM D93
pH [a]		6.68			su	SW846 9045D
MC50728-2A	**HA-2 0-2'**					
Lead [a]		0.097	0.015		mg/l	SW846 6010C
MC50728-3	**HA-3 0-2'**					
Acetone [b]		124	17		ug/kg	SW846 8260C
Acenaphthylene		320	120		ug/kg	SW846 8270D
Anthracene		218	120		ug/kg	SW846 8270D
Benzo(a)anthracene		754	120		ug/kg	SW846 8270D
Benzo(a)pyrene		943	290		ug/kg	SW846 8270D
Benzo(b)fluoranthene		934	120		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		651	120		ug/kg	SW846 8270D
Benzo(k)fluoranthene		878	120		ug/kg	SW846 8270D
Chrysene		914	120		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		187	120		ug/kg	SW846 8270D
Fluoranthene		1550	120		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		701	290		ug/kg	SW846 8270D
Phenanthrene		623	120		ug/kg	SW846 8270D
Pyrene		1550	120		ug/kg	SW846 8270D
CT-ETPH (C9-C36)		176	19		mg/kg	CT-ETPH 7/06
4,4'-DDT		10.1	5.9		ug/kg	SW846 8081B
Arsenic [a]		3.2	2.5		mg/kg	SW846 6010C
Barium [a]		42.6	25		mg/kg	SW846 6010C
Chromium [a]		18.8	1.2		mg/kg	SW846 6010C
Lead [a]		136	2.5		mg/kg	SW846 6010C
Mercury [a]		0.053	0.037		mg/kg	SW846 7471B
Ignitability (Flashpoint) [a]		> 200			Deg. F	SW846 1010A/ASTM D93
pH [a]		5.17			su	SW846 9045D
MC50728-3A	**HA-3 0-2'**					
Lead [a]		0.024	0.015		mg/l	SW846 6010C

Summary of Hits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

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Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC50728-4	**B-1 0-2'**					
Acenaphthene		789	520		ug/kg	SW846 8270D
Acenaphthylene		14100	520		ug/kg	SW846 8270D
Anthracene		11100	520		ug/kg	SW846 8270D
Benzo(a)anthracene		33200	520		ug/kg	SW846 8270D
Benzo(a)pyrene		35600	1300		ug/kg	SW846 8270D
Benzo(b)fluoranthene		37200	520		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		22100	520		ug/kg	SW846 8270D
Benzo(k)fluoranthene		27100	520		ug/kg	SW846 8270D
Carbazole		2560	520		ug/kg	SW846 8270D
Chrysene		38800	520		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		7290	520		ug/kg	SW846 8270D
Dibenzofuran		978	520		ug/kg	SW846 8270D
Fluoranthene		72000	2600		ug/kg	SW846 8270D
Fluorene		3040	520		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		22600	1300		ug/kg	SW846 8270D
2-Methylnaphthalene		736	520		ug/kg	SW846 8270D
Naphthalene		1080	520		ug/kg	SW846 8270D
Phenanthrene		44400	2600		ug/kg	SW846 8270D
Pyrene		74700	2600		ug/kg	SW846 8270D
CT-ETPH (C9-C36)		4310	180		mg/kg	CT-ETPH 7/06
4,4'-DDE		24.2	5.2		ug/kg	SW846 8081B
4,4'-DDT		1080	100		ug/kg	SW846 8081B
Aroclor 1260 [c]		89.4	26		ug/kg	SW846 8082A
Arsenic [a]		2.4	2.1		mg/kg	SW846 6010C
Barium [a]		30.0	21		mg/kg	SW846 6010C
Chromium [a]		15.4	1.0		mg/kg	SW846 6010C
Lead [a]		263	2.1		mg/kg	SW846 6010C
Ignitability (Flashpoint) [a]		> 200			Deg. F	SW846 1010A/ASTM D93
pH [a]		5.99			su	SW846 9045D
MC50728-4A	**B-1 0-2'**					
Lead [a]		0.058	0.015		mg/l	SW846 6010C
MC50728-5	**B-1 2-4'**					
Acenaphthylene		257	120		ug/kg	SW846 8270D
Benzo(a)anthracene		338	120		ug/kg	SW846 8270D
Benzo(a)pyrene		494	300		ug/kg	SW846 8270D
Benzo(b)fluoranthene		511	120		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		399	120		ug/kg	SW846 8270D
Benzo(k)fluoranthene		461	120		ug/kg	SW846 8270D
Chrysene		519	120		ug/kg	SW846 8270D

Summary of Hits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Fluoranthene		808	120		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		430	300		ug/kg	SW846 8270D
Phenanthrene		335	120		ug/kg	SW846 8270D
Pyrene		897	120		ug/kg	SW846 8270D
CT-ETPH (C9-C36)		262	19		mg/kg	CT-ETPH 7/06
4,4'-DDT		14.1	6.0		ug/kg	SW846 8081B
Arsenic [a]		4.6	2.5		mg/kg	SW846 6010C
Barium [a]		78.3	25		mg/kg	SW846 6010C
Chromium [a]		20.5	1.3		mg/kg	SW846 6010C
Lead [a]		196	2.5		mg/kg	SW846 6010C
Mercury [a]		0.15	0.039		mg/kg	SW846 7471B
MC50728-5A	**B-1 2-4'**					
Lead [a]		0.024	0.015		mg/l	SW846 6010C
MC50728-6	**B-2 1-3'**					
CT-ETPH (C9-C36)		23.0	18		mg/kg	CT-ETPH 7/06
Arsenic [a]		3.3	2.2		mg/kg	SW846 6010C
Barium [a]		103	22		mg/kg	SW846 6010C
Chromium [a]		14.1	1.1		mg/kg	SW846 6010C
Lead [a]		32.3	2.2		mg/kg	SW846 6010C
Mercury [a]		0.037	0.035		mg/kg	SW846 7471B
Ignitability (Flashpoint) [a]		> 200			Deg. F	SW846 1010A/ASTM D93
pH [a]		7.37			su	SW846 9045D
MC50728-6A	**B-2 1-3'**					
Lead [a]		0.019	0.015		mg/l	SW846 6010C
MC50728-7	**B-2 3-5'**					
Arsenic [a]		3.0	2.1		mg/kg	SW846 6010C
Barium [a]		38.4	21		mg/kg	SW846 6010C
Chromium [a]		13.3	1.0		mg/kg	SW846 6010C
Lead [a]		6.3	2.1		mg/kg	SW846 6010C
MC50728-7A	**B-2 3-5'**					
No hits reported in this sample.						
MC50728-8	**B-3 2-4'**					
Arsenic [a]		5.2	2.3		mg/kg	SW846 6010C

Summary of Hits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Barium [a]		47.8	23		mg/kg	SW846 6010C
Chromium [a]		14.3	1.1		mg/kg	SW846 6010C
Lead [a]		11.1	2.3		mg/kg	SW846 6010C
Ignitability (Flashpoint) [a]		> 200			Deg. F	SW846 1010A/ASTM D93
pH [a]		5.49			su	SW846 9045D
MC50728-8A	**B-3 2-4'**					
No hits reported in this sample.						
MC50728-9	**B-3 6-8'**					
Arsenic [a]		3.0	2.4		mg/kg	SW846 6010C
Barium [a]		73.1	24		mg/kg	SW846 6010C
Chromium [a]		14.9	1.2		mg/kg	SW846 6010C
Lead [a]		9.4	2.4		mg/kg	SW846 6010C
MC50728-9A	**B-3 6-8'**					
No hits reported in this sample.						
MC50728-10	**B-3 10-12'**					
CT-ETPH (C9-C36)		255	18		mg/kg	CT-ETPH 7/06
Arsenic [a]		3.2	2.4		mg/kg	SW846 6010C
Barium [a]		52.4	24		mg/kg	SW846 6010C
Cadmium [a]		0.67	0.60		mg/kg	SW846 6010C
Chromium [a]		20.5	1.2		mg/kg	SW846 6010C
Lead [a]		21.0	2.4		mg/kg	SW846 6010C
MC50728-10A	**B-3 10-12'**					
No hits reported in this sample.						
MC50728-11	**B-3 15-17'**					
Arsenic [a]		2.9	2.3		mg/kg	SW846 6010C
Barium [a]		48.3	23		mg/kg	SW846 6010C
Chromium [a]		13.5	1.2		mg/kg	SW846 6010C
Lead [a]		6.3	2.3		mg/kg	SW846 6010C
MC50728-11A	**B-3 15-17'**					
No hits reported in this sample.						

Summary of Hits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC50728-12	**B-4 1-3'**					
Acenaphthylene		323	110		ug/kg	SW846 8270D
Anthracene		152	110		ug/kg	SW846 8270D
Benzo(a)anthracene		616	110		ug/kg	SW846 8270D
Benzo(a)pyrene		784	270		ug/kg	SW846 8270D
Benzo(b)fluoranthene		740	110		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		484	110		ug/kg	SW846 8270D
Benzo(k)fluoranthene		701	110		ug/kg	SW846 8270D
Chrysene		750	110		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		180	110		ug/kg	SW846 8270D
Fluoranthene		971	110		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		528	270		ug/kg	SW846 8270D
Phenanthrene		267	110		ug/kg	SW846 8270D
Pyrene		1060	110		ug/kg	SW846 8270D
CT-ETPH (C9-C36)		120	18		mg/kg	CT-ETPH 7/06
Arsenic [a]		2.9	2.2		mg/kg	SW846 6010C
Barium [a]		30.5	22		mg/kg	SW846 6010C
Chromium [a]		11.6	1.1		mg/kg	SW846 6010C
Lead [a]		32.0	2.2		mg/kg	SW846 6010C
Mercury [a]		0.038	0.034		mg/kg	SW846 7471B
Ignitability (Flashpoint) [a]		> 200			Deg. F	SW846 1010A/ASTM D93
pH [a]		6.45			su	SW846 9045D
MC50728-12A	**B-4 1-3'**					
Lead [a]		0.023	0.015		mg/l	SW846 6010C
MC50728-13	**B-4 4-6'**					
Acenaphthylene		226	110		ug/kg	SW846 8270D
Anthracene		150	110		ug/kg	SW846 8270D
Benzo(a)anthracene		705	110		ug/kg	SW846 8270D
Benzo(a)pyrene		843	290		ug/kg	SW846 8270D
Benzo(b)fluoranthene		792	110		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		493	110		ug/kg	SW846 8270D
Benzo(k)fluoranthene		797	110		ug/kg	SW846 8270D
Chrysene		890	110		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		187	110		ug/kg	SW846 8270D
Fluoranthene		1370	110		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		537	290		ug/kg	SW846 8270D
Phenanthrene		481	110		ug/kg	SW846 8270D
Pyrene		1400	110		ug/kg	SW846 8270D
CT-ETPH (C9-C36)		192	18		mg/kg	CT-ETPH 7/06
Arsenic [a]		3.3	2.3		mg/kg	SW846 6010C

Summary of Hits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Barium [a]	41.5	23		mg/kg	SW846 6010C
Chromium [a]	14.2	1.2		mg/kg	SW846 6010C
Lead [a]	35.1	2.3		mg/kg	SW846 6010C
MC50728-13A B-4 4-6'					
No hits reported in this sample.					
MC50728-14 B-4 10-12'					
Benzo(a)anthracene	274	110		ug/kg	SW846 8270D
Benzo(a)pyrene	342	260		ug/kg	SW846 8270D
Benzo(b)fluoranthene	330	110		ug/kg	SW846 8270D
Benzo(g,h,i)perylene	221	110		ug/kg	SW846 8270D
Benzo(k)fluoranthene	340	110		ug/kg	SW846 8270D
Chrysene	379	110		ug/kg	SW846 8270D
Fluoranthene	603	110		ug/kg	SW846 8270D
Phenanthrene	194	110		ug/kg	SW846 8270D
Pyrene	583	110		ug/kg	SW846 8270D
CT-ETPH (C9-C36)	270	18		mg/kg	CT-ETPH 7/06
Arsenic [a]	3.1	2.3		mg/kg	SW846 6010C
Barium [a]	32.7	23		mg/kg	SW846 6010C
Chromium [a]	12.1	1.1		mg/kg	SW846 6010C
Lead [a]	10.3	2.3		mg/kg	SW846 6010C
MC50728-14A B-4 10-12'					
No hits reported in this sample.					
MC50728-15 B-4 14-16'					
Acenaphthylene	116	110		ug/kg	SW846 8270D
Benzo(a)anthracene	289	110		ug/kg	SW846 8270D
Benzo(a)pyrene	369	280		ug/kg	SW846 8270D
Benzo(b)fluoranthene	379	110		ug/kg	SW846 8270D
Benzo(g,h,i)perylene	240	110		ug/kg	SW846 8270D
Benzo(k)fluoranthene	336	110		ug/kg	SW846 8270D
Chrysene	407	110		ug/kg	SW846 8270D
Fluoranthene	619	110		ug/kg	SW846 8270D
Phenanthrene	213	110		ug/kg	SW846 8270D
Pyrene	613	110		ug/kg	SW846 8270D
CT-ETPH (C9-C36)	315	18		mg/kg	CT-ETPH 7/06
Arsenic [a]	3.1	2.2		mg/kg	SW846 6010C
Barium [a]	44.5	22		mg/kg	SW846 6010C
Chromium [a]	19.9	1.1		mg/kg	SW846 6010C

Summary of Hits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Lead [a]		13.0	2.2		mg/kg	SW846 6010C
MC50728-15A	**B-4 14-16'**					
No hits reported in this sample.						
MC50728-16	**DUP**					
Acenaphthylene		182	110		ug/kg	SW846 8270D
Benzo(a)anthracene		509	110		ug/kg	SW846 8270D
Benzo(a)pyrene		628	290		ug/kg	SW846 8270D
Benzo(b)fluoranthene		631	110		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		394	110		ug/kg	SW846 8270D
Benzo(k)fluoranthene		587	110		ug/kg	SW846 8270D
Chrysene		660	110		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		144	110		ug/kg	SW846 8270D
Fluoranthene		1040	110		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		422	290		ug/kg	SW846 8270D
Phenanthrene		344	110		ug/kg	SW846 8270D
Pyrene		1010	110		ug/kg	SW846 8270D
CT-ETPH (C9-C36)		286	19		mg/kg	CT-ETPH 7/06
Arsenic [a]		4.8	2.4		mg/kg	SW846 6010C
Barium [a]		43.1	24		mg/kg	SW846 6010C
Chromium [a]		16.9	1.2		mg/kg	SW846 6010C
Lead [a]		42.1	2.4		mg/kg	SW846 6010C
MC50728-16A	**DUP**					
No hits reported in this sample.						
MC50728-17	**TRIP BLANK**					
No hits reported in this sample.						

(a) Analysis performed at SGS Accutest, Dayton, NJ.
(b) Initial and Continuing Calibration Verification outside of acceptance criteria. Result may be biased high.
(c) Confirmation value > 40% RPD.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	HA-1 0-2'		
Lab Sample ID:	MC50728-1	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84439.D	1	06/27/17 17:45	DRY	n/a	n/a	MSM3045
Run #2 [a]	M84492.D	1	06/29/17 20:29	DRY	n/a	n/a	MSM3048

	Initial Weight	Final Volume
Run #1	6.39 g	5.0 ml
Run #2	6.31 g	5.0 ml

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	18	ug/kg	
107-13-1	Acrylonitrile	ND	22	ug/kg	
71-43-2	Benzene	ND	0.44	ug/kg	
108-86-1	Bromobenzene	ND	4.4	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	ug/kg	
75-25-2	Bromoform	ND	1.8	ug/kg	
74-83-9	Bromomethane	ND	8.8	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.8	ug/kg	
104-51-8	n-Butylbenzene	ND	4.4	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.4	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.4	ug/kg	
75-15-0	Carbon disulfide	ND	4.4	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.8	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	ug/kg	
75-00-3	Chloroethane	ND	8.8	ug/kg	
67-66-3	Chloroform	ND	1.8	ug/kg	
74-87-3	Chloromethane	ND	4.4	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.4	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.4	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.4	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.8	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.8	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.8	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.8	ug/kg	
75-71-8	Dichlorodifluoromethane [b]	ND	4.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.8	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.8	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.8	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-1 0-2'		
Lab Sample ID:	MC50728-1	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	4.4	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.4	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.4	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	ug/kg	
100-41-4	Ethylbenzene	ND	1.8	ug/kg	
76-13-1	Freon 113	ND	4.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.4	ug/kg	
591-78-6	2-Hexanone	ND	4.4	ug/kg	
98-82-8	Isopropylbenzene	ND	4.4	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.4	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.8	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.4	ug/kg	
74-95-3	Methylene bromide	ND	4.4	ug/kg	
75-09-2	Methylene chloride	ND	4.4	ug/kg	
91-20-3	Naphthalene	ND	4.4	ug/kg	
103-65-1	n-Propylbenzene	ND	4.4	ug/kg	
100-42-5	Styrene	ND	4.4	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.4	ug/kg	
127-18-4	Tetrachloroethene	ND	1.8	ug/kg	
109-99-9	Tetrahydrofuran	ND	8.8	ug/kg	
108-88-3	Toluene	ND	4.4	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	8.8	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.4	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	ug/kg	
79-01-6	Trichloroethene	ND	1.8	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.8	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.4	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.4	ug/kg	
75-01-4	Vinyl chloride	ND	8.8	ug/kg	
	m,p-Xylene	ND	1.8	ug/kg	
95-47-6	o-Xylene	ND	1.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%	120%	65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-1 0-2'		
Lab Sample ID:	MC50728-1	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	98%	106%	65-129%
460-00-4	4-Bromofluorobenzene	124%	134%	63-137%

(a) Confirmation run.
(b) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-1 0-2'		
Lab Sample ID:	MC50728-1	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52310.D	1	06/27/17 19:22	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.8 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	270	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	540	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	540	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	540	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	540	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	540	ug/kg	
95-48-7	2-Methylphenol	ND	540	ug/kg	
106-44-5	4-Methylphenol	ND	540	ug/kg	
88-75-5	2-Nitrophenol	ND	540	ug/kg	
100-02-7	4-Nitrophenol	ND	540	ug/kg	
87-86-5	Pentachlorophenol	ND	540	ug/kg	
108-95-2	Phenol	ND	270	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	540	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	540	ug/kg	
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	745	110	ug/kg	
62-53-3	Aniline	ND	540	ug/kg	
120-12-7	Anthracene	386	110	ug/kg	
56-55-3	Benzo(a)anthracene	1360	110	ug/kg	
50-32-8	Benzo(a)pyrene	1770	270	ug/kg	
205-99-2	Benzo(b)fluoranthene	1500	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1210	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	1400	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	ug/kg	
106-47-8	4-Chloroaniline	ND	540	ug/kg	
86-74-8	Carbazole	ND	110	ug/kg	
218-01-9	Chrysene	1440	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	270	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-1 0-2'		
Lab Sample ID:	MC50728-1	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	270	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	540	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	540	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	540	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	416	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	ug/kg	
84-66-2	Diethyl phthalate	ND	270	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	270	ug/kg	
206-44-0	Fluoranthene	1790	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	540	ug/kg	
67-72-1	Hexachloroethane	ND	270	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1290	270	ug/kg	
78-59-1	Isophorone	ND	270	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	540	ug/kg	
99-09-2	3-Nitroaniline	ND	540	ug/kg	
100-01-6	4-Nitroaniline	ND	540	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	270	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	540	ug/kg	
85-01-8	Phenanthrene	430	110	ug/kg	
129-00-0	Pyrene	2180	110	ug/kg	
110-86-1	Pyridine	ND	540	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	540	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	85%		25-109%
4165-62-2	Phenol-d5	89%		29-113%
118-79-6	2,4,6-Tribromophenol	80%		20-141%
4165-60-0	Nitrobenzene-d5	79%		27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-1 0-2'		
Lab Sample ID:	MC50728-1	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	76%		34-118%
1718-51-0	Terphenyl-d14	89%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-1 0-2'		
Lab Sample ID:	MC50728-1	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	88.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55375.D	1	06/27/17 15:18	AP	06/23/17 14:30	OP49806	GBE2773
Run #2							

	Initial Weight	Final Volume
Run #1	20.9 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	54	ug/kg	
309-00-2	Aldrin	ND	5.4	ug/kg	
319-84-6	alpha-BHC	ND	5.4	ug/kg	
319-85-7	beta-BHC	ND	5.4	ug/kg	
319-86-8	delta-BHC	ND	5.4	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.4	ug/kg	
12789-03-6	Chlordane	ND	54	ug/kg	
60-57-1	Dieldrin	ND	5.4	ug/kg	
72-54-8	4,4'-DDD	ND	5.4	ug/kg	
72-55-9	4,4'-DDE	ND	5.4	ug/kg	
50-29-3	4,4'-DDT	11.8	5.4	ug/kg	
72-20-8	Endrin	ND	5.4	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.4	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.4	ug/kg	
959-98-8	Endosulfan-I	ND	5.4	ug/kg	
33213-65-9	Endosulfan-II	ND	5.4	ug/kg	
76-44-8	Heptachlor	ND	5.4	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.4	ug/kg	
72-43-5	Methoxychlor	ND	5.4	ug/kg	
53494-70-5	Endrin ketone	ND	5.4	ug/kg	
8001-35-2	Toxaphene	ND	54	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		10-143%
877-09-8	Tetrachloro-m-xylene	76%		10-143%
2051-24-3	Decachlorobiphenyl	122%		10-172%
2051-24-3	Decachlorobiphenyl	212% [a]		10-172%

(a) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-1 0-2'		
Lab Sample ID:	MC50728-1	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	88.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65938.D	1	06/28/17 01:00	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.9 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	27	ug/kg	
11104-28-2	Aroclor 1221	ND	27	ug/kg	
11141-16-5	Aroclor 1232	ND	27	ug/kg	
53469-21-9	Aroclor 1242	ND	27	ug/kg	
12672-29-6	Aroclor 1248	ND	27	ug/kg	
11097-69-1	Aroclor 1254	ND	27	ug/kg	
11096-82-5	Aroclor 1260	ND	27	ug/kg	
37324-23-5	Aroclor 1262	ND	27	ug/kg	
11100-14-4	Aroclor 1268	ND	27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		25-145%
877-09-8	Tetrachloro-m-xylene	79%		25-145%
2051-24-3	Decachlorobiphenyl	93%		25-179%
2051-24-3	Decachlorobiphenyl	68%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-1 0-2'		
Lab Sample ID:	MC50728-1	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	88.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5524.D	1	06/28/17 18:34	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	135	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-1 0-2'		
Lab Sample ID:	MC50728-1	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	88.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	3.1	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	50.4	23	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.57	0.57	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	17.6	1.1	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	28.2	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	< 0.037	0.037	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.3	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.57	0.57	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA-1 0-2'		
Lab Sample ID:	MC50728-1	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	88.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide Reactivity [a]	< 11	11	mg/kg	1	06/26/17 14:56	ANJ	SW846 CHAP7/9012 B
Ignitability (Flashpoint) [a]	> 200		Deg. F	1	06/28/17 16:49	ANJ	SW846 1010A/ASTM D93
Solids, Percent [a]	88.5		%	1	06/26/17 17:00	ANJ	SM2540 G-97
Sulfide Reactivity [a]	< 110	110	mg/kg	1	06/26/17 03:19	ANJ	SW846 CHAP7/9034
pH [a]	6.12		su	1	06/27/17 16:44	ANJ	SW846 9045D

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA-1 0-2'		
Lab Sample ID:	MC50728-1A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	88.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	0.016		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	HA-2 0-2'		
Lab Sample ID:	MC50728-2	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84440.D	1	06/27/17 18:14	DRY	n/a	n/a	MSM3045
Run #2							

	Initial Weight	Final Volume
Run #1	7.66 g	5.0 ml
Run #2		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	15	ug/kg	
107-13-1	Acrylonitrile	ND	19	ug/kg	
71-43-2	Benzene	ND	0.37	ug/kg	
108-86-1	Bromobenzene	ND	3.7	ug/kg	
75-27-4	Bromodichloromethane	ND	1.5	ug/kg	
75-25-2	Bromoform	ND	1.5	ug/kg	
74-83-9	Bromomethane	ND	7.4	ug/kg	
78-93-3	2-Butanone (MEK)	ND	7.4	ug/kg	
104-51-8	n-Butylbenzene	ND	3.7	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.7	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.7	ug/kg	
75-15-0	Carbon disulfide	ND	3.7	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.5	ug/kg	
108-90-7	Chlorobenzene	ND	1.5	ug/kg	
75-00-3	Chloroethane	ND	7.4	ug/kg	
67-66-3	Chloroform	ND	1.5	ug/kg	
74-87-3	Chloromethane	ND	3.7	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.7	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.7	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.7	ug/kg	
124-48-1	Dibromochloromethane	ND	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.5	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.5	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.5	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	3.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.5	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.5	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.5	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.5	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-2 0-2'		
Lab Sample ID:	MC50728-2	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	3.7	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.7	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	1.5	ug/kg	
76-13-1	Freon 113	ND	3.7	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.7	ug/kg	
591-78-6	2-Hexanone	ND	3.7	ug/kg	
98-82-8	Isopropylbenzene	ND	3.7	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.7	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.5	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3.7	ug/kg	
74-95-3	Methylene bromide	ND	3.7	ug/kg	
75-09-2	Methylene chloride	ND	3.7	ug/kg	
91-20-3	Naphthalene	ND	3.7	ug/kg	
103-65-1	n-Propylbenzene	ND	3.7	ug/kg	
100-42-5	Styrene	ND	3.7	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	ug/kg	
127-18-4	Tetrachloroethene	ND	1.5	ug/kg	
109-99-9	Tetrahydrofuran	ND	7.4	ug/kg	
108-88-3	Toluene	ND	3.7	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	7.4	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.5	ug/kg	
79-01-6	Trichloroethene	ND	1.5	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.5	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.7	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.7	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.7	ug/kg	
75-01-4	Vinyl chloride	ND	7.4	ug/kg	
	m,p-Xylene	ND	1.5	ug/kg	
95-47-6	o-Xylene	ND	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-2 0-2'		
Lab Sample ID:	MC50728-2	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	107%		65-129%
460-00-4	4-Bromofluorobenzene	112%		63-137%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-2 0-2'		
Lab Sample ID:	MC50728-2	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52311.D	1	06/27/17 19:48	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.6 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	550	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	550	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	550	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	550	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	550	ug/kg	
95-48-7	2-Methylphenol	ND	550	ug/kg	
106-44-5	4-Methylphenol	ND	550	ug/kg	
88-75-5	2-Nitrophenol	ND	550	ug/kg	
100-02-7	4-Nitrophenol	ND	550	ug/kg	
87-86-5	Pentachlorophenol	ND	550	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	550	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	550	ug/kg	
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	1500	110	ug/kg	
62-53-3	Aniline	ND	550	ug/kg	
120-12-7	Anthracene	824	110	ug/kg	
56-55-3	Benzo(a)anthracene	3600	110	ug/kg	
50-32-8	Benzo(a)pyrene	4900	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	4850	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	3400	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	3550	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	550	ug/kg	
86-74-8	Carbazole	234	110	ug/kg	
218-01-9	Chrysene	4240	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-2 0-2'		
Lab Sample ID:	MC50728-2	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	550	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	550	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	550	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	960	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	7850	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	550	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	3670	280	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	550	ug/kg	
99-09-2	3-Nitroaniline	ND	550	ug/kg	
100-01-6	4-Nitroaniline	ND	550	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	550	ug/kg	
85-01-8	Phenanthrene	2530	110	ug/kg	
129-00-0	Pyrene	7790	110	ug/kg	
110-86-1	Pyridine	ND	550	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	550	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	91%		25-109%
4165-62-2	Phenol-d5	93%		29-113%
118-79-6	2,4,6-Tribromophenol	82%		20-141%
4165-60-0	Nitrobenzene-d5	82%		27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-2 0-2'		
Lab Sample ID:	MC50728-2	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	80%		34-118%
1718-51-0	Terphenyl-d14	91%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-2 0-2'		
Lab Sample ID:	MC50728-2	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55376.D	1	06/27/17 15:33	AP	06/23/17 14:30	OP49806	GBE2773
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	56	ug/kg	
309-00-2	Aldrin	ND	5.6	ug/kg	
319-84-6	alpha-BHC	ND	5.6	ug/kg	
319-85-7	beta-BHC	ND	5.6	ug/kg	
319-86-8	delta-BHC	ND	5.6	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.6	ug/kg	
12789-03-6	Chlordane	ND	56	ug/kg	
60-57-1	Dieldrin	ND	5.6	ug/kg	
72-54-8	4,4'-DDD	ND	5.6	ug/kg	
72-55-9	4,4'-DDE	23.6	5.6	ug/kg	
50-29-3	4,4'-DDT	46.1	5.6	ug/kg	
72-20-8	Endrin	ND	5.6	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.6	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.6	ug/kg	
959-98-8	Endosulfan-I	ND	5.6	ug/kg	
33213-65-9	Endosulfan-II	ND	5.6	ug/kg	
76-44-8	Heptachlor	ND	5.6	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.6	ug/kg	
72-43-5	Methoxychlor	ND	5.6	ug/kg	
53494-70-5	Endrin ketone	ND	5.6	ug/kg	
8001-35-2	Toxaphene	ND	56	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		10-143%
877-09-8	Tetrachloro-m-xylene	66%		10-143%
2051-24-3	Decachlorobiphenyl	147%		10-172%
2051-24-3	Decachlorobiphenyl	350% [a]		10-172%

(a) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-2 0-2'		
Lab Sample ID:	MC50728-2	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65939.D	1	06/28/17 01:16	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	28	ug/kg	
11104-28-2	Aroclor 1221	ND	28	ug/kg	
11141-16-5	Aroclor 1232	ND	28	ug/kg	
53469-21-9	Aroclor 1242	ND	28	ug/kg	
12672-29-6	Aroclor 1248	ND	28	ug/kg	
11097-69-1	Aroclor 1254	ND	28	ug/kg	
11096-82-5	Aroclor 1260	ND	28	ug/kg	
37324-23-5	Aroclor 1262	ND	28	ug/kg	
11100-14-4	Aroclor 1268	ND	28	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		25-145%
877-09-8	Tetrachloro-m-xylene	69%		25-145%
2051-24-3	Decachlorobiphenyl	65%		25-179%
2051-24-3	Decachlorobiphenyl	52%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-2 0-2'		
Lab Sample ID:	MC50728-2	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5525.D	1	06/28/17 19:06	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	206	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-2 0-2'		
Lab Sample ID:	MC50728-2	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	2.6	2.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	35.6	22	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.55	0.55	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	18.1	1.1	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	118	2.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	0.089	0.037	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.2	2.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.55	0.55	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA-2 0-2'		
Lab Sample ID:	MC50728-2	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide Reactivity [a]	< 11	11	mg/kg	1	06/26/17 15:00	ANJ	SW846 CHAP7/9012 B
Ignitability (Flashpoint) [a]	> 200		Deg. F	1	06/28/17 16:49	ANJ	SW846 1010A/ASTM D93
Solids, Percent [a]	88		%	1	06/26/17 17:00	ANJ	SM2540 G-97
Sulfide Reactivity [a]	< 110	110	mg/kg	1	06/26/17 03:19	ANJ	SW846 CHAP7/9034
pH [a]	6.68		su	1	06/27/17 16:30	ANJ	SW846 9045D

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA-2 0-2'		
Lab Sample ID:	MC50728-2A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	0.097		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	HA-3 0-2'		
Lab Sample ID:	MC50728-3	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	84.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84441.D	1	06/27/17 18:42	DRY	n/a	n/a	MSM3045
Run #2 [a]	M84493.D	1	06/29/17 20:56	DRY	n/a	n/a	MSM3048

	Initial Weight	Final Volume
Run #1	6.90 g	5.0 ml
Run #2	7.35 g	5.0 ml

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone [b]	124	17	ug/kg	
107-13-1	Acrylonitrile	ND	21	ug/kg	
71-43-2	Benzene	ND	0.43	ug/kg	
108-86-1	Bromobenzene	ND	4.3	ug/kg	
75-27-4	Bromodichloromethane	ND	1.7	ug/kg	
75-25-2	Bromoform	ND	1.7	ug/kg	
74-83-9	Bromomethane	ND	8.6	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.6	ug/kg	
104-51-8	n-Butylbenzene	ND	4.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.3	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.3	ug/kg	
75-15-0	Carbon disulfide	ND	4.3	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.7	ug/kg	
108-90-7	Chlorobenzene	ND	1.7	ug/kg	
75-00-3	Chloroethane	ND	8.6	ug/kg	
67-66-3	Chloroform	ND	1.7	ug/kg	
74-87-3	Chloromethane	ND	4.3	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.3	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.3	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.3	ug/kg	
124-48-1	Dibromochloromethane	ND	1.7	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.7	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.7	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.7	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.7	ug/kg	
75-71-8	Dichlorodifluoromethane [c]	ND	4.3	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.7	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.7	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.7	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.7	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.7	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-3 0-2'		
Lab Sample ID:	MC50728-3	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	84.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	4.3	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.3	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.7	ug/kg	
100-41-4	Ethylbenzene	ND	1.7	ug/kg	
76-13-1	Freon 113	ND	4.3	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.3	ug/kg	
591-78-6	2-Hexanone	ND	4.3	ug/kg	
98-82-8	Isopropylbenzene	ND	4.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.3	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.7	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.3	ug/kg	
74-95-3	Methylene bromide	ND	4.3	ug/kg	
75-09-2	Methylene chloride	ND	4.3	ug/kg	
91-20-3	Naphthalene	ND	4.3	ug/kg	
103-65-1	n-Propylbenzene	ND	4.3	ug/kg	
100-42-5	Styrene	ND	4.3	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.7	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.3	ug/kg	
127-18-4	Tetrachloroethene	ND	1.7	ug/kg	
109-99-9	Tetrahydrofuran	ND	8.6	ug/kg	
108-88-3	Toluene	ND	4.3	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	8.6	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.7	ug/kg	
79-01-6	Trichloroethene	ND	1.7	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.7	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.3	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.3	ug/kg	
75-01-4	Vinyl chloride	ND	8.6	ug/kg	
	m,p-Xylene	ND	1.7	ug/kg	
95-47-6	o-Xylene	ND	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%	119%	65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-3 0-2'		
Lab Sample ID:	MC50728-3	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	84.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%	101%	65-129%
460-00-4	4-Bromofluorobenzene	117%	128%	63-137%

(a) Confirmation run.
(b) Initial and Continuing Calibration Verification outside of acceptance criteria. Result may be biased high.
(c) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-3 0-2'		
Lab Sample ID:	MC50728-3	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52312.D	1	06/27/17 20:13	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	290	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	580	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	580	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	580	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	580	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	580	ug/kg	
95-48-7	2-Methylphenol	ND	580	ug/kg	
106-44-5	4-Methylphenol	ND	580	ug/kg	
88-75-5	2-Nitrophenol	ND	580	ug/kg	
100-02-7	4-Nitrophenol	ND	580	ug/kg	
87-86-5	Pentachlorophenol	ND	580	ug/kg	
108-95-2	Phenol	ND	290	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	580	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	580	ug/kg	
83-32-9	Acenaphthene	ND	120	ug/kg	
208-96-8	Acenaphthylene	320	120	ug/kg	
62-53-3	Aniline	ND	580	ug/kg	
120-12-7	Anthracene	218	120	ug/kg	
56-55-3	Benzo(a)anthracene	754	120	ug/kg	
50-32-8	Benzo(a)pyrene	943	290	ug/kg	
205-99-2	Benzo(b)fluoranthene	934	120	ug/kg	
191-24-2	Benzo(g,h,i)perylene	651	120	ug/kg	
207-08-9	Benzo(k)fluoranthene	878	120	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	290	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	290	ug/kg	
91-58-7	2-Chloronaphthalene	ND	290	ug/kg	
106-47-8	4-Chloroaniline	ND	580	ug/kg	
86-74-8	Carbazole	ND	120	ug/kg	
218-01-9	Chrysene	914	120	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	290	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	290	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	290	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-3 0-2'		
Lab Sample ID:	MC50728-3	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	290	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	580	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	580	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	580	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	187	120	ug/kg	
132-64-9	Dibenzofuran	ND	120	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	290	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	290	ug/kg	
84-66-2	Diethyl phthalate	ND	290	ug/kg	
131-11-3	Dimethyl phthalate	ND	290	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	290	ug/kg	
206-44-0	Fluoranthene	1550	120	ug/kg	
86-73-7	Fluorene	ND	120	ug/kg	
118-74-1	Hexachlorobenzene	ND	290	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	580	ug/kg	
67-72-1	Hexachloroethane	ND	290	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	701	290	ug/kg	
78-59-1	Isophorone	ND	290	ug/kg	
91-57-6	2-Methylnaphthalene	ND	120	ug/kg	
88-74-4	2-Nitroaniline	ND	580	ug/kg	
99-09-2	3-Nitroaniline	ND	580	ug/kg	
100-01-6	4-Nitroaniline	ND	580	ug/kg	
91-20-3	Naphthalene	ND	120	ug/kg	
98-95-3	Nitrobenzene	ND	290	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	290	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	290	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	580	ug/kg	
85-01-8	Phenanthrene	623	120	ug/kg	
129-00-0	Pyrene	1550	120	ug/kg	
110-86-1	Pyridine	ND	580	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	580	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	78%		25-109%
4165-62-2	Phenol-d5	80%		29-113%
118-79-6	2,4,6-Tribromophenol	68%		20-141%
4165-60-0	Nitrobenzene-d5	72%		27-115%

ND = Not detected
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-3 0-2'		
Lab Sample ID:	MC50728-3	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	68%		34-118%
1718-51-0	Terphenyl-d14	73%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-3 0-2'		
Lab Sample ID:	MC50728-3	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	84.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55377.D	1	06/27/17 15:47	AP	06/23/17 14:30	OP49806	GBE2773
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	59	ug/kg	
309-00-2	Aldrin	ND	5.9	ug/kg	
319-84-6	alpha-BHC	ND	5.9	ug/kg	
319-85-7	beta-BHC	ND	5.9	ug/kg	
319-86-8	delta-BHC	ND	5.9	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.9	ug/kg	
12789-03-6	Chlordane	ND	59	ug/kg	
60-57-1	Dieldrin	ND	5.9	ug/kg	
72-54-8	4,4'-DDD	ND	5.9	ug/kg	
72-55-9	4,4'-DDE	ND	5.9	ug/kg	
50-29-3	4,4'-DDT	10.1	5.9	ug/kg	
72-20-8	Endrin	ND	5.9	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.9	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.9	ug/kg	
959-98-8	Endosulfan-I	ND	5.9	ug/kg	
33213-65-9	Endosulfan-II	ND	5.9	ug/kg	
76-44-8	Heptachlor	ND	5.9	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.9	ug/kg	
72-43-5	Methoxychlor	ND	5.9	ug/kg	
53494-70-5	Endrin ketone	ND	5.9	ug/kg	
8001-35-2	Toxaphene	ND	59	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		10-143%
877-09-8	Tetrachloro-m-xylene	77%		10-143%
2051-24-3	Decachlorobiphenyl	102%		10-172%
2051-24-3	Decachlorobiphenyl	144%		10-172%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-3 0-2'		
Lab Sample ID:	MC50728-3	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	84.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65940.D	1	06/28/17 01:32	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	29	ug/kg	
11104-28-2	Aroclor 1221	ND	29	ug/kg	
11141-16-5	Aroclor 1232	ND	29	ug/kg	
53469-21-9	Aroclor 1242	ND	29	ug/kg	
12672-29-6	Aroclor 1248	ND	29	ug/kg	
11097-69-1	Aroclor 1254	ND	29	ug/kg	
11096-82-5	Aroclor 1260	ND	29	ug/kg	
37324-23-5	Aroclor 1262	ND	29	ug/kg	
11100-14-4	Aroclor 1268	ND	29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		25-145%
877-09-8	Tetrachloro-m-xylene	78%		25-145%
2051-24-3	Decachlorobiphenyl	82%		25-179%
2051-24-3	Decachlorobiphenyl	61%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-3 0-2'		
Lab Sample ID:	MC50728-3	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	84.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5526.D	1	06/28/17 19:37	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	176	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HA-3 0-2'		
Lab Sample ID:	MC50728-3	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	84.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	3.2	2.5	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	42.6	25	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.62	0.62	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	18.8	1.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	136	2.5	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	0.053	0.037	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.5	2.5	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.62	0.62	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA-3 0-2'		
Lab Sample ID:	MC50728-3	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	84.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide Reactivity [a]	< 12	12	mg/kg	1	06/26/17 15:01	ANJ	SW846 CHAP7/9012 B
Ignitability (Flashpoint) [a]	> 200		Deg. F	1	06/28/17 16:49	ANJ	SW846 1010A/ASTM D93
Solids, Percent [a]	84.5		%	1	06/26/17 17:00	ANJ	SM2540 G-97
Sulfide Reactivity [a]	< 120	120	mg/kg	1	06/26/17 03:19	ANJ	SW846 CHAP7/9034
pH [a]	5.17		su	1	06/27/17 16:36	ANJ	SW846 9045D

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HA-3 0-2'		
Lab Sample ID:	MC50728-3A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	84.5
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	0.024		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-1 0-2'		
Lab Sample ID:	MC50728-4	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	93.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84494.D	1	06/29/17 21:24	DRY	n/a	n/a	MSM3048
Run #2 [a]	M84442.D	1	06/27/17 19:10	DRY	n/a	n/a	MSM3045

	Initial Weight	Final Volume
Run #1	6.21 g	5.0 ml
Run #2	5.97 g	5.0 ml

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	17	ug/kg	
107-13-1	Acrylonitrile	ND	22	ug/kg	
71-43-2	Benzene	ND	0.43	ug/kg	
108-86-1	Bromobenzene	ND	4.3	ug/kg	
75-27-4	Bromodichloromethane	ND	1.7	ug/kg	
75-25-2	Bromoform	ND	1.7	ug/kg	
74-83-9	Bromomethane	ND	8.6	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.6	ug/kg	
104-51-8	n-Butylbenzene	ND	4.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.3	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.3	ug/kg	
75-15-0	Carbon disulfide	ND	4.3	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.7	ug/kg	
108-90-7	Chlorobenzene	ND	1.7	ug/kg	
75-00-3	Chloroethane	ND	8.6	ug/kg	
67-66-3	Chloroform	ND	1.7	ug/kg	
74-87-3	Chloromethane	ND	4.3	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.3	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.3	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.3	ug/kg	
124-48-1	Dibromochloromethane	ND	1.7	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.7	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.7	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.7	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.7	ug/kg	
75-71-8	Dichlorodifluoromethane [b]	ND	4.3	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.7	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.7	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.7	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.7	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.7	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 0-2'		
Lab Sample ID:	MC50728-4	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	93.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	4.3	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.3	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.7	ug/kg	
100-41-4	Ethylbenzene	ND	1.7	ug/kg	
76-13-1	Freon 113	ND	4.3	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.3	ug/kg	
591-78-6	2-Hexanone	ND	4.3	ug/kg	
98-82-8	Isopropylbenzene	ND	4.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.3	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.7	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.3	ug/kg	
74-95-3	Methylene bromide	ND	4.3	ug/kg	
75-09-2	Methylene chloride	ND	4.3	ug/kg	
91-20-3	Naphthalene	ND	4.3	ug/kg	
103-65-1	n-Propylbenzene	ND	4.3	ug/kg	
100-42-5	Styrene	ND	4.3	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.7	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.3	ug/kg	
127-18-4	Tetrachloroethene	ND	1.7	ug/kg	
109-99-9	Tetrahydrofuran	ND	8.6	ug/kg	
108-88-3	Toluene	ND	4.3	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	8.6	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.7	ug/kg	
79-01-6	Trichloroethene	ND	1.7	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.7	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.3	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.3	ug/kg	
75-01-4	Vinyl chloride	ND	8.6	ug/kg	
	m,p-Xylene	ND	1.7	ug/kg	
95-47-6	o-Xylene	ND	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	128%	116%	65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 0-2'		
Lab Sample ID:	MC50728-4	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	93.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%	100%	65-129%
460-00-4	4-Bromofluorobenzene	137%	156% [c]	63-137%

(a) Confirmation run.
(b) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.
(c) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 0-2'		
Lab Sample ID:	MC50728-4	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	93.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52319.D	5	06/27/17 23:12	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2	R52334.D	25	06/28/17 18:29	DRY	06/23/17 12:30	OP49803	MSR1982

	Initial Weight	Final Volume
Run #1	20.6 g	1.0 ml
Run #2	20.6 g	1.0 ml

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	1300	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	2600	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	2600	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	2600	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	2600	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	2600	ug/kg	
95-48-7	2-Methylphenol	ND	2600	ug/kg	
106-44-5	4-Methylphenol	ND	2600	ug/kg	
88-75-5	2-Nitrophenol	ND	2600	ug/kg	
100-02-7	4-Nitrophenol	ND	2600	ug/kg	
87-86-5	Pentachlorophenol	ND	2600	ug/kg	
108-95-2	Phenol	ND	1300	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	2600	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	2600	ug/kg	
83-32-9	Acenaphthene	789	520	ug/kg	
208-96-8	Acenaphthylene	14100	520	ug/kg	
62-53-3	Aniline	ND	2600	ug/kg	
120-12-7	Anthracene	11100	520	ug/kg	
56-55-3	Benzo(a)anthracene	33200	520	ug/kg	
50-32-8	Benzo(a)pyrene	35600	1300	ug/kg	
205-99-2	Benzo(b)fluoranthene	37200	520	ug/kg	
191-24-2	Benzo(g,h,i)perylene	22100	520	ug/kg	
207-08-9	Benzo(k)fluoranthene	27100	520	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	1300	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	1300	ug/kg	
91-58-7	2-Chloronaphthalene	ND	1300	ug/kg	
106-47-8	4-Chloroaniline	ND	2600	ug/kg	
86-74-8	Carbazole	2560	520	ug/kg	
218-01-9	Chrysene	38800	520	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	1300	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	1300	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	1300	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 0-2'		
Lab Sample ID:	MC50728-4	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	93.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	1300	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	2600	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	2600	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	2600	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	7290	520	ug/kg	
132-64-9	Dibenzofuran	978	520	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	1300	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	1300	ug/kg	
84-66-2	Diethyl phthalate	ND	1300	ug/kg	
131-11-3	Dimethyl phthalate	ND	1300	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1300	ug/kg	
206-44-0	Fluoranthene	72000 [a]	2600	ug/kg	
86-73-7	Fluorene	3040	520	ug/kg	
118-74-1	Hexachlorobenzene	ND	1300	ug/kg	
87-68-3	Hexachlorobutadiene	ND	1300	ug/kg	
77-47-4	Hexachlorocyclopentadiene [b]	ND	2600	ug/kg	
67-72-1	Hexachloroethane	ND	1300	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	22600	1300	ug/kg	
78-59-1	Isophorone	ND	1300	ug/kg	
91-57-6	2-Methylnaphthalene	736	520	ug/kg	
88-74-4	2-Nitroaniline	ND	2600	ug/kg	
99-09-2	3-Nitroaniline	ND	2600	ug/kg	
100-01-6	4-Nitroaniline	ND	2600	ug/kg	
91-20-3	Naphthalene	1080	520	ug/kg	
98-95-3	Nitrobenzene	ND	1300	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	1300	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	1300	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	2600	ug/kg	
85-01-8	Phenanthrene	44400 [a]	2600	ug/kg	
129-00-0	Pyrene	74700 [a]	2600	ug/kg	
110-86-1	Pyridine	ND	2600	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2600	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	1300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	73%	67%	25-109%
4165-62-2	Phenol-d5	74%	67%	29-113%
118-79-6	2,4,6-Tribromophenol	71%	74%	20-141%
4165-60-0	Nitrobenzene-d5	68%	64%	27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 0-2'		
Lab Sample ID:	MC50728-4	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	93.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	69%	71%	34-118%
1718-51-0	Terphenyl-d14	77%	82%	42-139%

(a) Result is from Run# 2
(b) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 0-2'		
Lab Sample ID:	MC50728-4	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	93.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55379.D	1	06/27/17 16:16	AP	06/23/17 14:30	OP49806	GBE2773
Run #2	BE55378.D	20	06/27/17 16:02	AP	06/23/17 14:30	OP49806	GBE2773

	Initial Weight	Final Volume
Run #1	20.4 g	10.0 ml
Run #2	20.4 g	10.0 ml

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	52	ug/kg	
309-00-2	Aldrin	ND	5.2	ug/kg	
319-84-6	alpha-BHC	ND	5.2	ug/kg	
319-85-7	beta-BHC	ND	5.2	ug/kg	
319-86-8	delta-BHC	ND	5.2	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.2	ug/kg	
12789-03-6	Chlordane	ND	52	ug/kg	
60-57-1	Dieldrin	ND	5.2	ug/kg	
72-54-8	4,4'-DDD	ND	5.2	ug/kg	
72-55-9	4,4'-DDE	24.2	5.2	ug/kg	
50-29-3	4,4'-DDT	1080 [a]	100	ug/kg	
72-20-8	Endrin	ND	5.2	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.2	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.2	ug/kg	
959-98-8	Endosulfan-I	ND	5.2	ug/kg	
33213-65-9	Endosulfan-II	ND	5.2	ug/kg	
76-44-8	Heptachlor	ND	5.2	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.2	ug/kg	
72-43-5	Methoxychlor	ND	5.2	ug/kg	
53494-70-5	Endrin ketone	ND	5.2	ug/kg	
8001-35-2	Toxaphene	ND	52	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%	122%	10-143%
877-09-8	Tetrachloro-m-xylene	81%	98%	10-143%
2051-24-3	Decachlorobiphenyl	498% [b]	846% [b]	10-172%
2051-24-3	Decachlorobiphenyl	2594% [b]	2189% [b]	10-172%

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 0-2'		
Lab Sample ID:	MC50728-4	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	93.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65941.D	1	06/28/17 01:48	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	26	ug/kg	
11104-28-2	Aroclor 1221	ND	26	ug/kg	
11141-16-5	Aroclor 1232	ND	26	ug/kg	
53469-21-9	Aroclor 1242	ND	26	ug/kg	
12672-29-6	Aroclor 1248	ND	26	ug/kg	
11097-69-1	Aroclor 1254	ND	26	ug/kg	
11096-82-5	Aroclor 1260 [a]	89.4	26	ug/kg	
37324-23-5	Aroclor 1262	ND	26	ug/kg	
11100-14-4	Aroclor 1268	ND	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		25-145%
877-09-8	Tetrachloro-m-xylene	59%		25-145%
2051-24-3	Decachlorobiphenyl	99%		25-179%
2051-24-3	Decachlorobiphenyl	68%		25-179%

(a) Confirmation value > 40% RPD.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 0-2'		
Lab Sample ID:	MC50728-4	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	93.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5558.D	10	06/29/17 14:25	AP	06/23/17 14:00	OP49804	GCR1332
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	4310	180	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	123%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 0-2'		
Lab Sample ID:	MC50728-4	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	93.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	2.4	2.1	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	30.0	21	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.52	0.52	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	15.4	1.0	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	263	2.1	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	< 0.034	0.034	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.1	2.1	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.52	0.52	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-1 0-2'		
Lab Sample ID:	MC50728-4	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	93.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide Reactivity [a]	< 11	11	mg/kg	1	06/26/17 15:03	ANJ	SW846 CHAP7/9012 B
Ignitability (Flashpoint) [a]	> 200		Deg. F	1	06/28/17 16:49	ANJ	SW846 1010A/ASTM D93
Solids, Percent [a]	93.3		%	1	06/26/17 17:00	ANJ	SM2540 G-97
Sulfide Reactivity [a]	< 110	110	mg/kg	1	06/26/17 03:19	ANJ	SW846 CHAP7/9034
pH [a]	5.99		su	1	06/27/17 16:37	ANJ	SW846 9045D

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-1 0-2'		
Lab Sample ID:	MC50728-4A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	93.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	0.058		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-1 2-4'		
Lab Sample ID:	MC50728-5	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	81.2
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84443.D	1	06/27/17 19:38	DRY	n/a	n/a	MSM3045
Run #2 [a]	M84495.D	1	06/29/17 21:52	DRY	n/a	n/a	MSM3048

	Initial Weight	Final Volume
Run #1	7.44 g	5.0 ml
Run #2	6.44 g	5.0 ml

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	17	ug/kg	
107-13-1	Acrylonitrile	ND	21	ug/kg	
71-43-2	Benzene	ND	0.41	ug/kg	
108-86-1	Bromobenzene	ND	4.1	ug/kg	
75-27-4	Bromodichloromethane	ND	1.7	ug/kg	
75-25-2	Bromoform	ND	1.7	ug/kg	
74-83-9	Bromomethane	ND	8.3	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.3	ug/kg	
104-51-8	n-Butylbenzene	ND	4.1	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.1	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.1	ug/kg	
75-15-0	Carbon disulfide	ND	4.1	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.7	ug/kg	
108-90-7	Chlorobenzene	ND	1.7	ug/kg	
75-00-3	Chloroethane	ND	8.3	ug/kg	
67-66-3	Chloroform	ND	1.7	ug/kg	
74-87-3	Chloromethane	ND	4.1	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.1	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.1	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.1	ug/kg	
124-48-1	Dibromochloromethane	ND	1.7	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.7	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.7	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.7	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.7	ug/kg	
75-71-8	Dichlorodifluoromethane [b]	ND	4.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.7	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.7	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.7	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.7	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.7	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 2-4'		
Lab Sample ID:	MC50728-5	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	81.2
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	4.1	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.1	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.7	ug/kg	
100-41-4	Ethylbenzene	ND	1.7	ug/kg	
76-13-1	Freon 113	ND	4.1	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.1	ug/kg	
591-78-6	2-Hexanone	ND	4.1	ug/kg	
98-82-8	Isopropylbenzene	ND	4.1	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.7	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.1	ug/kg	
74-95-3	Methylene bromide	ND	4.1	ug/kg	
75-09-2	Methylene chloride	ND	4.1	ug/kg	
91-20-3	Naphthalene	ND	4.1	ug/kg	
103-65-1	n-Propylbenzene	ND	4.1	ug/kg	
100-42-5	Styrene	ND	4.1	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.7	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.1	ug/kg	
127-18-4	Tetrachloroethene	ND	1.7	ug/kg	
109-99-9	Tetrahydrofuran	ND	8.3	ug/kg	
108-88-3	Toluene	ND	4.1	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	8.3	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.1	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.7	ug/kg	
79-01-6	Trichloroethene	ND	1.7	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.7	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.1	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.1	ug/kg	
75-01-4	Vinyl chloride	ND	8.3	ug/kg	
	m,p-Xylene	ND	1.7	ug/kg	
95-47-6	o-Xylene	ND	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%	124%	65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 2-4'		
Lab Sample ID:	MC50728-5	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	81.2
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	97%	104%	65-129%
460-00-4	4-Bromofluorobenzene	123%	132%	63-137%

(a) Confirmation run.
(b) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 2-4'		
Lab Sample ID:	MC50728-5	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.2
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52304.D	1	06/27/17 16:48	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.8 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	300	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	590	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	590	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	590	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	590	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	590	ug/kg	
95-48-7	2-Methylphenol	ND	590	ug/kg	
106-44-5	4-Methylphenol	ND	590	ug/kg	
88-75-5	2-Nitrophenol	ND	590	ug/kg	
100-02-7	4-Nitrophenol	ND	590	ug/kg	
87-86-5	Pentachlorophenol	ND	590	ug/kg	
108-95-2	Phenol	ND	300	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	590	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	590	ug/kg	
83-32-9	Acenaphthene	ND	120	ug/kg	
208-96-8	Acenaphthylene	257	120	ug/kg	
62-53-3	Aniline	ND	590	ug/kg	
120-12-7	Anthracene	ND	120	ug/kg	
56-55-3	Benzo(a)anthracene	338	120	ug/kg	
50-32-8	Benzo(a)pyrene	494	300	ug/kg	
205-99-2	Benzo(b)fluoranthene	511	120	ug/kg	
191-24-2	Benzo(g,h,i)perylene	399	120	ug/kg	
207-08-9	Benzo(k)fluoranthene	461	120	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	300	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	300	ug/kg	
91-58-7	2-Chloronaphthalene	ND	300	ug/kg	
106-47-8	4-Chloroaniline	ND	590	ug/kg	
86-74-8	Carbazole	ND	120	ug/kg	
218-01-9	Chrysene	519	120	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	300	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	300	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	300	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 2-4'		
Lab Sample ID:	MC50728-5	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.2
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	300	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	590	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	590	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	590	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	120	ug/kg	
132-64-9	Dibenzofuran	ND	120	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	300	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	300	ug/kg	
84-66-2	Diethyl phthalate	ND	300	ug/kg	
131-11-3	Dimethyl phthalate	ND	300	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	300	ug/kg	
206-44-0	Fluoranthene	808	120	ug/kg	
86-73-7	Fluorene	ND	120	ug/kg	
118-74-1	Hexachlorobenzene	ND	300	ug/kg	
87-68-3	Hexachlorobutadiene	ND	300	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	590	ug/kg	
67-72-1	Hexachloroethane	ND	300	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	430	300	ug/kg	
78-59-1	Isophorone	ND	300	ug/kg	
91-57-6	2-Methylnaphthalene	ND	120	ug/kg	
88-74-4	2-Nitroaniline	ND	590	ug/kg	
99-09-2	3-Nitroaniline	ND	590	ug/kg	
100-01-6	4-Nitroaniline	ND	590	ug/kg	
91-20-3	Naphthalene	ND	120	ug/kg	
98-95-3	Nitrobenzene	ND	300	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	300	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	300	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	590	ug/kg	
85-01-8	Phenanthrene	335	120	ug/kg	
129-00-0	Pyrene	897	120	ug/kg	
110-86-1	Pyridine	ND	590	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	590	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	92%		25-109%
4165-62-2	Phenol-d5	94%		29-113%
118-79-6	2,4,6-Tribromophenol	83%		20-141%
4165-60-0	Nitrobenzene-d5	84%		27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 2-4'		
Lab Sample ID:	MC50728-5	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.2
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	79%		34-118%
1718-51-0	Terphenyl-d14	92%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 2-4'		
Lab Sample ID:	MC50728-5	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	81.2
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55344.D	1	06/27/17 00:38	AP	06/23/17 14:30	OP49806	GBE2772
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	60	ug/kg	
309-00-2	Aldrin	ND	6.0	ug/kg	
319-84-6	alpha-BHC	ND	6.0	ug/kg	
319-85-7	beta-BHC	ND	6.0	ug/kg	
319-86-8	delta-BHC	ND	6.0	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	6.0	ug/kg	
12789-03-6	Chlordane	ND	60	ug/kg	
60-57-1	Dieldrin	ND	6.0	ug/kg	
72-54-8	4,4'-DDD	ND	6.0	ug/kg	
72-55-9	4,4'-DDE	ND	6.0	ug/kg	
50-29-3	4,4'-DDT	14.1	6.0	ug/kg	
72-20-8	Endrin	ND	6.0	ug/kg	
1031-07-8	Endosulfan sulfate	ND	6.0	ug/kg	
7421-93-4	Endrin aldehyde	ND	6.0	ug/kg	
959-98-8	Endosulfan-I	ND	6.0	ug/kg	
33213-65-9	Endosulfan-II	ND	6.0	ug/kg	
76-44-8	Heptachlor	ND	6.0	ug/kg	
1024-57-3	Heptachlor epoxide	ND	6.0	ug/kg	
72-43-5	Methoxychlor	ND	6.0	ug/kg	
53494-70-5	Endrin ketone	ND	6.0	ug/kg	
8001-35-2	Toxaphene	ND	60	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		10-143%
877-09-8	Tetrachloro-m-xylene	74%		10-143%
2051-24-3	Decachlorobiphenyl	176% [a]		10-172%
2051-24-3	Decachlorobiphenyl	157%		10-172%

(a) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 2-4'		
Lab Sample ID:	MC50728-5	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	81.2
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65942.D	1	06/28/17 02:03	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	30	ug/kg	
11104-28-2	Aroclor 1221	ND	30	ug/kg	
11141-16-5	Aroclor 1232	ND	30	ug/kg	
53469-21-9	Aroclor 1242	ND	30	ug/kg	
12672-29-6	Aroclor 1248	ND	30	ug/kg	
11097-69-1	Aroclor 1254	ND	30	ug/kg	
11096-82-5	Aroclor 1260	ND	30	ug/kg	
37324-23-5	Aroclor 1262	ND	30	ug/kg	
11100-14-4	Aroclor 1268	ND	30	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		25-145%
877-09-8	Tetrachloro-m-xylene	75%		25-145%
2051-24-3	Decachlorobiphenyl	83%		25-179%
2051-24-3	Decachlorobiphenyl	64%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 2-4'		
Lab Sample ID:	MC50728-5	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	81.2
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5529.D	1	06/28/17 21:11	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	262	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1 2-4'		
Lab Sample ID:	MC50728-5	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	81.2
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	4.6	2.5	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	78.3	25	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.63	0.63	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	20.5	1.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	196	2.5	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	0.15	0.039	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.5	2.5	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.63	0.63	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-1 2-4'		
Lab Sample ID:	MC50728-5A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	81.2
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	0.024		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-2 1-3'		
Lab Sample ID:	MC50728-6	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	91.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84496.D	1	06/29/17 22:19	DRY	n/a	n/a	MSM3048
Run #2							

	Initial Weight	Final Volume
Run #1	7.46 g	5.0 ml
Run #2		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	15	ug/kg	
107-13-1	Acrylonitrile	ND	18	ug/kg	
71-43-2	Benzene	ND	0.37	ug/kg	
108-86-1	Bromobenzene	ND	3.7	ug/kg	
75-27-4	Bromodichloromethane	ND	1.5	ug/kg	
75-25-2	Bromoform	ND	1.5	ug/kg	
74-83-9	Bromomethane	ND	7.4	ug/kg	
78-93-3	2-Butanone (MEK)	ND	7.4	ug/kg	
104-51-8	n-Butylbenzene	ND	3.7	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.7	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.7	ug/kg	
75-15-0	Carbon disulfide	ND	3.7	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.5	ug/kg	
108-90-7	Chlorobenzene	ND	1.5	ug/kg	
75-00-3	Chloroethane	ND	7.4	ug/kg	
67-66-3	Chloroform	ND	1.5	ug/kg	
74-87-3	Chloromethane	ND	3.7	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.7	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.7	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.7	ug/kg	
124-48-1	Dibromochloromethane	ND	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.5	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.5	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.5	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	3.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.5	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.5	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.5	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.5	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 1-3'		
Lab Sample ID:	MC50728-6	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	91.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	3.7	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.7	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	1.5	ug/kg	
76-13-1	Freon 113	ND	3.7	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.7	ug/kg	
591-78-6	2-Hexanone	ND	3.7	ug/kg	
98-82-8	Isopropylbenzene	ND	3.7	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.7	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.5	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3.7	ug/kg	
74-95-3	Methylene bromide	ND	3.7	ug/kg	
75-09-2	Methylene chloride	ND	3.7	ug/kg	
91-20-3	Naphthalene	ND	3.7	ug/kg	
103-65-1	n-Propylbenzene	ND	3.7	ug/kg	
100-42-5	Styrene	ND	3.7	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	ug/kg	
127-18-4	Tetrachloroethene	ND	1.5	ug/kg	
109-99-9	Tetrahydrofuran	ND	7.4	ug/kg	
108-88-3	Toluene	ND	3.7	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	7.4	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.5	ug/kg	
79-01-6	Trichloroethene	ND	1.5	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.5	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.7	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.7	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.7	ug/kg	
75-01-4	Vinyl chloride	ND	7.4	ug/kg	
	m,p-Xylene	ND	1.5	ug/kg	
95-47-6	o-Xylene	ND	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	128%		65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 1-3'		
Lab Sample ID:	MC50728-6	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	91.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	106%		65-129%
460-00-4	4-Bromofluorobenzene	104%		63-137%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 1-3'		
Lab Sample ID:	MC50728-6	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52305.D	1	06/27/17 17:14	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	270	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	540	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	540	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	540	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	540	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	540	ug/kg	
95-48-7	2-Methylphenol	ND	540	ug/kg	
106-44-5	4-Methylphenol	ND	540	ug/kg	
88-75-5	2-Nitrophenol	ND	540	ug/kg	
100-02-7	4-Nitrophenol	ND	540	ug/kg	
87-86-5	Pentachlorophenol	ND	540	ug/kg	
108-95-2	Phenol	ND	270	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	540	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	540	ug/kg	
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	ND	110	ug/kg	
62-53-3	Aniline	ND	540	ug/kg	
120-12-7	Anthracene	ND	110	ug/kg	
56-55-3	Benzo(a)anthracene	ND	110	ug/kg	
50-32-8	Benzo(a)pyrene	ND	270	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	ug/kg	
106-47-8	4-Chloroaniline	ND	540	ug/kg	
86-74-8	Carbazole	ND	110	ug/kg	
218-01-9	Chrysene	ND	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	270	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 1-3'		
Lab Sample ID:	MC50728-6	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	270	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	540	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	540	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	540	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	ug/kg	
84-66-2	Diethyl phthalate	ND	270	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	270	ug/kg	
206-44-0	Fluoranthene	ND	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	540	ug/kg	
67-72-1	Hexachloroethane	ND	270	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	270	ug/kg	
78-59-1	Isophorone	ND	270	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	540	ug/kg	
99-09-2	3-Nitroaniline	ND	540	ug/kg	
100-01-6	4-Nitroaniline	ND	540	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	270	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	540	ug/kg	
85-01-8	Phenanthrene	ND	110	ug/kg	
129-00-0	Pyrene	ND	110	ug/kg	
110-86-1	Pyridine	ND	540	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	540	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	91%		25-109%
4165-62-2	Phenol-d5	92%		29-113%
118-79-6	2,4,6-Tribromophenol	79%		20-141%
4165-60-0	Nitrobenzene-d5	85%		27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 1-3'		
Lab Sample ID:	MC50728-6	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	80%		34-118%
1718-51-0	Terphenyl-d14	91%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 1-3'		
Lab Sample ID:	MC50728-6	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	91.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55345.D	1	06/27/17 00:53	AP	06/23/17 14:30	OP49806	GBE2772
Run #2							

	Initial Weight	Final Volume
Run #1	20.6 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	53	ug/kg	
309-00-2	Aldrin	ND	5.3	ug/kg	
319-84-6	alpha-BHC	ND	5.3	ug/kg	
319-85-7	beta-BHC	ND	5.3	ug/kg	
319-86-8	delta-BHC	ND	5.3	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.3	ug/kg	
12789-03-6	Chlordane	ND	53	ug/kg	
60-57-1	Dieldrin	ND	5.3	ug/kg	
72-54-8	4,4'-DDD	ND	5.3	ug/kg	
72-55-9	4,4'-DDE	ND	5.3	ug/kg	
50-29-3	4,4'-DDT	ND	5.3	ug/kg	
72-20-8	Endrin	ND	5.3	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.3	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.3	ug/kg	
959-98-8	Endosulfan-I	ND	5.3	ug/kg	
33213-65-9	Endosulfan-II	ND	5.3	ug/kg	
76-44-8	Heptachlor	ND	5.3	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.3	ug/kg	
72-43-5	Methoxychlor	ND	5.3	ug/kg	
53494-70-5	Endrin ketone	ND	5.3	ug/kg	
8001-35-2	Toxaphene	ND	53	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	103%		10-143%
877-09-8	Tetrachloro-m-xylene	86%		10-143%
2051-24-3	Decachlorobiphenyl	120%		10-172%
2051-24-3	Decachlorobiphenyl	110%		10-172%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 1-3'		
Lab Sample ID:	MC50728-6	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	91.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65943.D	1	06/28/17 02:19	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.6 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	27	ug/kg	
11104-28-2	Aroclor 1221	ND	27	ug/kg	
11141-16-5	Aroclor 1232	ND	27	ug/kg	
53469-21-9	Aroclor 1242	ND	27	ug/kg	
12672-29-6	Aroclor 1248	ND	27	ug/kg	
11097-69-1	Aroclor 1254	ND	27	ug/kg	
11096-82-5	Aroclor 1260	ND	27	ug/kg	
37324-23-5	Aroclor 1262	ND	27	ug/kg	
11100-14-4	Aroclor 1268	ND	27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		25-145%
877-09-8	Tetrachloro-m-xylene	98%		25-145%
2051-24-3	Decachlorobiphenyl	86%		25-179%
2051-24-3	Decachlorobiphenyl	71%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 1-3'		
Lab Sample ID:	MC50728-6	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	91.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5523.D	1	06/28/17 18:03	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	23.0	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 1-3'		
Lab Sample ID:	MC50728-6	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	91.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	3.3	2.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	103	22	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.55	0.55	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	14.1	1.1	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	32.3	2.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	0.037	0.035	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.2	2.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.55	0.55	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-2 1-3'		
Lab Sample ID:	MC50728-6	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	91.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide Reactivity [a]	< 11	11	mg/kg	1	06/26/17 15:04	ANJ	SW846 CHAP7/9012 B
Ignitability (Flashpoint) [a]	> 200		Deg. F	1	06/28/17 16:49	ANJ	SW846 1010A/ASTM D93
Solids, Percent [a]	91		%	1	06/26/17 17:00	ANJ	SM2540 G-97
Sulfide Reactivity [a]	< 110	110	mg/kg	1	06/26/17 03:19	ANJ	SW846 CHAP7/9034
pH [a]	7.37		su	1	06/27/17 16:39	ANJ	SW846 9045D

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-2 1-3'		
Lab Sample ID:	MC50728-6A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	91.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	0.019		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-2 3-5'		
Lab Sample ID:	MC50728-7	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	91.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84497.D	1	06/29/17 22:47	DRY	n/a	n/a	MSM3048
Run #2							

	Initial Weight	Final Volume
Run #1	7.15 g	5.0 ml
Run #2		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	15	ug/kg	
107-13-1	Acrylonitrile	ND	19	ug/kg	
71-43-2	Benzene	ND	0.38	ug/kg	
108-86-1	Bromobenzene	ND	3.8	ug/kg	
75-27-4	Bromodichloromethane	ND	1.5	ug/kg	
75-25-2	Bromoform	ND	1.5	ug/kg	
74-83-9	Bromomethane	ND	7.7	ug/kg	
78-93-3	2-Butanone (MEK)	ND	7.7	ug/kg	
104-51-8	n-Butylbenzene	ND	3.8	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.8	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.8	ug/kg	
75-15-0	Carbon disulfide	ND	3.8	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.5	ug/kg	
108-90-7	Chlorobenzene	ND	1.5	ug/kg	
75-00-3	Chloroethane	ND	7.7	ug/kg	
67-66-3	Chloroform	ND	1.5	ug/kg	
74-87-3	Chloromethane	ND	3.8	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.8	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.8	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.8	ug/kg	
124-48-1	Dibromochloromethane	ND	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.5	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.5	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.5	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	3.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.5	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.5	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.5	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.5	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 3-5'		
Lab Sample ID:	MC50728-7	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	91.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	3.8	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.8	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	1.5	ug/kg	
76-13-1	Freon 113	ND	3.8	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.8	ug/kg	
591-78-6	2-Hexanone	ND	3.8	ug/kg	
98-82-8	Isopropylbenzene	ND	3.8	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.8	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.5	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3.8	ug/kg	
74-95-3	Methylene bromide	ND	3.8	ug/kg	
75-09-2	Methylene chloride	ND	3.8	ug/kg	
91-20-3	Naphthalene	ND	3.8	ug/kg	
103-65-1	n-Propylbenzene	ND	3.8	ug/kg	
100-42-5	Styrene	ND	3.8	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.8	ug/kg	
127-18-4	Tetrachloroethene	ND	1.5	ug/kg	
109-99-9	Tetrahydrofuran	ND	7.7	ug/kg	
108-88-3	Toluene	ND	3.8	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	7.7	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.8	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.5	ug/kg	
79-01-6	Trichloroethene	ND	1.5	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.5	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.8	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.8	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.8	ug/kg	
75-01-4	Vinyl chloride	ND	7.7	ug/kg	
	m,p-Xylene	ND	1.5	ug/kg	
95-47-6	o-Xylene	ND	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	128%		65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 3-5'		
Lab Sample ID:	MC50728-7	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	91.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		65-129%
460-00-4	4-Bromofluorobenzene	97%		63-137%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 3-5'		
Lab Sample ID:	MC50728-7	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52306.D	1	06/27/17 17:39	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	270	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	540	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	540	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	540	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	540	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	540	ug/kg	
95-48-7	2-Methylphenol	ND	540	ug/kg	
106-44-5	4-Methylphenol	ND	540	ug/kg	
88-75-5	2-Nitrophenol	ND	540	ug/kg	
100-02-7	4-Nitrophenol	ND	540	ug/kg	
87-86-5	Pentachlorophenol	ND	540	ug/kg	
108-95-2	Phenol	ND	270	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	540	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	540	ug/kg	
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	ND	110	ug/kg	
62-53-3	Aniline	ND	540	ug/kg	
120-12-7	Anthracene	ND	110	ug/kg	
56-55-3	Benzo(a)anthracene	ND	110	ug/kg	
50-32-8	Benzo(a)pyrene	ND	270	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	ug/kg	
106-47-8	4-Chloroaniline	ND	540	ug/kg	
86-74-8	Carbazole	ND	110	ug/kg	
218-01-9	Chrysene	ND	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	270	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 3-5'		
Lab Sample ID:	MC50728-7	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	270	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	540	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	540	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	540	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	ug/kg	
84-66-2	Diethyl phthalate	ND	270	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	270	ug/kg	
206-44-0	Fluoranthene	ND	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	540	ug/kg	
67-72-1	Hexachloroethane	ND	270	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	270	ug/kg	
78-59-1	Isophorone	ND	270	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	540	ug/kg	
99-09-2	3-Nitroaniline	ND	540	ug/kg	
100-01-6	4-Nitroaniline	ND	540	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	270	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	540	ug/kg	
85-01-8	Phenanthrene	ND	110	ug/kg	
129-00-0	Pyrene	ND	110	ug/kg	
110-86-1	Pyridine	ND	540	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	540	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	97%		25-109%
4165-62-2	Phenol-d5	98%		29-113%
118-79-6	2,4,6-Tribromophenol	83%		20-141%
4165-60-0	Nitrobenzene-d5	88%		27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 3-5'		
Lab Sample ID:	MC50728-7	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	83%		34-118%
1718-51-0	Terphenyl-d14	96%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 3-5'		
Lab Sample ID:	MC50728-7	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	91.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55346.D	1	06/27/17 01:07	AP	06/23/17 14:30	OP49806	GBE2772
Run #2							

	Initial Weight	Final Volume
Run #1	20.7 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	53	ug/kg	
309-00-2	Aldrin	ND	5.3	ug/kg	
319-84-6	alpha-BHC	ND	5.3	ug/kg	
319-85-7	beta-BHC	ND	5.3	ug/kg	
319-86-8	delta-BHC	ND	5.3	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.3	ug/kg	
12789-03-6	Chlordane	ND	53	ug/kg	
60-57-1	Dieldrin	ND	5.3	ug/kg	
72-54-8	4,4'-DDD	ND	5.3	ug/kg	
72-55-9	4,4'-DDE	ND	5.3	ug/kg	
50-29-3	4,4'-DDT	ND	5.3	ug/kg	
72-20-8	Endrin	ND	5.3	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.3	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.3	ug/kg	
959-98-8	Endosulfan-I	ND	5.3	ug/kg	
33213-65-9	Endosulfan-II	ND	5.3	ug/kg	
76-44-8	Heptachlor	ND	5.3	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.3	ug/kg	
72-43-5	Methoxychlor	ND	5.3	ug/kg	
53494-70-5	Endrin ketone	ND	5.3	ug/kg	
8001-35-2	Toxaphene	ND	53	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		10-143%
877-09-8	Tetrachloro-m-xylene	73%		10-143%
2051-24-3	Decachlorobiphenyl	106%		10-172%
2051-24-3	Decachlorobiphenyl	93%		10-172%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 3-5'		
Lab Sample ID:	MC50728-7	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	91.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65944.D	1	06/28/17 02:35	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.7 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	26	ug/kg	
11104-28-2	Aroclor 1221	ND	26	ug/kg	
11141-16-5	Aroclor 1232	ND	26	ug/kg	
53469-21-9	Aroclor 1242	ND	26	ug/kg	
12672-29-6	Aroclor 1248	ND	26	ug/kg	
11097-69-1	Aroclor 1254	ND	26	ug/kg	
11096-82-5	Aroclor 1260	ND	26	ug/kg	
37324-23-5	Aroclor 1262	ND	26	ug/kg	
11100-14-4	Aroclor 1268	ND	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	96%		25-145%
877-09-8	Tetrachloro-m-xylene	98%		25-145%
2051-24-3	Decachlorobiphenyl	76%		25-179%
2051-24-3	Decachlorobiphenyl	67%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 3-5'		
Lab Sample ID:	MC50728-7	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	91.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5519.D	1	06/28/17 15:57	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	ND	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2 3-5'		
Lab Sample ID:	MC50728-7	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	91.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	3.0	2.1	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	38.4	21	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.52	0.52	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	13.3	1.0	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.3	2.1	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	< 0.036	0.036	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.1	2.1	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.52	0.52	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-2 3-5'		
Lab Sample ID:	MC50728-7A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	91.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	< 0.015		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-3 2-4'		
Lab Sample ID:	MC50728-8	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84514.D	1	06/30/17 12:34	DRY	n/a	n/a	MSM3049
Run #2							

	Initial Weight	Final Volume
Run #1	5.37 g	5.0 ml
Run #2		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	21	ug/kg	
107-13-1	Acrylonitrile	ND	26	ug/kg	
71-43-2	Benzene	ND	0.53	ug/kg	
108-86-1	Bromobenzene	ND	5.3	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	ug/kg	
75-25-2	Bromoform	ND	2.1	ug/kg	
74-83-9	Bromomethane	ND	11	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	
104-51-8	n-Butylbenzene	ND	5.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.3	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.3	ug/kg	
75-15-0	Carbon disulfide	ND	5.3	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	ug/kg	
75-00-3	Chloroethane	ND	11	ug/kg	
67-66-3	Chloroform	ND	2.1	ug/kg	
74-87-3	Chloromethane	ND	5.3	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.3	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.3	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.3	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.1	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.1	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.3	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.1	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.1	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 2-4'		
Lab Sample ID:	MC50728-8	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.3	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.3	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ug/kg	
100-41-4	Ethylbenzene	ND	2.1	ug/kg	
76-13-1	Freon 113	ND	5.3	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.3	ug/kg	
591-78-6	2-Hexanone	ND	5.3	ug/kg	
98-82-8	Isopropylbenzene	ND	5.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.3	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.1	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.3	ug/kg	
74-95-3	Methylene bromide	ND	5.3	ug/kg	
75-09-2	Methylene chloride	ND	5.3	ug/kg	
91-20-3	Naphthalene	ND	5.3	ug/kg	
103-65-1	n-Propylbenzene	ND	5.3	ug/kg	
100-42-5	Styrene	ND	5.3	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	ug/kg	
109-99-9	Tetrahydrofuran [a]	ND	11	ug/kg	
108-88-3	Toluene	ND	5.3	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	11	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ug/kg	
79-01-6	Trichloroethene	ND	2.1	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.3	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.3	ug/kg	
75-01-4	Vinyl chloride	ND	11	ug/kg	
	m,p-Xylene	ND	2.1	ug/kg	
95-47-6	o-Xylene	ND	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	126%		65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 2-4'		
Lab Sample ID:	MC50728-8	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		65-129%
460-00-4	4-Bromofluorobenzene	107%		63-137%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 2-4'		
Lab Sample ID:	MC50728-8	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52307.D	1	06/27/17 18:05	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	550	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	550	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	550	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	550	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	550	ug/kg	
95-48-7	2-Methylphenol	ND	550	ug/kg	
106-44-5	4-Methylphenol	ND	550	ug/kg	
88-75-5	2-Nitrophenol	ND	550	ug/kg	
100-02-7	4-Nitrophenol	ND	550	ug/kg	
87-86-5	Pentachlorophenol	ND	550	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	550	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	550	ug/kg	
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	ND	110	ug/kg	
62-53-3	Aniline	ND	550	ug/kg	
120-12-7	Anthracene	ND	110	ug/kg	
56-55-3	Benzo(a)anthracene	ND	110	ug/kg	
50-32-8	Benzo(a)pyrene	ND	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	550	ug/kg	
86-74-8	Carbazole	ND	110	ug/kg	
218-01-9	Chrysene	ND	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 2-4'		
Lab Sample ID:	MC50728-8	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	550	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	550	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	550	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	ND	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	550	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	280	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	550	ug/kg	
99-09-2	3-Nitroaniline	ND	550	ug/kg	
100-01-6	4-Nitroaniline	ND	550	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	550	ug/kg	
85-01-8	Phenanthrene	ND	110	ug/kg	
129-00-0	Pyrene	ND	110	ug/kg	
110-86-1	Pyridine	ND	550	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	550	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	102%		25-109%
4165-62-2	Phenol-d5	103%		29-113%
118-79-6	2,4,6-Tribromophenol	87%		20-141%
4165-60-0	Nitrobenzene-d5	93%		27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 2-4'		
Lab Sample ID:	MC50728-8	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	87%		34-118%
1718-51-0	Terphenyl-d14	99%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 2-4'		
Lab Sample ID:	MC50728-8	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	88.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55347.D	1	06/27/17 01:22	AP	06/23/17 14:30	OP49806	GBE2772
Run #2							

	Initial Weight	Final Volume
Run #1	20.3 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	56	ug/kg	
309-00-2	Aldrin	ND	5.6	ug/kg	
319-84-6	alpha-BHC	ND	5.6	ug/kg	
319-85-7	beta-BHC	ND	5.6	ug/kg	
319-86-8	delta-BHC	ND	5.6	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.6	ug/kg	
12789-03-6	Chlordane	ND	56	ug/kg	
60-57-1	Dieldrin	ND	5.6	ug/kg	
72-54-8	4,4'-DDD	ND	5.6	ug/kg	
72-55-9	4,4'-DDE	ND	5.6	ug/kg	
50-29-3	4,4'-DDT	ND	5.6	ug/kg	
72-20-8	Endrin	ND	5.6	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.6	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.6	ug/kg	
959-98-8	Endosulfan-I	ND	5.6	ug/kg	
33213-65-9	Endosulfan-II	ND	5.6	ug/kg	
76-44-8	Heptachlor	ND	5.6	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.6	ug/kg	
72-43-5	Methoxychlor	ND	5.6	ug/kg	
53494-70-5	Endrin ketone	ND	5.6	ug/kg	
8001-35-2	Toxaphene	ND	56	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		10-143%
877-09-8	Tetrachloro-m-xylene	75%		10-143%
2051-24-3	Decachlorobiphenyl	115%		10-172%
2051-24-3	Decachlorobiphenyl	96%		10-172%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 2-4'		
Lab Sample ID:	MC50728-8	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	88.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65945.D	1	06/28/17 02:51	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.3 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	28	ug/kg	
11104-28-2	Aroclor 1221	ND	28	ug/kg	
11141-16-5	Aroclor 1232	ND	28	ug/kg	
53469-21-9	Aroclor 1242	ND	28	ug/kg	
12672-29-6	Aroclor 1248	ND	28	ug/kg	
11097-69-1	Aroclor 1254	ND	28	ug/kg	
11096-82-5	Aroclor 1260	ND	28	ug/kg	
37324-23-5	Aroclor 1262	ND	28	ug/kg	
11100-14-4	Aroclor 1268	ND	28	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		25-145%
877-09-8	Tetrachloro-m-xylene	99%		25-145%
2051-24-3	Decachlorobiphenyl	83%		25-179%
2051-24-3	Decachlorobiphenyl	74%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 2-4'		
Lab Sample ID:	MC50728-8	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	88.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5520.D	1	06/28/17 16:29	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	ND	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	99%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 2-4'		
Lab Sample ID:	MC50728-8	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	88.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	5.2	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	47.8	23	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.57	0.57	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	14.3	1.1	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	11.1	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	< 0.034	0.034	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.3	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.57	0.57	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-3 2-4'		
Lab Sample ID:	MC50728-8	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	88.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide Reactivity [a]	< 11	11	mg/kg	1	06/26/17 15:05	ANJ	SW846 CHAP7/9012 B
Ignitability (Flashpoint) [a]	> 200		Deg. F	1	06/28/17 16:49	ANJ	SW846 1010A/ASTM D93
Solids, Percent [a]	88.3		%	1	06/26/17 17:00	ANJ	SM2540 G-97
Sulfide Reactivity [a]	< 110	110	mg/kg	1	06/26/17 03:19	ANJ	SW846 CHAP7/9034
pH [a]	5.49		su	1	06/27/17 16:43	ANJ	SW846 9045D

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-3 2-4'		
Lab Sample ID:	MC50728-8A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	88.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	< 0.015		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-3 6-8'		
Lab Sample ID:	MC50728-9	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	84.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84499.D	1	06/29/17 23:42	DRY	n/a	n/a	MSM3048
Run #2 [a]	M84515.D	1	06/30/17 13:02	DRY	n/a	n/a	MSM3049

	Initial Weight	Final Volume
Run #1	5.99 g	5.0 ml
Run #2	7.26 g	5.0 ml

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	20	ug/kg	
107-13-1	Acrylonitrile	ND	25	ug/kg	
71-43-2	Benzene	ND	0.49	ug/kg	
108-86-1	Bromobenzene	ND	4.9	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	ug/kg	
75-25-2	Bromoform	ND	2.0	ug/kg	
74-83-9	Bromomethane	ND	9.9	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.9	ug/kg	
104-51-8	n-Butylbenzene	ND	4.9	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.9	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.9	ug/kg	
75-15-0	Carbon disulfide	ND	4.9	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	ug/kg	
75-00-3	Chloroethane	ND	9.9	ug/kg	
67-66-3	Chloroform	ND	2.0	ug/kg	
74-87-3	Chloromethane	ND	4.9	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.9	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.9	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.9	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	ug/kg	
75-71-8	Dichlorodifluoromethane [b]	ND	4.9	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 6-8'		
Lab Sample ID:	MC50728-9	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	84.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	4.9	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.9	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.9	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	ug/kg	
76-13-1	Freon 113	ND	4.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.9	ug/kg	
591-78-6	2-Hexanone	ND	4.9	ug/kg	
98-82-8	Isopropylbenzene	ND	4.9	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.9	ug/kg	
74-95-3	Methylene bromide	ND	4.9	ug/kg	
75-09-2	Methylene chloride	ND	4.9	ug/kg	
91-20-3	Naphthalene	ND	4.9	ug/kg	
103-65-1	n-Propylbenzene	ND	4.9	ug/kg	
100-42-5	Styrene	ND	4.9	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	ug/kg	
109-99-9	Tetrahydrofuran	ND	9.9	ug/kg	
108-88-3	Toluene	ND	4.9	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	9.9	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ug/kg	
79-01-6	Trichloroethene	ND	2.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.9	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.9	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.9	ug/kg	
75-01-4	Vinyl chloride	ND	9.9	ug/kg	
	m,p-Xylene	ND	2.0	ug/kg	
95-47-6	o-Xylene	ND	2.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	131%	130%	65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 6-8'		
Lab Sample ID:	MC50728-9	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	84.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	105%	101%	65-129%
460-00-4	4-Bromofluorobenzene	107%	121%	63-137%

(a) Confirmation run.
(b) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 6-8'		
Lab Sample ID:	MC50728-9	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52308.D	1	06/27/17 18:31	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	290	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	580	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	580	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	580	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	580	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	580	ug/kg	
95-48-7	2-Methylphenol	ND	580	ug/kg	
106-44-5	4-Methylphenol	ND	580	ug/kg	
88-75-5	2-Nitrophenol	ND	580	ug/kg	
100-02-7	4-Nitrophenol	ND	580	ug/kg	
87-86-5	Pentachlorophenol	ND	580	ug/kg	
108-95-2	Phenol	ND	290	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	580	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	580	ug/kg	
83-32-9	Acenaphthene	ND	120	ug/kg	
208-96-8	Acenaphthylene	ND	120	ug/kg	
62-53-3	Aniline	ND	580	ug/kg	
120-12-7	Anthracene	ND	120	ug/kg	
56-55-3	Benzo(a)anthracene	ND	120	ug/kg	
50-32-8	Benzo(a)pyrene	ND	290	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	120	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	120	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	120	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	290	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	290	ug/kg	
91-58-7	2-Chloronaphthalene	ND	290	ug/kg	
106-47-8	4-Chloroaniline	ND	580	ug/kg	
86-74-8	Carbazole	ND	120	ug/kg	
218-01-9	Chrysene	ND	120	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	290	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	290	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	290	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 6-8'		
Lab Sample ID:	MC50728-9	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	290	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	580	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	580	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	580	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	120	ug/kg	
132-64-9	Dibenzofuran	ND	120	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	290	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	290	ug/kg	
84-66-2	Diethyl phthalate	ND	290	ug/kg	
131-11-3	Dimethyl phthalate	ND	290	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	290	ug/kg	
206-44-0	Fluoranthene	ND	120	ug/kg	
86-73-7	Fluorene	ND	120	ug/kg	
118-74-1	Hexachlorobenzene	ND	290	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	580	ug/kg	
67-72-1	Hexachloroethane	ND	290	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	290	ug/kg	
78-59-1	Isophorone	ND	290	ug/kg	
91-57-6	2-Methylnaphthalene	ND	120	ug/kg	
88-74-4	2-Nitroaniline	ND	580	ug/kg	
99-09-2	3-Nitroaniline	ND	580	ug/kg	
100-01-6	4-Nitroaniline	ND	580	ug/kg	
91-20-3	Naphthalene	ND	120	ug/kg	
98-95-3	Nitrobenzene	ND	290	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	290	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	290	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	580	ug/kg	
85-01-8	Phenanthrene	ND	120	ug/kg	
129-00-0	Pyrene	ND	120	ug/kg	
110-86-1	Pyridine	ND	580	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	580	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	92%		25-109%
4165-62-2	Phenol-d5	93%		29-113%
118-79-6	2,4,6-Tribromophenol	83%		20-141%
4165-60-0	Nitrobenzene-d5	82%		27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 6-8'		
Lab Sample ID:	MC50728-9	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	80%		34-118%
1718-51-0	Terphenyl-d14	91%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 6-8'		
Lab Sample ID:	MC50728-9	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	84.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55348.D	1	06/27/17 01:36	AP	06/23/17 14:30	OP49806	GBE2772
Run #2							

	Initial Weight	Final Volume
Run #1	20.8 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	57	ug/kg	
309-00-2	Aldrin	ND	5.7	ug/kg	
319-84-6	alpha-BHC	ND	5.7	ug/kg	
319-85-7	beta-BHC	ND	5.7	ug/kg	
319-86-8	delta-BHC	ND	5.7	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.7	ug/kg	
12789-03-6	Chlordane	ND	57	ug/kg	
60-57-1	Dieldrin	ND	5.7	ug/kg	
72-54-8	4,4'-DDD	ND	5.7	ug/kg	
72-55-9	4,4'-DDE	ND	5.7	ug/kg	
50-29-3	4,4'-DDT	ND	5.7	ug/kg	
72-20-8	Endrin	ND	5.7	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.7	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.7	ug/kg	
959-98-8	Endosulfan-I	ND	5.7	ug/kg	
33213-65-9	Endosulfan-II	ND	5.7	ug/kg	
76-44-8	Heptachlor	ND	5.7	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.7	ug/kg	
72-43-5	Methoxychlor	ND	5.7	ug/kg	
53494-70-5	Endrin ketone	ND	5.7	ug/kg	
8001-35-2	Toxaphene	ND	57	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		10-143%
877-09-8	Tetrachloro-m-xylene	72%		10-143%
2051-24-3	Decachlorobiphenyl	120%		10-172%
2051-24-3	Decachlorobiphenyl	103%		10-172%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 6-8'		
Lab Sample ID:	MC50728-9	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	84.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65946.D	1	06/28/17 03:07	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.8 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	28	ug/kg	
11104-28-2	Aroclor 1221	ND	28	ug/kg	
11141-16-5	Aroclor 1232	ND	28	ug/kg	
53469-21-9	Aroclor 1242	ND	28	ug/kg	
12672-29-6	Aroclor 1248	ND	28	ug/kg	
11097-69-1	Aroclor 1254	ND	28	ug/kg	
11096-82-5	Aroclor 1260	ND	28	ug/kg	
37324-23-5	Aroclor 1262	ND	28	ug/kg	
11100-14-4	Aroclor 1268	ND	28	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		25-145%
877-09-8	Tetrachloro-m-xylene	95%		25-145%
2051-24-3	Decachlorobiphenyl	82%		25-179%
2051-24-3	Decachlorobiphenyl	74%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 6-8'		
Lab Sample ID:	MC50728-9	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	84.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5521.D	1	06/28/17 17:00	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	ND	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	83%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 6-8'		
Lab Sample ID:	MC50728-9	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	84.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	3.0	2.4	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	73.1	24	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.61	0.61	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	14.9	1.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	9.4	2.4	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	< 0.039	0.039	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.4	2.4	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.61	0.61	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-3 6-8'		
Lab Sample ID:	MC50728-9A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	84.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	< 0.015		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-3 10-12'		
Lab Sample ID:	MC50728-10	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	86.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84500.D	1	06/30/17 00:10	DRY	n/a	n/a	MSM3048
Run #2							

	Initial Weight	Final Volume
Run #1	7.18 g	5.0 ml
Run #2		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	16	ug/kg	
107-13-1	Acrylonitrile	ND	20	ug/kg	
71-43-2	Benzene	ND	0.40	ug/kg	
108-86-1	Bromobenzene	ND	4.0	ug/kg	
75-27-4	Bromodichloromethane	ND	1.6	ug/kg	
75-25-2	Bromoform	ND	1.6	ug/kg	
74-83-9	Bromomethane	ND	8.1	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.1	ug/kg	
104-51-8	n-Butylbenzene	ND	4.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.0	ug/kg	
75-15-0	Carbon disulfide	ND	4.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.6	ug/kg	
108-90-7	Chlorobenzene	ND	1.6	ug/kg	
75-00-3	Chloroethane	ND	8.1	ug/kg	
67-66-3	Chloroform	ND	1.6	ug/kg	
74-87-3	Chloromethane	ND	4.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	ug/kg	
124-48-1	Dibromochloromethane	ND	1.6	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.6	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.6	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.6	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.6	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	4.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.6	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.6	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.6	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.6	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.6	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 10-12'		
Lab Sample ID:	MC50728-10	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	86.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	4.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.0	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.6	ug/kg	
100-41-4	Ethylbenzene	ND	1.6	ug/kg	
76-13-1	Freon 113	ND	4.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.0	ug/kg	
591-78-6	2-Hexanone	ND	4.0	ug/kg	
98-82-8	Isopropylbenzene	ND	4.0	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.6	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.0	ug/kg	
74-95-3	Methylene bromide	ND	4.0	ug/kg	
75-09-2	Methylene chloride	ND	4.0	ug/kg	
91-20-3	Naphthalene	ND	4.0	ug/kg	
103-65-1	n-Propylbenzene	ND	4.0	ug/kg	
100-42-5	Styrene	ND	4.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	ug/kg	
127-18-4	Tetrachloroethene	ND	1.6	ug/kg	
109-99-9	Tetrahydrofuran	ND	8.1	ug/kg	
108-88-3	Toluene	ND	4.0	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	8.1	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.6	ug/kg	
79-01-6	Trichloroethene	ND	1.6	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.6	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.0	ug/kg	
75-01-4	Vinyl chloride	ND	8.1	ug/kg	
	m,p-Xylene	ND	1.6	ug/kg	
95-47-6	o-Xylene	ND	1.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	131%		65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 10-12'		
Lab Sample ID:	MC50728-10	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	86.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	104%		65-129%
460-00-4	4-Bromofluorobenzene	100%		63-137%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 10-12'		
Lab Sample ID:	MC50728-10	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	86.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52313.D	1	06/27/17 20:39	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	560	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	560	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	560	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	560	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	560	ug/kg	
95-48-7	2-Methylphenol	ND	560	ug/kg	
106-44-5	4-Methylphenol	ND	560	ug/kg	
88-75-5	2-Nitrophenol	ND	560	ug/kg	
100-02-7	4-Nitrophenol	ND	560	ug/kg	
87-86-5	Pentachlorophenol	ND	560	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	560	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	560	ug/kg	
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	ND	110	ug/kg	
62-53-3	Aniline	ND	560	ug/kg	
120-12-7	Anthracene	ND	110	ug/kg	
56-55-3	Benzo(a)anthracene	ND	110	ug/kg	
50-32-8	Benzo(a)pyrene	ND	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	560	ug/kg	
86-74-8	Carbazole	ND	110	ug/kg	
218-01-9	Chrysene	ND	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 10-12'		
Lab Sample ID:	MC50728-10	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	86.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	560	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	560	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	560	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	ND	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	560	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	280	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	560	ug/kg	
99-09-2	3-Nitroaniline	ND	560	ug/kg	
100-01-6	4-Nitroaniline	ND	560	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	560	ug/kg	
85-01-8	Phenanthrene	ND	110	ug/kg	
129-00-0	Pyrene	ND	110	ug/kg	
110-86-1	Pyridine	ND	560	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	560	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	93%		25-109%
4165-62-2	Phenol-d5	94%		29-113%
118-79-6	2,4,6-Tribromophenol	86%		20-141%
4165-60-0	Nitrobenzene-d5	85%		27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 10-12'		
Lab Sample ID:	MC50728-10	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	86.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	82%		34-118%
1718-51-0	Terphenyl-d14	91%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 10-12'		
Lab Sample ID:	MC50728-10	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	86.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55380.D	1	06/27/17 16:31	AP	06/23/17 14:30	OP49806	GBE2773
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	57	ug/kg	
309-00-2	Aldrin	ND	5.7	ug/kg	
319-84-6	alpha-BHC	ND	5.7	ug/kg	
319-85-7	beta-BHC	ND	5.7	ug/kg	
319-86-8	delta-BHC	ND	5.7	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.7	ug/kg	
12789-03-6	Chlordane	ND	57	ug/kg	
60-57-1	Dieldrin	ND	5.7	ug/kg	
72-54-8	4,4'-DDD	ND	5.7	ug/kg	
72-55-9	4,4'-DDE	ND	5.7	ug/kg	
50-29-3	4,4'-DDT	ND	5.7	ug/kg	
72-20-8	Endrin	ND	5.7	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.7	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.7	ug/kg	
959-98-8	Endosulfan-I	ND	5.7	ug/kg	
33213-65-9	Endosulfan-II	ND	5.7	ug/kg	
76-44-8	Heptachlor	ND	5.7	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.7	ug/kg	
72-43-5	Methoxychlor	ND	5.7	ug/kg	
53494-70-5	Endrin ketone	ND	5.7	ug/kg	
8001-35-2	Toxaphene	ND	57	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		10-143%
877-09-8	Tetrachloro-m-xylene	71%		10-143%
2051-24-3	Decachlorobiphenyl	54%		10-172%
2051-24-3	Decachlorobiphenyl	76%		10-172%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 10-12'		
Lab Sample ID:	MC50728-10	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	86.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65947.D	1	06/28/17 03:23	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	29	ug/kg	
11104-28-2	Aroclor 1221	ND	29	ug/kg	
11141-16-5	Aroclor 1232	ND	29	ug/kg	
53469-21-9	Aroclor 1242	ND	29	ug/kg	
12672-29-6	Aroclor 1248	ND	29	ug/kg	
11097-69-1	Aroclor 1254	ND	29	ug/kg	
11096-82-5	Aroclor 1260	ND	29	ug/kg	
37324-23-5	Aroclor 1262	ND	29	ug/kg	
11100-14-4	Aroclor 1268	ND	29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	105%		25-145%
877-09-8	Tetrachloro-m-xylene	100%		25-145%
2051-24-3	Decachlorobiphenyl	100%		25-179%
2051-24-3	Decachlorobiphenyl	72%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 10-12'		
Lab Sample ID:	MC50728-10	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	86.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5530.D	1	06/28/17 21:42	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	255	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 10-12'		
Lab Sample ID:	MC50728-10	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	86.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	3.2	2.4	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [4]
Barium [a]	52.4	24	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [4]
Cadmium [a]	0.67	0.60	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [4]
Chromium [a]	20.5	1.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [4]
Lead [a]	21.0	2.4	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [4]
Mercury [a]	< 0.036	0.036	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [5]
Selenium [a]	< 2.4	2.4	mg/kg	1	06/25/17	06/27/17	ANJ	SW846 6010C [3]	SW846 3050B [4]
Silver [a]	< 0.60	0.60	mg/kg	1	06/25/17	06/27/17	ANJ	SW846 6010C [3]	SW846 3050B [4]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Instrument QC Batch: N:MA42313
(4) Prep QC Batch: N:MP1622
(5) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-3 10-12'		
Lab Sample ID:	MC50728-10A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	86.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	< 0.015		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-3 15-17'		
Lab Sample ID:	MC50728-11	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84516.D	1	06/30/17 13:30	DRY	n/a	n/a	MSM3049
Run #2							

	Initial Weight	Final Volume
Run #1	8.03 g	5.0 ml
Run #2		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	14	ug/kg	
107-13-1	Acrylonitrile	ND	18	ug/kg	
71-43-2	Benzene	ND	0.35	ug/kg	
108-86-1	Bromobenzene	ND	3.5	ug/kg	
75-27-4	Bromodichloromethane	ND	1.4	ug/kg	
75-25-2	Bromoform	ND	1.4	ug/kg	
74-83-9	Bromomethane	ND	7.1	ug/kg	
78-93-3	2-Butanone (MEK)	ND	7.1	ug/kg	
104-51-8	n-Butylbenzene	ND	3.5	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.5	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.5	ug/kg	
75-15-0	Carbon disulfide	ND	3.5	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.4	ug/kg	
108-90-7	Chlorobenzene	ND	1.4	ug/kg	
75-00-3	Chloroethane	ND	7.1	ug/kg	
67-66-3	Chloroform	ND	1.4	ug/kg	
74-87-3	Chloromethane	ND	3.5	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.5	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.5	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.5	ug/kg	
124-48-1	Dibromochloromethane	ND	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.4	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.4	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.4	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.4	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.5	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.4	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.4	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.4	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.4	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 15-17'		
Lab Sample ID:	MC50728-11	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	3.5	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.5	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.5	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.4	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.4	ug/kg	
100-41-4	Ethylbenzene	ND	1.4	ug/kg	
76-13-1	Freon 113	ND	3.5	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.5	ug/kg	
591-78-6	2-Hexanone	ND	3.5	ug/kg	
98-82-8	Isopropylbenzene	ND	3.5	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.4	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3.5	ug/kg	
74-95-3	Methylene bromide	ND	3.5	ug/kg	
75-09-2	Methylene chloride	ND	3.5	ug/kg	
91-20-3	Naphthalene	ND	3.5	ug/kg	
103-65-1	n-Propylbenzene	ND	3.5	ug/kg	
100-42-5	Styrene	ND	3.5	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.4	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.5	ug/kg	
127-18-4	Tetrachloroethene	ND	1.4	ug/kg	
109-99-9	Tetrahydrofuran [a]	ND	7.1	ug/kg	
108-88-3	Toluene	ND	3.5	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	7.1	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.4	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.4	ug/kg	
79-01-6	Trichloroethene	ND	1.4	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.4	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.5	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.5	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.5	ug/kg	
75-01-4	Vinyl chloride	ND	7.1	ug/kg	
	m,p-Xylene	ND	1.4	ug/kg	
95-47-6	o-Xylene	ND	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	131%		65-141%

ND = Not detected
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 15-17'		
Lab Sample ID:	MC50728-11	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	104%		65-129%
460-00-4	4-Bromofluorobenzene	97%		63-137%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 15-17'		
Lab Sample ID:	MC50728-11	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52309.D	1	06/27/17 18:57	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	560	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	560	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	560	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	560	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	560	ug/kg	
95-48-7	2-Methylphenol	ND	560	ug/kg	
106-44-5	4-Methylphenol	ND	560	ug/kg	
88-75-5	2-Nitrophenol	ND	560	ug/kg	
100-02-7	4-Nitrophenol	ND	560	ug/kg	
87-86-5	Pentachlorophenol	ND	560	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	560	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	560	ug/kg	
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	ND	110	ug/kg	
62-53-3	Aniline	ND	560	ug/kg	
120-12-7	Anthracene	ND	110	ug/kg	
56-55-3	Benzo(a)anthracene	ND	110	ug/kg	
50-32-8	Benzo(a)pyrene	ND	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	560	ug/kg	
86-74-8	Carbazole	ND	110	ug/kg	
218-01-9	Chrysene	ND	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 15-17'		
Lab Sample ID:	MC50728-11	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	560	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	560	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	560	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	ND	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	560	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	280	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	560	ug/kg	
99-09-2	3-Nitroaniline	ND	560	ug/kg	
100-01-6	4-Nitroaniline	ND	560	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	560	ug/kg	
85-01-8	Phenanthrene	ND	110	ug/kg	
129-00-0	Pyrene	ND	110	ug/kg	
110-86-1	Pyridine	ND	560	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	560	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	97%		25-109%
4165-62-2	Phenol-d5	97%		29-113%
118-79-6	2,4,6-Tribromophenol	80%		20-141%
4165-60-0	Nitrobenzene-d5	88%		27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 15-17'		
Lab Sample ID:	MC50728-11	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	81%		34-118%
1718-51-0	Terphenyl-d14	93%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 15-17'		
Lab Sample ID:	MC50728-11	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55349.D	1	06/27/17 01:51	AP	06/23/17 14:30	OP49806	GBE2772
Run #2							

	Initial Weight	Final Volume
Run #1	20.5 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	55	ug/kg	
309-00-2	Aldrin	ND	5.5	ug/kg	
319-84-6	alpha-BHC	ND	5.5	ug/kg	
319-85-7	beta-BHC	ND	5.5	ug/kg	
319-86-8	delta-BHC	ND	5.5	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.5	ug/kg	
12789-03-6	Chlordane	ND	55	ug/kg	
60-57-1	Dieldrin	ND	5.5	ug/kg	
72-54-8	4,4'-DDD	ND	5.5	ug/kg	
72-55-9	4,4'-DDE	ND	5.5	ug/kg	
50-29-3	4,4'-DDT	ND	5.5	ug/kg	
72-20-8	Endrin	ND	5.5	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.5	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.5	ug/kg	
959-98-8	Endosulfan-I	ND	5.5	ug/kg	
33213-65-9	Endosulfan-II	ND	5.5	ug/kg	
76-44-8	Heptachlor	ND	5.5	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.5	ug/kg	
72-43-5	Methoxychlor	ND	5.5	ug/kg	
53494-70-5	Endrin ketone	ND	5.5	ug/kg	
8001-35-2	Toxaphene	ND	55	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	106%		10-143%
877-09-8	Tetrachloro-m-xylene	86%		10-143%
2051-24-3	Decachlorobiphenyl	135%		10-172%
2051-24-3	Decachlorobiphenyl	115%		10-172%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 15-17'		
Lab Sample ID:	MC50728-11	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65949.D	1	06/28/17 03:54	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.5 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	28	ug/kg	
11104-28-2	Aroclor 1221	ND	28	ug/kg	
11141-16-5	Aroclor 1232	ND	28	ug/kg	
53469-21-9	Aroclor 1242	ND	28	ug/kg	
12672-29-6	Aroclor 1248	ND	28	ug/kg	
11097-69-1	Aroclor 1254	ND	28	ug/kg	
11096-82-5	Aroclor 1260	ND	28	ug/kg	
37324-23-5	Aroclor 1262	ND	28	ug/kg	
11100-14-4	Aroclor 1268	ND	28	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	103%		25-145%
877-09-8	Tetrachloro-m-xylene	102%		25-145%
2051-24-3	Decachlorobiphenyl	104%		25-179%
2051-24-3	Decachlorobiphenyl	95%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 15-17'		
Lab Sample ID:	MC50728-11	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5522.D	1	06/28/17 17:32	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	ND	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3 15-17'		
Lab Sample ID:	MC50728-11	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	2.9	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	48.3	23	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.58	0.58	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	13.5	1.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.3	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	< 0.035	0.035	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.3	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.58	0.58	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-3 15-17'		
Lab Sample ID:	MC50728-11A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	88.0
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	< 0.015		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-4 1-3'		
Lab Sample ID:	MC50728-12	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	87.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84502.D	1	06/30/17 01:06	DRY	n/a	n/a	MSM3048
Run #2 [a]	M84517.D	1	06/30/17 13:58	DRY	n/a	n/a	MSM3049

	Initial Weight	Final Volume
Run #1	7.73 g	5.0 ml
Run #2	7.90 g	5.0 ml

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	15	ug/kg	
107-13-1	Acrylonitrile	ND	18	ug/kg	
71-43-2	Benzene	ND	0.37	ug/kg	
108-86-1	Bromobenzene	ND	3.7	ug/kg	
75-27-4	Bromodichloromethane	ND	1.5	ug/kg	
75-25-2	Bromoform	ND	1.5	ug/kg	
74-83-9	Bromomethane	ND	7.4	ug/kg	
78-93-3	2-Butanone (MEK)	ND	7.4	ug/kg	
104-51-8	n-Butylbenzene	ND	3.7	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.7	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.7	ug/kg	
75-15-0	Carbon disulfide	ND	3.7	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.5	ug/kg	
108-90-7	Chlorobenzene	ND	1.5	ug/kg	
75-00-3	Chloroethane	ND	7.4	ug/kg	
67-66-3	Chloroform	ND	1.5	ug/kg	
74-87-3	Chloromethane	ND	3.7	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.7	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.7	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.7	ug/kg	
124-48-1	Dibromochloromethane	ND	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.5	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.5	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.5	ug/kg	
75-71-8	Dichlorodifluoromethane [b]	ND	3.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.5	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.5	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.5	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.5	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 1-3'		
Lab Sample ID:	MC50728-12	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	87.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	3.7	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.7	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	1.5	ug/kg	
76-13-1	Freon 113	ND	3.7	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.7	ug/kg	
591-78-6	2-Hexanone	ND	3.7	ug/kg	
98-82-8	Isopropylbenzene	ND	3.7	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.7	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.5	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3.7	ug/kg	
74-95-3	Methylene bromide	ND	3.7	ug/kg	
75-09-2	Methylene chloride	ND	3.7	ug/kg	
91-20-3	Naphthalene	ND	3.7	ug/kg	
103-65-1	n-Propylbenzene	ND	3.7	ug/kg	
100-42-5	Styrene	ND	3.7	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	ug/kg	
127-18-4	Tetrachloroethene	ND	1.5	ug/kg	
109-99-9	Tetrahydrofuran	ND	7.4	ug/kg	
108-88-3	Toluene	ND	3.7	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	7.4	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.5	ug/kg	
79-01-6	Trichloroethene	ND	1.5	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.5	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.7	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.7	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.7	ug/kg	
75-01-4	Vinyl chloride	ND	7.4	ug/kg	
	m,p-Xylene	ND	1.5	ug/kg	
95-47-6	o-Xylene	ND	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	136%	138%	65-141%

ND = Not detected
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 1-3'		
Lab Sample ID:	MC50728-12	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	87.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%	103%	65-129%
460-00-4	4-Bromofluorobenzene	107%	113%	63-137%

(a) Confirmation run.
(b) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 1-3'		
Lab Sample ID:	MC50728-12	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	87.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52314.D	1	06/27/17 21:05	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	21.0 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	270	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	540	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	540	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	540	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	540	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	540	ug/kg	
95-48-7	2-Methylphenol	ND	540	ug/kg	
106-44-5	4-Methylphenol	ND	540	ug/kg	
88-75-5	2-Nitrophenol	ND	540	ug/kg	
100-02-7	4-Nitrophenol	ND	540	ug/kg	
87-86-5	Pentachlorophenol	ND	540	ug/kg	
108-95-2	Phenol	ND	270	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	540	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	540	ug/kg	
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	323	110	ug/kg	
62-53-3	Aniline	ND	540	ug/kg	
120-12-7	Anthracene	152	110	ug/kg	
56-55-3	Benzo(a)anthracene	616	110	ug/kg	
50-32-8	Benzo(a)pyrene	784	270	ug/kg	
205-99-2	Benzo(b)fluoranthene	740	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	484	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	701	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	ug/kg	
106-47-8	4-Chloroaniline	ND	540	ug/kg	
86-74-8	Carbazole	ND	110	ug/kg	
218-01-9	Chrysene	750	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	270	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 1-3'		
Lab Sample ID:	MC50728-12	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	87.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	270	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	540	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	540	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	540	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	180	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	ug/kg	
84-66-2	Diethyl phthalate	ND	270	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	270	ug/kg	
206-44-0	Fluoranthene	971	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	540	ug/kg	
67-72-1	Hexachloroethane	ND	270	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	528	270	ug/kg	
78-59-1	Isophorone	ND	270	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	540	ug/kg	
99-09-2	3-Nitroaniline	ND	540	ug/kg	
100-01-6	4-Nitroaniline	ND	540	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	270	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	540	ug/kg	
85-01-8	Phenanthrene	267	110	ug/kg	
129-00-0	Pyrene	1060	110	ug/kg	
110-86-1	Pyridine	ND	540	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	540	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	92%		25-109%
4165-62-2	Phenol-d5	94%		29-113%
118-79-6	2,4,6-Tribromophenol	79%		20-141%
4165-60-0	Nitrobenzene-d5	83%		27-115%

ND = Not detected
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 1-3'		
Lab Sample ID:	MC50728-12	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	87.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	80%		34-118%
1718-51-0	Terphenyl-d14	87%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 1-3'		
Lab Sample ID:	MC50728-12	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	87.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55342.D	1	06/27/17 00:09	AP	06/23/17 14:30	OP49806	GBE2772
Run #2							

	Initial Weight	Final Volume
Run #1	20.7 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	55	ug/kg	
309-00-2	Aldrin	ND	5.5	ug/kg	
319-84-6	alpha-BHC	ND	5.5	ug/kg	
319-85-7	beta-BHC	ND	5.5	ug/kg	
319-86-8	delta-BHC	ND	5.5	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.5	ug/kg	
12789-03-6	Chlordane	ND	55	ug/kg	
60-57-1	Dieldrin	ND	5.5	ug/kg	
72-54-8	4,4'-DDD	ND	5.5	ug/kg	
72-55-9	4,4'-DDE	ND	5.5	ug/kg	
50-29-3	4,4'-DDT	ND	5.5	ug/kg	
72-20-8	Endrin	ND	5.5	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.5	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.5	ug/kg	
959-98-8	Endosulfan-I	ND	5.5	ug/kg	
33213-65-9	Endosulfan-II	ND	5.5	ug/kg	
76-44-8	Heptachlor	ND	5.5	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.5	ug/kg	
72-43-5	Methoxychlor	ND	5.5	ug/kg	
53494-70-5	Endrin ketone	ND	5.5	ug/kg	
8001-35-2	Toxaphene	ND	55	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		10-143%
877-09-8	Tetrachloro-m-xylene	70%		10-143%
2051-24-3	Decachlorobiphenyl	124%		10-172%
2051-24-3	Decachlorobiphenyl	121%		10-172%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 1-3'		
Lab Sample ID:	MC50728-12	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	87.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65950.D	1	06/28/17 04:10	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.7 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	27	ug/kg	
11104-28-2	Aroclor 1221	ND	27	ug/kg	
11141-16-5	Aroclor 1232	ND	27	ug/kg	
53469-21-9	Aroclor 1242	ND	27	ug/kg	
12672-29-6	Aroclor 1248	ND	27	ug/kg	
11097-69-1	Aroclor 1254	ND	27	ug/kg	
11096-82-5	Aroclor 1260	ND	27	ug/kg	
37324-23-5	Aroclor 1262	ND	27	ug/kg	
11100-14-4	Aroclor 1268	ND	27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		25-145%
877-09-8	Tetrachloro-m-xylene	85%		25-145%
2051-24-3	Decachlorobiphenyl	90%		25-179%
2051-24-3	Decachlorobiphenyl	79%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 1-3'		
Lab Sample ID:	MC50728-12	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	87.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5531.D	1	06/28/17 22:13	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	120	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	103%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 1-3'		
Lab Sample ID:	MC50728-12	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	87.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	2.9	2.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	30.5	22	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.55	0.55	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	11.6	1.1	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	32.0	2.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	0.038	0.034	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.2	2.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.55	0.55	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-4 1-3'		
Lab Sample ID:	MC50728-12	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	87.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide Reactivity [a]	< 11	11	mg/kg	1	06/26/17 15:07	ANJ	SW846 CHAP7/9012 B
Ignitability (Flashpoint) [a]	> 200		Deg. F	1	06/28/17 16:49	ANJ	SW846 1010A/ASTM D93
Solids, Percent [a]	87.7		%	1	06/26/17 17:00	ANJ	SM2540 G-97
Sulfide Reactivity [a]	< 110	110	mg/kg	1	06/26/17 03:19	ANJ	SW846 CHAP7/9034
pH [a]	6.45		su	1	06/27/17 16:27	ANJ	SW846 9045D

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-4 1-3'		
Lab Sample ID:	MC50728-12A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	87.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	0.023		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-4 4-6'		
Lab Sample ID:	MC50728-13	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	87.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84518.D	1	06/30/17 14:26	DRY	n/a	n/a	MSM3049
Run #2							

	Initial Weight	Final Volume
Run #1	7.95 g	5.0 ml
Run #2		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	14	ug/kg	
107-13-1	Acrylonitrile	ND	18	ug/kg	
71-43-2	Benzene	ND	0.36	ug/kg	
108-86-1	Bromobenzene	ND	3.6	ug/kg	
75-27-4	Bromodichloromethane	ND	1.4	ug/kg	
75-25-2	Bromoform	ND	1.4	ug/kg	
74-83-9	Bromomethane	ND	7.2	ug/kg	
78-93-3	2-Butanone (MEK)	ND	7.2	ug/kg	
104-51-8	n-Butylbenzene	ND	3.6	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.6	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.6	ug/kg	
75-15-0	Carbon disulfide	ND	3.6	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.4	ug/kg	
108-90-7	Chlorobenzene	ND	1.4	ug/kg	
75-00-3	Chloroethane	ND	7.2	ug/kg	
67-66-3	Chloroform	ND	1.4	ug/kg	
74-87-3	Chloromethane	ND	3.6	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.6	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.6	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.6	ug/kg	
124-48-1	Dibromochloromethane	ND	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.4	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.4	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.4	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.4	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.4	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.4	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.4	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.4	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 4-6'		
Lab Sample ID:	MC50728-13	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	87.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	3.6	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.6	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.4	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.4	ug/kg	
100-41-4	Ethylbenzene	ND	1.4	ug/kg	
76-13-1	Freon 113	ND	3.6	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.6	ug/kg	
591-78-6	2-Hexanone	ND	3.6	ug/kg	
98-82-8	Isopropylbenzene	ND	3.6	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.6	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.4	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3.6	ug/kg	
74-95-3	Methylene bromide	ND	3.6	ug/kg	
75-09-2	Methylene chloride	ND	3.6	ug/kg	
91-20-3	Naphthalene	ND	3.6	ug/kg	
103-65-1	n-Propylbenzene	ND	3.6	ug/kg	
100-42-5	Styrene	ND	3.6	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.4	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.6	ug/kg	
127-18-4	Tetrachloroethene	ND	1.4	ug/kg	
109-99-9	Tetrahydrofuran [a]	ND	7.2	ug/kg	
108-88-3	Toluene	ND	3.6	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	7.2	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.4	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.4	ug/kg	
79-01-6	Trichloroethene	ND	1.4	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.4	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.6	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.6	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.6	ug/kg	
75-01-4	Vinyl chloride	ND	7.2	ug/kg	
	m,p-Xylene	ND	1.4	ug/kg	
95-47-6	o-Xylene	ND	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	136%		65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 4-6'		
Lab Sample ID:	MC50728-13	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	87.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		65-129%
460-00-4	4-Bromofluorobenzene	109%		63-137%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 4-6'		
Lab Sample ID:	MC50728-13	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	87.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52315.D	1	06/27/17 21:30	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	290	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	570	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	570	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	570	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	570	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	570	ug/kg	
95-48-7	2-Methylphenol	ND	570	ug/kg	
106-44-5	4-Methylphenol	ND	570	ug/kg	
88-75-5	2-Nitrophenol	ND	570	ug/kg	
100-02-7	4-Nitrophenol	ND	570	ug/kg	
87-86-5	Pentachlorophenol	ND	570	ug/kg	
108-95-2	Phenol	ND	290	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	570	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	570	ug/kg	
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	226	110	ug/kg	
62-53-3	Aniline	ND	570	ug/kg	
120-12-7	Anthracene	150	110	ug/kg	
56-55-3	Benzo(a)anthracene	705	110	ug/kg	
50-32-8	Benzo(a)pyrene	843	290	ug/kg	
205-99-2	Benzo(b)fluoranthene	792	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	493	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	797	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	290	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	290	ug/kg	
91-58-7	2-Chloronaphthalene	ND	290	ug/kg	
106-47-8	4-Chloroaniline	ND	570	ug/kg	
86-74-8	Carbazole	ND	110	ug/kg	
218-01-9	Chrysene	890	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	290	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	290	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	290	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 4-6'		
Lab Sample ID:	MC50728-13	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	87.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	290	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	570	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	570	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	570	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	187	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	290	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	290	ug/kg	
84-66-2	Diethyl phthalate	ND	290	ug/kg	
131-11-3	Dimethyl phthalate	ND	290	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	290	ug/kg	
206-44-0	Fluoranthene	1370	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	290	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	570	ug/kg	
67-72-1	Hexachloroethane	ND	290	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	537	290	ug/kg	
78-59-1	Isophorone	ND	290	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	570	ug/kg	
99-09-2	3-Nitroaniline	ND	570	ug/kg	
100-01-6	4-Nitroaniline	ND	570	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	290	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	290	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	290	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	570	ug/kg	
85-01-8	Phenanthrene	481	110	ug/kg	
129-00-0	Pyrene	1400	110	ug/kg	
110-86-1	Pyridine	ND	570	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	570	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	91%		25-109%
4165-62-2	Phenol-d5	95%		29-113%
118-79-6	2,4,6-Tribromophenol	80%		20-141%
4165-60-0	Nitrobenzene-d5	82%		27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 4-6'		
Lab Sample ID:	MC50728-13	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	87.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	82%		34-118%
1718-51-0	Terphenyl-d14	88%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 4-6'		
Lab Sample ID:	MC50728-13	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	87.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55343.D	1	06/27/17 00:24	AP	06/23/17 14:30	OP49806	GBE2772
Run #2							

	Initial Weight	Final Volume
Run #1	20.1 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	57	ug/kg	
309-00-2	Aldrin	ND	5.7	ug/kg	
319-84-6	alpha-BHC	ND	5.7	ug/kg	
319-85-7	beta-BHC	ND	5.7	ug/kg	
319-86-8	delta-BHC	ND	5.7	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.7	ug/kg	
12789-03-6	Chlordane	ND	57	ug/kg	
60-57-1	Dieldrin	ND	5.7	ug/kg	
72-54-8	4,4'-DDD	ND	5.7	ug/kg	
72-55-9	4,4'-DDE	ND	5.7	ug/kg	
50-29-3	4,4'-DDT	ND	5.7	ug/kg	
72-20-8	Endrin	ND	5.7	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.7	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.7	ug/kg	
959-98-8	Endosulfan-I	ND	5.7	ug/kg	
33213-65-9	Endosulfan-II	ND	5.7	ug/kg	
76-44-8	Heptachlor	ND	5.7	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.7	ug/kg	
72-43-5	Methoxychlor	ND	5.7	ug/kg	
53494-70-5	Endrin ketone	ND	5.7	ug/kg	
8001-35-2	Toxaphene	ND	57	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		10-143%
877-09-8	Tetrachloro-m-xylene	76%		10-143%
2051-24-3	Decachlorobiphenyl	83%		10-172%
2051-24-3	Decachlorobiphenyl	93%		10-172%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 4-6'		
Lab Sample ID:	MC50728-13	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	87.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65951.D	1	06/28/17 04:26	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.1 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	29	ug/kg	
11104-28-2	Aroclor 1221	ND	29	ug/kg	
11141-16-5	Aroclor 1232	ND	29	ug/kg	
53469-21-9	Aroclor 1242	ND	29	ug/kg	
12672-29-6	Aroclor 1248	ND	29	ug/kg	
11097-69-1	Aroclor 1254	ND	29	ug/kg	
11096-82-5	Aroclor 1260	ND	29	ug/kg	
37324-23-5	Aroclor 1262	ND	29	ug/kg	
11100-14-4	Aroclor 1268	ND	29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		25-145%
877-09-8	Tetrachloro-m-xylene	90%		25-145%
2051-24-3	Decachlorobiphenyl	101%		25-179%
2051-24-3	Decachlorobiphenyl	78%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 4-6'		
Lab Sample ID:	MC50728-13	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	87.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5532.D	1	06/28/17 22:44	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	192	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 4-6'		
Lab Sample ID:	MC50728-13	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	87.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	3.3	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	41.5	23	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.58	0.58	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	14.2	1.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	35.1	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	< 0.037	0.037	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.3	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.58	0.58	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-4 4-6'		
Lab Sample ID:	MC50728-13A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	87.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	< 0.015		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-4 10-12'		
Lab Sample ID:	MC50728-14	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	90.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84519.D	1	06/30/17 14:53	DRY	n/a	n/a	MSM3049
Run #2							

	Initial Weight	Final Volume
Run #1	7.17 g	5.0 ml
Run #2		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	15	ug/kg	
107-13-1	Acrylonitrile	ND	19	ug/kg	
71-43-2	Benzene	ND	0.38	ug/kg	
108-86-1	Bromobenzene	ND	3.8	ug/kg	
75-27-4	Bromodichloromethane	ND	1.5	ug/kg	
75-25-2	Bromoform	ND	1.5	ug/kg	
74-83-9	Bromomethane	ND	7.7	ug/kg	
78-93-3	2-Butanone (MEK)	ND	7.7	ug/kg	
104-51-8	n-Butylbenzene	ND	3.8	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.8	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.8	ug/kg	
75-15-0	Carbon disulfide	ND	3.8	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.5	ug/kg	
108-90-7	Chlorobenzene	ND	1.5	ug/kg	
75-00-3	Chloroethane	ND	7.7	ug/kg	
67-66-3	Chloroform	ND	1.5	ug/kg	
74-87-3	Chloromethane	ND	3.8	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.8	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.8	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.8	ug/kg	
124-48-1	Dibromochloromethane	ND	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.5	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.5	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.5	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.5	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.5	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.5	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.5	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 10-12'		
Lab Sample ID:	MC50728-14	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	90.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	3.8	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.8	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	1.5	ug/kg	
76-13-1	Freon 113	ND	3.8	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.8	ug/kg	
591-78-6	2-Hexanone	ND	3.8	ug/kg	
98-82-8	Isopropylbenzene	ND	3.8	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.8	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.5	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3.8	ug/kg	
74-95-3	Methylene bromide	ND	3.8	ug/kg	
75-09-2	Methylene chloride	ND	3.8	ug/kg	
91-20-3	Naphthalene	ND	3.8	ug/kg	
103-65-1	n-Propylbenzene	ND	3.8	ug/kg	
100-42-5	Styrene	ND	3.8	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.8	ug/kg	
127-18-4	Tetrachloroethene	ND	1.5	ug/kg	
109-99-9	Tetrahydrofuran [a]	ND	7.7	ug/kg	
108-88-3	Toluene	ND	3.8	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	7.7	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.8	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.5	ug/kg	
79-01-6	Trichloroethene	ND	1.5	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.5	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.8	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.8	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.8	ug/kg	
75-01-4	Vinyl chloride	ND	7.7	ug/kg	
	m,p-Xylene	ND	1.5	ug/kg	
95-47-6	o-Xylene	ND	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	134%		65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 10-12'		
Lab Sample ID:	MC50728-14	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	90.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	106%		65-129%
460-00-4	4-Bromofluorobenzene	101%		63-137%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 10-12'		
Lab Sample ID:	MC50728-14	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	90.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52316.D	1	06/27/17 21:56	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.8 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	260	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	530	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	530	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	530	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	530	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	530	ug/kg	
95-48-7	2-Methylphenol	ND	530	ug/kg	
106-44-5	4-Methylphenol	ND	530	ug/kg	
88-75-5	2-Nitrophenol	ND	530	ug/kg	
100-02-7	4-Nitrophenol	ND	530	ug/kg	
87-86-5	Pentachlorophenol	ND	530	ug/kg	
108-95-2	Phenol	ND	260	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	530	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	530	ug/kg	
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	ND	110	ug/kg	
62-53-3	Aniline	ND	530	ug/kg	
120-12-7	Anthracene	ND	110	ug/kg	
56-55-3	Benzo(a)anthracene	274	110	ug/kg	
50-32-8	Benzo(a)pyrene	342	260	ug/kg	
205-99-2	Benzo(b)fluoranthene	330	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	221	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	340	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	260	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	260	ug/kg	
91-58-7	2-Chloronaphthalene	ND	260	ug/kg	
106-47-8	4-Chloroaniline	ND	530	ug/kg	
86-74-8	Carbazole	ND	110	ug/kg	
218-01-9	Chrysene	379	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	260	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	260	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	260	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 10-12'		
Lab Sample ID:	MC50728-14	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	90.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	260	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	530	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	530	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	530	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	260	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	260	ug/kg	
84-66-2	Diethyl phthalate	ND	260	ug/kg	
131-11-3	Dimethyl phthalate	ND	260	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	260	ug/kg	
206-44-0	Fluoranthene	603	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	260	ug/kg	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	530	ug/kg	
67-72-1	Hexachloroethane	ND	260	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	260	ug/kg	
78-59-1	Isophorone	ND	260	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	530	ug/kg	
99-09-2	3-Nitroaniline	ND	530	ug/kg	
100-01-6	4-Nitroaniline	ND	530	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	260	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	260	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	260	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	530	ug/kg	
85-01-8	Phenanthrene	194	110	ug/kg	
129-00-0	Pyrene	583	110	ug/kg	
110-86-1	Pyridine	ND	530	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	530	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	260	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	86%		25-109%
4165-62-2	Phenol-d5	87%		29-113%
118-79-6	2,4,6-Tribromophenol	79%		20-141%
4165-60-0	Nitrobenzene-d5	80%		27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 10-12'		
Lab Sample ID:	MC50728-14	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	90.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	78%		34-118%
1718-51-0	Terphenyl-d14	86%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 10-12'		
Lab Sample ID:	MC50728-14	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	90.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55381.D	1	06/27/17 16:45	AP	06/23/17 14:30	OP49806	GBE2773
Run #2							

	Initial Weight	Final Volume
Run #1	20.8 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	53	ug/kg	
309-00-2	Aldrin	ND	5.3	ug/kg	
319-84-6	alpha-BHC	ND	5.3	ug/kg	
319-85-7	beta-BHC	ND	5.3	ug/kg	
319-86-8	delta-BHC	ND	5.3	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.3	ug/kg	
12789-03-6	Chlordane	ND	53	ug/kg	
60-57-1	Dieldrin	ND	5.3	ug/kg	
72-54-8	4,4'-DDD	ND	5.3	ug/kg	
72-55-9	4,4'-DDE	ND	5.3	ug/kg	
50-29-3	4,4'-DDT	ND	5.3	ug/kg	
72-20-8	Endrin	ND	5.3	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.3	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.3	ug/kg	
959-98-8	Endosulfan-I	ND	5.3	ug/kg	
33213-65-9	Endosulfan-II	ND	5.3	ug/kg	
76-44-8	Heptachlor	ND	5.3	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.3	ug/kg	
72-43-5	Methoxychlor	ND	5.3	ug/kg	
53494-70-5	Endrin ketone	ND	5.3	ug/kg	
8001-35-2	Toxaphene	ND	53	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		10-143%
877-09-8	Tetrachloro-m-xylene	72%		10-143%
2051-24-3	Decachlorobiphenyl	55%		10-172%
2051-24-3	Decachlorobiphenyl	84%		10-172%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 10-12'		
Lab Sample ID:	MC50728-14	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	90.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65952.D	1	06/28/17 04:42	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.8 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	26	ug/kg	
11104-28-2	Aroclor 1221	ND	26	ug/kg	
11141-16-5	Aroclor 1232	ND	26	ug/kg	
53469-21-9	Aroclor 1242	ND	26	ug/kg	
12672-29-6	Aroclor 1248	ND	26	ug/kg	
11097-69-1	Aroclor 1254	ND	26	ug/kg	
11096-82-5	Aroclor 1260	ND	26	ug/kg	
37324-23-5	Aroclor 1262	ND	26	ug/kg	
11100-14-4	Aroclor 1268	ND	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		25-145%
877-09-8	Tetrachloro-m-xylene	85%		25-145%
2051-24-3	Decachlorobiphenyl	99%		25-179%
2051-24-3	Decachlorobiphenyl	81%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 10-12'		
Lab Sample ID:	MC50728-14	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	90.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5533.D	1	06/28/17 23:15	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	270	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 10-12'		
Lab Sample ID:	MC50728-14	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	90.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	3.1	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	32.7	23	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.57	0.57	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	12.1	1.1	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	10.3	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	< 0.034	0.034	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.3	2.3	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.57	0.57	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-4 10-12'		
Lab Sample ID:	MC50728-14A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	90.7
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	< 0.015		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-4 14-16'		
Lab Sample ID:	MC50728-15	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84520.D	1	06/30/17 15:21	DRY	n/a	n/a	MSM3049
Run #2							

	Initial Weight	Final Volume
Run #1	7.64 g	5.0 ml
Run #2		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	15	ug/kg	
107-13-1	Acrylonitrile	ND	19	ug/kg	
71-43-2	Benzene	ND	0.37	ug/kg	
108-86-1	Bromobenzene	ND	3.7	ug/kg	
75-27-4	Bromodichloromethane	ND	1.5	ug/kg	
75-25-2	Bromoform	ND	1.5	ug/kg	
74-83-9	Bromomethane	ND	7.4	ug/kg	
78-93-3	2-Butanone (MEK)	ND	7.4	ug/kg	
104-51-8	n-Butylbenzene	ND	3.7	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.7	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.7	ug/kg	
75-15-0	Carbon disulfide	ND	3.7	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.5	ug/kg	
108-90-7	Chlorobenzene	ND	1.5	ug/kg	
75-00-3	Chloroethane	ND	7.4	ug/kg	
67-66-3	Chloroform	ND	1.5	ug/kg	
74-87-3	Chloromethane	ND	3.7	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.7	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.7	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.7	ug/kg	
124-48-1	Dibromochloromethane	ND	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.5	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.5	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.5	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.5	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.5	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.5	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.5	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 14-16'		
Lab Sample ID:	MC50728-15	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	3.7	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.7	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	1.5	ug/kg	
76-13-1	Freon 113	ND	3.7	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.7	ug/kg	
591-78-6	2-Hexanone	ND	3.7	ug/kg	
98-82-8	Isopropylbenzene	ND	3.7	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.7	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.5	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3.7	ug/kg	
74-95-3	Methylene bromide	ND	3.7	ug/kg	
75-09-2	Methylene chloride	ND	3.7	ug/kg	
91-20-3	Naphthalene	ND	3.7	ug/kg	
103-65-1	n-Propylbenzene	ND	3.7	ug/kg	
100-42-5	Styrene	ND	3.7	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	ug/kg	
127-18-4	Tetrachloroethene	ND	1.5	ug/kg	
109-99-9	Tetrahydrofuran [a]	ND	7.4	ug/kg	
108-88-3	Toluene	ND	3.7	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	7.4	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.5	ug/kg	
79-01-6	Trichloroethene	ND	1.5	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.5	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.7	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.7	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.7	ug/kg	
75-01-4	Vinyl chloride	ND	7.4	ug/kg	
	m,p-Xylene	ND	1.5	ug/kg	
95-47-6	o-Xylene	ND	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	131%		65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 14-16'		
Lab Sample ID:	MC50728-15	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	88.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		65-129%
460-00-4	4-Bromofluorobenzene	101%		63-137%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 14-16'		
Lab Sample ID:	MC50728-15	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52317.D	1	06/27/17 22:21	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	560	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	560	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	560	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	560	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	560	ug/kg	
95-48-7	2-Methylphenol	ND	560	ug/kg	
106-44-5	4-Methylphenol	ND	560	ug/kg	
88-75-5	2-Nitrophenol	ND	560	ug/kg	
100-02-7	4-Nitrophenol	ND	560	ug/kg	
87-86-5	Pentachlorophenol	ND	560	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	560	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	560	ug/kg	
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	116	110	ug/kg	
62-53-3	Aniline	ND	560	ug/kg	
120-12-7	Anthracene	ND	110	ug/kg	
56-55-3	Benzo(a)anthracene	289	110	ug/kg	
50-32-8	Benzo(a)pyrene	369	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	379	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	240	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	336	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	560	ug/kg	
86-74-8	Carbazole	ND	110	ug/kg	
218-01-9	Chrysene	407	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 14-16'		
Lab Sample ID:	MC50728-15	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	560	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	560	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	560	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	619	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	560	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	280	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	560	ug/kg	
99-09-2	3-Nitroaniline	ND	560	ug/kg	
100-01-6	4-Nitroaniline	ND	560	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	560	ug/kg	
85-01-8	Phenanthrene	213	110	ug/kg	
129-00-0	Pyrene	613	110	ug/kg	
110-86-1	Pyridine	ND	560	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	560	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	91%		25-109%
4165-62-2	Phenol-d5	95%		29-113%
118-79-6	2,4,6-Tribromophenol	83%		20-141%
4165-60-0	Nitrobenzene-d5	83%		27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 14-16'		
Lab Sample ID:	MC50728-15	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	83%		34-118%
1718-51-0	Terphenyl-d14	91%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 14-16'		
Lab Sample ID:	MC50728-15	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	88.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55382.D	1	06/27/17 17:00	AP	06/23/17 14:30	OP49806	GBE2773
Run #2							

	Initial Weight	Final Volume
Run #1	21.0 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	54	ug/kg	
309-00-2	Aldrin	ND	5.4	ug/kg	
319-84-6	alpha-BHC	ND	5.4	ug/kg	
319-85-7	beta-BHC	ND	5.4	ug/kg	
319-86-8	delta-BHC	ND	5.4	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.4	ug/kg	
12789-03-6	Chlordane	ND	54	ug/kg	
60-57-1	Dieldrin	ND	5.4	ug/kg	
72-54-8	4,4'-DDD	ND	5.4	ug/kg	
72-55-9	4,4'-DDE	ND	5.4	ug/kg	
50-29-3	4,4'-DDT	ND	5.4	ug/kg	
72-20-8	Endrin	ND	5.4	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.4	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.4	ug/kg	
959-98-8	Endosulfan-I	ND	5.4	ug/kg	
33213-65-9	Endosulfan-II	ND	5.4	ug/kg	
76-44-8	Heptachlor	ND	5.4	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.4	ug/kg	
72-43-5	Methoxychlor	ND	5.4	ug/kg	
53494-70-5	Endrin ketone	ND	5.4	ug/kg	
8001-35-2	Toxaphene	ND	54	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		10-143%
877-09-8	Tetrachloro-m-xylene	75%		10-143%
2051-24-3	Decachlorobiphenyl	64%		10-172%
2051-24-3	Decachlorobiphenyl	83%		10-172%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 14-16'		
Lab Sample ID:	MC50728-15	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	88.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65953.D	1	06/28/17 04:58	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	21.0 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	27	ug/kg	
11104-28-2	Aroclor 1221	ND	27	ug/kg	
11141-16-5	Aroclor 1232	ND	27	ug/kg	
53469-21-9	Aroclor 1242	ND	27	ug/kg	
12672-29-6	Aroclor 1248	ND	27	ug/kg	
11097-69-1	Aroclor 1254	ND	27	ug/kg	
11096-82-5	Aroclor 1260	ND	27	ug/kg	
37324-23-5	Aroclor 1262	ND	27	ug/kg	
11100-14-4	Aroclor 1268	ND	27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		25-145%
877-09-8	Tetrachloro-m-xylene	89%		25-145%
2051-24-3	Decachlorobiphenyl	100%		25-179%
2051-24-3	Decachlorobiphenyl	77%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 14-16'		
Lab Sample ID:	MC50728-15	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	88.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5534.D	1	06/28/17 23:46	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	315	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4 14-16'		
Lab Sample ID:	MC50728-15	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	88.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	3.1	2.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	44.5	22	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.56	0.56	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	19.9	1.1	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	13.0	2.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	< 0.037	0.037	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.2	2.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.56	0.56	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-4 14-16'		
Lab Sample ID:	MC50728-15A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	88.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	< 0.015		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	MC50728-16	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	86.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84521.D	1	06/30/17 15:48	DRY	n/a	n/a	MSM3049
Run #2 [a]	M84506.D	1	06/30/17 02:56	DRY	n/a	n/a	MSM3048

	Initial Weight	Final Volume
Run #1	6.53 g	5.0 ml
Run #2	6.68 g	5.0 ml

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	18	ug/kg	
107-13-1	Acrylonitrile	ND	22	ug/kg	
71-43-2	Benzene	ND	0.44	ug/kg	
108-86-1	Bromobenzene	ND	4.4	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	ug/kg	
75-25-2	Bromoform	ND	1.8	ug/kg	
74-83-9	Bromomethane	ND	8.9	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.9	ug/kg	
104-51-8	n-Butylbenzene	ND	4.4	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.4	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.4	ug/kg	
75-15-0	Carbon disulfide	ND	4.4	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.8	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	ug/kg	
75-00-3	Chloroethane	ND	8.9	ug/kg	
67-66-3	Chloroform	ND	1.8	ug/kg	
74-87-3	Chloromethane	ND	4.4	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.4	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.4	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.4	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.8	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.8	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.8	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.8	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.8	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.8	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.8	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	MC50728-16	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	86.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	4.4	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.4	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.4	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	ug/kg	
100-41-4	Ethylbenzene	ND	1.8	ug/kg	
76-13-1	Freon 113	ND	4.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.4	ug/kg	
591-78-6	2-Hexanone	ND	4.4	ug/kg	
98-82-8	Isopropylbenzene	ND	4.4	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.4	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.8	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.4	ug/kg	
74-95-3	Methylene bromide	ND	4.4	ug/kg	
75-09-2	Methylene chloride	ND	4.4	ug/kg	
91-20-3	Naphthalene	ND	4.4	ug/kg	
103-65-1	n-Propylbenzene	ND	4.4	ug/kg	
100-42-5	Styrene	ND	4.4	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.4	ug/kg	
127-18-4	Tetrachloroethene	ND	1.8	ug/kg	
109-99-9	Tetrahydrofuran [b]	ND	8.9	ug/kg	
108-88-3	Toluene	ND	4.4	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	8.9	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.4	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	ug/kg	
79-01-6	Trichloroethene	ND	1.8	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.8	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.4	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.4	ug/kg	
75-01-4	Vinyl chloride	ND	8.9	ug/kg	
	m,p-Xylene	ND	1.8	ug/kg	
95-47-6	o-Xylene	ND	1.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	141%	145% [c]	65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	MC50728-16	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	86.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%	101%	65-129%
460-00-4	4-Bromofluorobenzene	107%	120%	63-137%

(a) Confirmation run.
(b) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.
(c) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	MC50728-16	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	86.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R52318.D	1	06/27/17 22:47	DRY	06/23/17 12:30	OP49803	MSR1980
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	290	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	570	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	570	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	570	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	570	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	570	ug/kg	
95-48-7	2-Methylphenol	ND	570	ug/kg	
106-44-5	4-Methylphenol	ND	570	ug/kg	
88-75-5	2-Nitrophenol	ND	570	ug/kg	
100-02-7	4-Nitrophenol	ND	570	ug/kg	
87-86-5	Pentachlorophenol	ND	570	ug/kg	
108-95-2	Phenol	ND	290	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	570	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	570	ug/kg	
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	182	110	ug/kg	
62-53-3	Aniline	ND	570	ug/kg	
120-12-7	Anthracene	ND	110	ug/kg	
56-55-3	Benzo(a)anthracene	509	110	ug/kg	
50-32-8	Benzo(a)pyrene	628	290	ug/kg	
205-99-2	Benzo(b)fluoranthene	631	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	394	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	587	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	290	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	290	ug/kg	
91-58-7	2-Chloronaphthalene	ND	290	ug/kg	
106-47-8	4-Chloroaniline	ND	570	ug/kg	
86-74-8	Carbazole	ND	110	ug/kg	
218-01-9	Chrysene	660	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	290	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	290	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	290	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	MC50728-16	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	86.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Compound	Result	RL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	290	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	570	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	570	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	570	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	144	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	290	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	290	ug/kg	
84-66-2	Diethyl phthalate	ND	290	ug/kg	
131-11-3	Dimethyl phthalate	ND	290	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	290	ug/kg	
206-44-0	Fluoranthene	1040	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	290	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	570	ug/kg	
67-72-1	Hexachloroethane	ND	290	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	422	290	ug/kg	
78-59-1	Isophorone	ND	290	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	570	ug/kg	
99-09-2	3-Nitroaniline	ND	570	ug/kg	
100-01-6	4-Nitroaniline	ND	570	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	290	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	290	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	290	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	570	ug/kg	
85-01-8	Phenanthrene	344	110	ug/kg	
129-00-0	Pyrene	1010	110	ug/kg	
110-86-1	Pyridine	ND	570	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	570	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	88%		25-109%
4165-62-2	Phenol-d5	92%		29-113%
118-79-6	2,4,6-Tribromophenol	83%		20-141%
4165-60-0	Nitrobenzene-d5	80%		27-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	MC50728-16	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	86.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

ABN RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	78%		34-118%
1718-51-0	Terphenyl-d14	89%		42-139%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit Response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	MC50728-16	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	86.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE55383.D	1	06/27/17 17:14	AP	06/23/17 14:30	OP49806	GBE2773
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	10.0 ml
Run #2		

Pesticide RCP List

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	57	ug/kg	
309-00-2	Aldrin	ND	5.7	ug/kg	
319-84-6	alpha-BHC	ND	5.7	ug/kg	
319-85-7	beta-BHC	ND	5.7	ug/kg	
319-86-8	delta-BHC	ND	5.7	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.7	ug/kg	
12789-03-6	Chlordane	ND	57	ug/kg	
60-57-1	Dieldrin	ND	5.7	ug/kg	
72-54-8	4,4'-DDD	ND	5.7	ug/kg	
72-55-9	4,4'-DDE	ND	5.7	ug/kg	
50-29-3	4,4'-DDT	ND	5.7	ug/kg	
72-20-8	Endrin	ND	5.7	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.7	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.7	ug/kg	
959-98-8	Endosulfan-I	ND	5.7	ug/kg	
33213-65-9	Endosulfan-II	ND	5.7	ug/kg	
76-44-8	Heptachlor	ND	5.7	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.7	ug/kg	
72-43-5	Methoxychlor	ND	5.7	ug/kg	
53494-70-5	Endrin ketone	ND	5.7	ug/kg	
8001-35-2	Toxaphene	ND	57	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	82%		10-143%
877-09-8	Tetrachloro-m-xylene	62%		10-143%
2051-24-3	Decachlorobiphenyl	64%		10-172%
2051-24-3	Decachlorobiphenyl	90%		10-172%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	MC50728-16	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	86.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK65954.D	1	06/28/17 05:13	AP	06/23/17 14:30	OP49805	GBK2113
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	29	ug/kg	
11104-28-2	Aroclor 1221	ND	29	ug/kg	
11141-16-5	Aroclor 1232	ND	29	ug/kg	
53469-21-9	Aroclor 1242	ND	29	ug/kg	
12672-29-6	Aroclor 1248	ND	29	ug/kg	
11097-69-1	Aroclor 1254	ND	29	ug/kg	
11096-82-5	Aroclor 1260	ND	29	ug/kg	
37324-23-5	Aroclor 1262	ND	29	ug/kg	
11100-14-4	Aroclor 1268	ND	29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		25-145%
877-09-8	Tetrachloro-m-xylene	74%		25-145%
2051-24-3	Decachlorobiphenyl	67%		25-179%
2051-24-3	Decachlorobiphenyl	52%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	MC50728-16	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	86.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5535.D	1	06/29/17 00:17	AP	06/23/17 14:00	OP49804	GCR1330
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	286	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	MC50728-16	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	86.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	4.8	2.4	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Barium [a]	43.1	24	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Cadmium [a]	< 0.59	0.59	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Chromium [a]	16.9	1.2	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	42.1	2.4	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Mercury [a]	< 0.037	0.037	mg/kg	1	06/27/17	06/27/17	ANJ	SW846 7471B [2]	SW846 7471B [4]
Selenium [a]	< 2.4	2.4	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]
Silver [a]	< 0.59	0.59	mg/kg	1	06/25/17	06/26/17	ANJ	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: N:MA42305
(2) Instrument QC Batch: N:MA42310
(3) Prep QC Batch: N:MP1622
(4) Prep QC Batch: N:MP1642

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	MC50728-16A	**Date Sampled:**	06/21/17
Matrix:	SO - Soil	**Date Received:**	06/22/17
		Percent Solids:	86.3
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Barium [a]	< 1.0		1.0	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Cadmium [a]	< 0.0050		0.0050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Chromium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Lead [a]	< 0.015		0.015	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Mercury [a]	< 0.20		0.20	ug/l	1	06/27/17	06/27/17	ANJ	SW846 7470A [1]	SW846 7470A [4]
Selenium [a]	< 0.050		0.050	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]
Silver [a]	< 0.025		0.025	mg/l	5	06/26/17	06/27/17	ANJ	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA42312
(2) Instrument QC Batch: N:MA42316
(3) Prep QC Batch: N:MP1635
(4) Prep QC Batch: N:MP1647

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC50728-17	**Date Sampled:**	06/21/17
Matrix:	SO - Trip Blank Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84491.D	1	06/29/17 20:01	DRY	n/a	n/a	MSM3048
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	20	ug/kg	
107-13-1	Acrylonitrile	ND	25	ug/kg	
71-43-2	Benzene	ND	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	ug/kg	
75-25-2	Bromoform	ND	2.0	ug/kg	
74-83-9	Bromomethane	ND	10	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	ug/kg	
75-00-3	Chloroethane	ND	10	ug/kg	
67-66-3	Chloroform	ND	2.0	ug/kg	
74-87-3	Chloromethane	ND	5.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	5.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC50728-17	**Date Sampled:**	06/21/17
Matrix:	SO - Trip Blank Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	ug/kg	
76-13-1	Freon 113	ND	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/kg	
591-78-6	2-Hexanone	ND	5.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	ug/kg	
75-09-2	Methylene chloride	ND	5.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	ug/kg	
100-42-5	Styrene	ND	5.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	ug/kg	
109-99-9	Tetrahydrofuran	ND	10	ug/kg	
108-88-3	Toluene	ND	5.0	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	10	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ug/kg	
79-01-6	Trichloroethene	ND	2.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/kg	
75-01-4	Vinyl chloride	ND	10	ug/kg	
	m,p-Xylene	ND	2.0	ug/kg	
95-47-6	o-Xylene	ND	2.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	122%		65-141%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC50728-17	**Date Sampled:**	06/21/17
Matrix:	SO - Trip Blank Soil	**Date Received:**	06/22/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		65-129%
460-00-4	4-Bromofluorobenzene	99%		63-137%

(a) Continuing Calibration outside of acceptance criteria. Reporting Limit response verified by low-level standard.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- RCP Form
- RCP Form (SGS Accutest New Jersey)
- Sample Tracking Chronicle
- QC Evaluation: CT RCP Limits

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest of New England
50 D'Angelo Drive/495 Technology Center West, Building One Marlborough, MA 01752
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job #: MC50728

Client / Reporting Information

Company Name: BL COMPANIES
Street Address: 355 Research Pkwy
City State Zip: Meriden CT 06450
Project Contact E-mail: Joy Kloss JKloss@blcompanies.com
Phone # Fax #: 203-630-1406
Sampler(s) Name(s) Phone #: Wesley Johnson 860-559-5412

Project Information

Project Name: Replacement of Bridge NO.03993
Street: West ST
City: Middletown
Project#: 14EC0058
Client PO#: PM4_2017_337
Project Manager: Joy Kloss

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bleu/Rite	VOCs 8260	SVOCs 8270	ETPH	PCBs 8082	Pesticides 8081	Total RCRA 8 Metals	SPLP RCRA 8 Metals	ignitability, Reactivity, PH				LAB USE ONLY
-1	HA-1 0-2'		6/21/17	12:45	WJ	S	4							1			✓	✓	✓	✓	✓	✓	✓	✓				
-2	HA-2 0-2'			12:20													✓	✓	✓	✓	✓	✓	✓	✓				
-3	HA-3 0-2'			13:05													✓	✓	✓	✓	✓	✓	✓	✓				
-4	B-1 0-2'			11:30													✓	✓	✓	✓	✓	✓	✓	✓				
-5	B-1 2-4'			11:30													✓	✓	✓	✓	✓	✓	✓					
-6	B-2 1-3'			11:05													✓	✓	✓	✓	✓	✓	✓	✓				
-7	B-2 3-5'			11:10													✓	✓	✓	✓	✓	✓	✓					
-8	B-3 2-4'			10:10													✓	✓	✓	✓	✓	✓	✓	✓				
-9	B-3 6-8'			10:20													✓	✓	✓	✓	✓	✓	✓					
-10	B-3 10-12'		↓	10:30	↓	↓	↓							↓			✓	✓	✓	✓	✓	✓	✓					
-11	B-3 15-17'		6/21/17	10:40	WJ	S	4							1			✓	✓	✓	✓	✓	✓	✓					

Turnaround Time (Business days)
- ☐ Std. 10 Business Days
- ☑ Std. 5 Business Days (By Contract only)
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:

Data Deliverable Information
- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULLT1 (Level 3+4)
- ☑ CT RCP
- ☐ MA MCP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format
- ☐ Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

INITIAL ASESSMENT BM

LABEL VERIFICATION BM

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Wesley Johnson	6/21/17 13:50	1 BL Fridge	2	6-22-17 10:05	2
Relinquished by Sampler: 3 B.C	Date Time: 6-22-17 18:30	Received By: 3 B.C	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time: 18:30	Received By: 5	Custody Seal # ☐ Intact ☐ Not intact	Preserved where applicable ☐	On Ice ☑ Cooler Temp 4.1, 4.3

MC50728: Chain of Custody
Page 1 of 3

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest of New England
50 D'Angelo Drive/495 Technology Center West, Building One Marlborough, MA 01752
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #: | SGS Accutest Quote #: | SGS Accutest Job #: MC50728

Client / Reporting Information

Company Name: BL Companies
Street Address: 355 Research Pkwy
City State Zip: Meriden CT 06450
Project Contact E-mail: Joy Kloss JKloss@blcompanies.com
Phone #: 203-630-1406 Fax #:
Sampler(s) Name(s) Phone #: Wesley Johnson 860-659-5417

Project Information

Project Name: Replacement of Bridge No. 03993
Street: West St
City: Middletown
Project#: 14ECC058
Client PO#: PM4_2017_337
Project Manager: Joy Kloss

Billing Information (If different from Report to)

Company Name:
Street Address:
City State Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfite	VOCs 8260	SVOCs 8270	ETPH	PCBs 8082	Pesticides 8081	Total RCRA 8 Metals	SPLP RCRA 8 Metals	ignitability, Reactivity, PH				LAB USE ONLY
-12	B-4 1-3'		6/21/17	9:10	WJ	S	4							1			✓	✓	✓	✓	✓	✓	✓	✓				
-13	B-4 4-6'		↓	9:15	↓	↓	↓							↓			✓	✓	✓	✓	✓	✓	✓					
-14	B-4 10-12'		↓	9:40	↓	↓	↓							↓			✓	✓	✓	✓	✓	✓	✓					
-15	B-4 14-16'		↓	9:50	↓	↓	↓							↓			✓	✓	✓	✓	✓	✓	✓					
-16	DUP		↓	—	↓	S	4							↓			✓	✓	✓	✓	✓	✓	✓					
-17	Trip Blank		6/21/17	—	WJ		3							1			✓											

Turnaround Time (Business days)
- ☐ Std. 10 Business Days
- ☐ Std. 5 Business Days (By Contract only)
- ☑ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:

Data Deliverable Information
- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULLT1 (Level 3+4)
- ☑ CT RCP
- ☐ MA MCP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format
- ☐ Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Wesley Johnson	6/21/17	1 BL Fridge	2	6-22-17 10:00	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3 B.C	6-22-17 1830	3 B.C	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	☐ Intact ☐ Not intact	Preserved where applicable ☐	On Ice ☐	Cooler Temp.
5		5					

5.1

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MC50728: Chain of Custody
Page 2 of 3

SGS Accutest NE Sample Receipt Summary

Job Number: MC50728 **Client:** BL COMPANIES **Project:** REPLACEMENT OF BRIDGE

Date / Time Received: 6/22/2017 6:30:00 PM **Delivery Method:** SGS COURIER **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1 (4.1 / 3.6); #2 (4.3 / 3.8);

Cooler Security	Y	or	N
1. Custody Seals Present:	☐		☑
2. Custody Seals Intact:	☐		☑
3. COC Present:	☑		☐
4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Thermometer ID:	; IRGUN1;
3. Cooler media:	Ice (Bag)
4. No. Coolers:	1

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

5.1

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MC50728: Chain of Custody

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Reasonable Confidence Protocol
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: **SGS Accutest- Marlborough** **Client:** **BL Companies**

Project Location: **Replacement of Bridge No. 03993, West Street, Middletown, CT** **Project Number:** **14EC0058**

Sampling Date(s): **6/21/2017**

Laboratory Sample ID(s): MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16, MC50728-17, MC50728-1A, MC50728-2A, MC50728-3A, MC50728-4A, MC50728-5A, MC50728-6A, MC50728-7A, MC50728-8A, MC50728-9A, MC50728-10A, MC50728-11A, MC50728-12A, MC50728-13A, MC50728-14A, MC50728-15A, MC50728-16A

Methods: Refer to case narrative.

1	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 CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes ☑ No ☐
1A	Where all the method specified preservation and holding time requirements met?	Yes ☑ No ☐
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes ☐ No ☐ NA ☑
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes ☑ No ☐
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No ☐
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ☐ No ☑
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes ☑ No ☐
	b) Were these reporting limits met?	Yes ☐ No ☑
6	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?	Yes ☐ No ☑
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ☑ No ☐

Note: 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".

I, the undersigned, attest under 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: Position: Lab Director

Printed Name: H. (Brad) Madadian Date: 6/30/2017
SGS Accutest- Marlborough

Reasonable Confidence Protocol
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: **Accutest New England** **Client:** **SGS Accutest New England**

Project Location: **BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT** **Project Number:** **BLCTM27045**

Sampling Date(s): **6/21/2017**

Laboratory Sample ID(s): MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16, MC50728-17, MC50728-1A, MC50728-2A, MC50728-3A, MC50728-4A, MC50728-5A, MC50728-6A, MC50728-7A, MC50728-8A, MC50728-9A, MC50728-10A, MC50728-11A, MC50728-12A, MC50728-13A, MC50728-14A, MC50728-15A, MC50728-16A

Methods: EPA 160.3 M, NONE, SM2540 G-97, SW846 1010A/ASTM D93, SW846 6010C

1	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 CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes ☑ No ☐
1A	Where all the method specified preservation and holding time requirements met?	Yes ☑ No ☐
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes ☐ No ☐ NA ☑
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes ☑ No ☐
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No ☐
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ☑ No ☐
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes ☑ No ☐
	b) Were these reporting limits met?	Yes ☑ No ☐
6	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?	Yes ☐ No ☑
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ☑ No ☐

Note: 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".

I, the undersigned, attest under 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: Nancy F. Cole Position: Lab Director

Printed Name: Nancy Cole Date: 6/29/2017
Mid-Atlantic Laboratory

Internal Sample Tracking Chronicle

BL Companies

Job No: MC50728

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-1	Collected: 21-JUN-17 12:45 By: WJ		Received: 22-JUN-17 By: TF			
HA-1 0-2'						
MC50728-1	SW846 CHAP7/9034	26-JUN-17 03:19	ANJ	26-JUN-17	ANJ	SREAC
MC50728-1	SW846 CHAP7/9012 B	26-JUN-17 14:56	ANJ	26-JUN-17	ANJ	CREAC
MC50728-1	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-1	SW846 6010C	26-JUN-17 19:26	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-1	SW846 7471B	27-JUN-17 10:57	ANJ	27-JUN-17	ANJ	HG
MC50728-1	SW846 8081B	27-JUN-17 15:18	AP	23-JUN-17	AJ	P8081RCP
MC50728-1	SW846 9045D	27-JUN-17 16:44	ANJ			PH
MC50728-1	SW846 8260C	27-JUN-17 17:45	DRY			V8260RCP
MC50728-1	SW846 8270D	27-JUN-17 19:22	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-1	SW846 8082A	28-JUN-17 01:00	AP	23-JUN-17	AJ	P8082RCP
MC50728-1	SW846 1010A/ASTM D93	28-JUN-17 16:49	ANJ			IGN
MC50728-1	CT-ETPH 7/06	28-JUN-17 18:34	AP	23-JUN-17	AJ	BCTTPH
MC50728-1	SW846 8260C	29-JUN-17 20:29	DRY			V8260RCP
MC50728-2	Collected: 21-JUN-17 12:20 By: WJ		Received: 22-JUN-17 By: TF			
HA-2 0-2'						
MC50728-2	SW846 CHAP7/9034	26-JUN-17 03:19	ANJ	26-JUN-17	ANJ	SREAC
MC50728-2	SW846 CHAP7/9012 B	26-JUN-17 15:00	ANJ	26-JUN-17	ANJ	CREAC
MC50728-2	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-2	SW846 6010C	26-JUN-17 19:35	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-2	SW846 7471B	27-JUN-17 11:02	ANJ	27-JUN-17	ANJ	HG
MC50728-2	SW846 8081B	27-JUN-17 15:33	AP	23-JUN-17	AJ	P8081RCP
MC50728-2	SW846 9045D	27-JUN-17 16:30	ANJ			PH
MC50728-2	SW846 8260C	27-JUN-17 18:14	DRY			V8260RCP
MC50728-2	SW846 8270D	27-JUN-17 19:48	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-2	SW846 8082A	28-JUN-17 01:16	AP	23-JUN-17	AJ	P8082RCP
MC50728-2	SW846 1010A/ASTM D93	28-JUN-17 16:49	ANJ			IGN
MC50728-2	CT-ETPH 7/06	28-JUN-17 19:06	AP	23-JUN-17	AJ	BCTTPH
MC50728-3	Collected: 21-JUN-17 13:05 By: WJ		Received: 22-JUN-17 By: TF			
HA-3 0-2'						
MC50728-3	SW846 CHAP7/9034	26-JUN-17 03:19	ANJ	26-JUN-17	ANJ	SREAC
MC50728-3	SW846 CHAP7/9012 B	26-JUN-17 15:01	ANJ	26-JUN-17	ANJ	CREAC
MC50728-3	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-3	SW846 6010C	26-JUN-17 19:38	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE

Internal Sample Tracking Chronicle

BL Companies

Job No: MC50728

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-3	SW846 7471B	27-JUN-17 11:03	ANJ	27-JUN-17	ANJ	HG
MC50728-3	SW846 8081B	27-JUN-17 15:47	AP	23-JUN-17	AJ	P8081RCP
MC50728-3	SW846 9045D	27-JUN-17 16:36	ANJ			PH
MC50728-3	SW846 8260C	27-JUN-17 18:42	DRY			V8260RCP
MC50728-3	SW846 8270D	27-JUN-17 20:13	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-3	SW846 8082A	28-JUN-17 01:32	AP	23-JUN-17	AJ	P8082RCP
MC50728-3	SW846 1010A/ASTM D93	28-JUN-17 16:49	ANJ			IGN
MC50728-3	CT-ETPH 7/06	28-JUN-17 19:37	AP	23-JUN-17	AJ	BCTTPH
MC50728-3	SW846 8260C	29-JUN-17 20:56	DRY			V8260RCP
MC50728-4	Collected: 21-JUN-17 11:30 By: WJ		Received: 22-JUN-17 By: TF			
B-1 0-2'						
MC50728-4	SW846 CHAP7/9034	26-JUN-17 03:19	ANJ	26-JUN-17	ANJ	SREAC
MC50728-4	SW846 CHAP7/9012 B	26-JUN-17 15:03	ANJ	26-JUN-17	ANJ	CREAC
MC50728-4	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-4	SW846 6010C	26-JUN-17 19:41	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-4	SW846 7471B	27-JUN-17 11:05	ANJ	27-JUN-17	ANJ	HG
MC50728-4	SW846 8081B	27-JUN-17 16:02	AP	23-JUN-17	AJ	P8081RCP
MC50728-4	SW846 8081B	27-JUN-17 16:16	AP	23-JUN-17	AJ	P8081RCP
MC50728-4	SW846 9045D	27-JUN-17 16:37	ANJ			PH
MC50728-4	SW846 8260C	27-JUN-17 19:10	DRY			V8260RCP
MC50728-4	SW846 8270D	27-JUN-17 23:12	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-4	SW846 8082A	28-JUN-17 01:48	AP	23-JUN-17	AJ	P8082RCP
MC50728-4	SW846 1010A/ASTM D93	28-JUN-17 16:49	ANJ			IGN
MC50728-4	SW846 8270D	28-JUN-17 18:29	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-4	CT-ETPH 7/06	29-JUN-17 14:25	AP	23-JUN-17	AJ	BCTTPH
MC50728-4	SW846 8260C	29-JUN-17 21:24	DRY			V8260RCP
MC50728-5	Collected: 21-JUN-17 11:30 By: WJ		Received: 22-JUN-17 By: TF			
B-1 2-4'						
MC50728-5	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-5	SW846 6010C	26-JUN-17 19:44	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-5	SW846 8081B	27-JUN-17 00:38	AP	23-JUN-17	AJ	P8081RCP
MC50728-5	SW846 7471B	27-JUN-17 11:06	ANJ	27-JUN-17	ANJ	HG
MC50728-5	SW846 8270D	27-JUN-17 16:48	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-5	SW846 8260C	27-JUN-17 19:38	DRY			V8260RCP
MC50728-5	SW846 8082A	28-JUN-17 02:03	AP	23-JUN-17	AJ	P8082RCP
MC50728-5	CT-ETPH 7/06	28-JUN-17 21:11	AP	23-JUN-17	AJ	BCTTPH

Internal Sample Tracking Chronicle

BL Companies

Job No: MC50728

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-5	SW846 8260C	29-JUN-17 21:52	DRY			V8260RCP
MC50728-6	Collected: 21-JUN-17 11:05 By: WJ		Received: 22-JUN-17 By: TF			
B-2 1-3'						
MC50728-6	SW846 CHAP7/9034	26-JUN-17 03:19	ANJ	26-JUN-17	ANJ	SREAC
MC50728-6	SW846 CHAP7/9012 B	26-JUN-17 15:04	ANJ	26-JUN-17	ANJ	CREAC
MC50728-6	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-6	SW846 6010C	26-JUN-17 19:48	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-6	SW846 8081B	27-JUN-17 00:53	AP	23-JUN-17	AJ	P8081RCP
MC50728-6	SW846 7471B	27-JUN-17 11:07	ANJ	27-JUN-17	ANJ	HG
MC50728-6	SW846 9045D	27-JUN-17 16:39	ANJ			PH
MC50728-6	SW846 8270D	27-JUN-17 17:14	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-6	SW846 8082A	28-JUN-17 02:19	AP	23-JUN-17	AJ	P8082RCP
MC50728-6	SW846 1010A/ASTM D93	28-JUN-17 16:49	ANJ			IGN
MC50728-6	CT-ETPH 7/06	28-JUN-17 18:03	AP	23-JUN-17	AJ	BCTTPH
MC50728-6	SW846 8260C	29-JUN-17 22:19	DRY			V8260RCP
MC50728-7	Collected: 21-JUN-17 11:10 By: WJ		Received: 22-JUN-17 By: TF			
B-2 3-5'						
MC50728-7	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-7	SW846 6010C	26-JUN-17 19:13	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-7	SW846 8081B	27-JUN-17 01:07	AP	23-JUN-17	AJ	P8081RCP
MC50728-7	SW846 7471B	27-JUN-17 11:09	ANJ	27-JUN-17	ANJ	HG
MC50728-7	SW846 8270D	27-JUN-17 17:39	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-7	SW846 8082A	28-JUN-17 02:35	AP	23-JUN-17	AJ	P8082RCP
MC50728-7	CT-ETPH 7/06	28-JUN-17 15:57	AP	23-JUN-17	AJ	BCTTPH
MC50728-7	SW846 8260C	29-JUN-17 22:47	DRY			V8260RCP
MC50728-8	Collected: 21-JUN-17 10:10 By: WJ		Received: 22-JUN-17 By: TF			
B-3 2-4'						
MC50728-8	SW846 CHAP7/9034	26-JUN-17 03:19	ANJ	26-JUN-17	ANJ	SREAC
MC50728-8	SW846 CHAP7/9012 B	26-JUN-17 15:05	ANJ	26-JUN-17	ANJ	CREAC
MC50728-8	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-8	SW846 6010C	26-JUN-17 19:52	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-8	SW846 8081B	27-JUN-17 01:22	AP	23-JUN-17	AJ	P8081RCP
MC50728-8	SW846 7471B	27-JUN-17 11:10	ANJ	27-JUN-17	ANJ	HG
MC50728-8	SW846 9045D	27-JUN-17 16:43	ANJ			PH

Internal Sample Tracking Chronicle

BL Companies

Job No: MC50728

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-8	SW846 8270D	27-JUN-17 18:05	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-8	SW846 8082A	28-JUN-17 02:51	AP	23-JUN-17	AJ	P8082RCP
MC50728-8	CT-ETPH 7/06	28-JUN-17 16:29	AP	23-JUN-17	AJ	BCTTPH
MC50728-8	SW846 1010A/ASTM D28	28-JUN-17 16:49	ANJ			IGN
MC50728-8	SW846 8260C	30-JUN-17 12:34	DRY			V8260RCP
MC50728-9	Collected: 21-JUN-17 10:20 By: WJ		Received: 22-JUN-17 By: TF			
B-3 6-8'						
MC50728-9	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-9	SW846 6010C	26-JUN-17 19:55	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-9	SW846 8081B	27-JUN-17 01:36	AP	23-JUN-17	AJ	P8081RCP
MC50728-9	SW846 7471B	27-JUN-17 11:12	ANJ	27-JUN-17	ANJ	HG
MC50728-9	SW846 8270D	27-JUN-17 18:31	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-9	SW846 8082A	28-JUN-17 03:07	AP	23-JUN-17	AJ	P8082RCP
MC50728-9	CT-ETPH 7/06	28-JUN-17 17:00	AP	23-JUN-17	AJ	BCTTPH
MC50728-9	SW846 8260C	29-JUN-17 23:42	DRY			V8260RCP
MC50728-9	SW846 8260C	30-JUN-17 13:02	DRY			V8260RCP
MC50728-10	Collected: 21-JUN-17 10:30 By: WJ		Received: 22-JUN-17 By: TF			
B-3 10-12'						
MC50728-10	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-10	SW846 6010C	26-JUN-17 19:58	ANJ	25-JUN-17	ANJ	AS,BA,CD,CR,PB
MC50728-10	SW846 7471B	27-JUN-17 11:13	ANJ	27-JUN-17	ANJ	HG
MC50728-10	SW846 6010C	27-JUN-17 12:41	ANJ	25-JUN-17	ANJ	AG,SE
MC50728-10	SW846 8081B	27-JUN-17 16:31	AP	23-JUN-17	AJ	P8081RCP
MC50728-10	SW846 8270D	27-JUN-17 20:39	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-10	SW846 8082A	28-JUN-17 03:23	AP	23-JUN-17	AJ	P8082RCP
MC50728-10	CT-ETPH 7/06	28-JUN-17 21:42	AP	23-JUN-17	AJ	BCTTPH
MC50728-10	SW846 8260C	30-JUN-17 00:10	DRY			V8260RCP
MC50728-11	Collected: 21-JUN-17 10:40 By: WJ		Received: 22-JUN-17 By: TF			
B-3 15-17'						
MC50728-11	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-11	SW846 6010C	26-JUN-17 20:02	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-11	SW846 8081B	27-JUN-17 01:51	AP	23-JUN-17	AJ	P8081RCP
MC50728-11	SW846 7471B	27-JUN-17 11:17	ANJ	27-JUN-17	ANJ	HG
MC50728-11	SW846 8270D	27-JUN-17 18:57	DRY	23-JUN-17	AJ	AB8270RCP

Internal Sample Tracking Chronicle

BL Companies

Job No: MC50728

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-11	SW846 8082A	28-JUN-17 03:54	AP	23-JUN-17	AJ	P8082RCP
MC50728-11	CT-ETPH 7/06	28-JUN-17 17:32	AP	23-JUN-17	AJ	BCTTPH
MC50728-11	SW846 8260C	30-JUN-17 13:30	DRY			V8260RCP
MC50728-12	Collected: 21-JUN-17 09:10 By: WJ		Received: 22-JUN-17 By: TF			
B-4 1-3'						
MC50728-12	SW846 CHAP7/9034	26-JUN-17 03:19	ANJ	26-JUN-17	ANJ	SREAC
MC50728-12	SW846 CHAP7/9012 B	26-JUN-17 15:07	ANJ	26-JUN-17	ANJ	CREAC
MC50728-12	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-12	SW846 6010C	26-JUN-17 20:11	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-12	SW846 8081B	27-JUN-17 00:09	AP	23-JUN-17	AJ	P8081RCP
MC50728-12	SW846 7471B	27-JUN-17 11:19	ANJ	27-JUN-17	ANJ	HG
MC50728-12	SW846 9045D	27-JUN-17 16:27	ANJ			PH
MC50728-12	SW846 8270D	27-JUN-17 21:05	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-12	SW846 8082A	28-JUN-17 04:10	AP	23-JUN-17	AJ	P8082RCP
MC50728-12	SW846 1010A/ASTM D28	28-JUN-17 16:49	ANJ			IGN
MC50728-12	CT-ETPH 7/06	28-JUN-17 22:13	AP	23-JUN-17	AJ	BCTTPH
MC50728-12	SW846 8260C	30-JUN-17 01:06	DRY			V8260RCP
MC50728-12	SW846 8260C	30-JUN-17 13:58	DRY			V8260RCP
MC50728-13	Collected: 21-JUN-17 09:15 By: WJ		Received: 22-JUN-17 By: TF			
B-4 4-6'						
MC50728-13	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-13	SW846 6010C	26-JUN-17 20:14	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-13	SW846 8081B	27-JUN-17 00:24	AP	23-JUN-17	AJ	P8081RCP
MC50728-13	SW846 7471B	27-JUN-17 11:20	ANJ	27-JUN-17	ANJ	HG
MC50728-13	SW846 8270D	27-JUN-17 21:30	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-13	SW846 8082A	28-JUN-17 04:26	AP	23-JUN-17	AJ	P8082RCP
MC50728-13	CT-ETPH 7/06	28-JUN-17 22:44	AP	23-JUN-17	AJ	BCTTPH
MC50728-13	SW846 8260C	30-JUN-17 14:26	DRY			V8260RCP
MC50728-14	Collected: 21-JUN-17 09:40 By: WJ		Received: 22-JUN-17 By: TF			
B-4 10-12'						
MC50728-14	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-14	SW846 6010C	26-JUN-17 20:17	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-14	SW846 7471B	27-JUN-17 11:21	ANJ	27-JUN-17	ANJ	HG
MC50728-14	SW846 8081B	27-JUN-17 16:45	AP	23-JUN-17	AJ	P8081RCP

Internal Sample Tracking Chronicle

BL Companies

Job No: MC50728

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-14	SW846 8270D	27-JUN-17 21:56	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-14	SW846 8082A	28-JUN-17 04:42	AP	23-JUN-17	AJ	P8082RCP
MC50728-14	CT-ETPH 7/06	28-JUN-17 23:15	AP	23-JUN-17	AJ	BCTTPH
MC50728-14	SW846 8260C	30-JUN-17 14:53	DRY			V8260RCP
MC50728-15	Collected: 21-JUN-17 09:50 By: WJ		Received: 22-JUN-17 By: TF			
B-4 14-16'						
MC50728-15	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-15	SW846 6010C	26-JUN-17 20:20	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-15	SW846 7471B	27-JUN-17 11:23	ANJ	27-JUN-17	ANJ	HG
MC50728-15	SW846 8081B	27-JUN-17 17:00	AP	23-JUN-17	AJ	P8081RCP
MC50728-15	SW846 8270D	27-JUN-17 22:21	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-15	SW846 8082A	28-JUN-17 04:58	AP	23-JUN-17	AJ	P8082RCP
MC50728-15	CT-ETPH 7/06	28-JUN-17 23:46	AP	23-JUN-17	AJ	BCTTPH
MC50728-15	SW846 8260C	30-JUN-17 15:21	DRY			V8260RCP
MC50728-16	Collected: 21-JUN-17 00:00 By: WJ		Received: 22-JUN-17 By: TF			
DUP						
MC50728-16	SM2540 G-97	26-JUN-17 17:00	ANJ			SOL104
MC50728-16	SW846 6010C	26-JUN-17 20:23	ANJ	25-JUN-17	ANJ	AG,AS,BA,CD,CR,PB,SE
MC50728-16	SW846 7471B	27-JUN-17 11:24	ANJ	27-JUN-17	ANJ	HG
MC50728-16	SW846 8081B	27-JUN-17 17:14	AP	23-JUN-17	AJ	P8081RCP
MC50728-16	SW846 8270D	27-JUN-17 22:47	DRY	23-JUN-17	AJ	AB8270RCP
MC50728-16	SW846 8082A	28-JUN-17 05:13	AP	23-JUN-17	AJ	P8082RCP
MC50728-16	CT-ETPH 7/06	29-JUN-17 00:17	AP	23-JUN-17	AJ	BCTTPH
MC50728-16	SW846 8260C	30-JUN-17 02:56	DRY			V8260RCP
MC50728-16	SW846 8260C	30-JUN-17 15:48	DRY			V8260RCP
MC50728-17	Collected: 21-JUN-17 00:00 By: WJ		Received: 22-JUN-17 By: TF			
TRIP BLANK						
MC50728-17	SW846 8260C	29-JUN-17 20:01	DRY			V8260RCP
MC50728-1A	Collected: 21-JUN-17 12:45 By: WJ		Received: 22-JUN-17 By: TF			
HA-1 0-2'						
MC50728-1A	SW846 7470A	27-JUN-17 11:41	ANJ	27-JUN-17	ANJ	EHG
MC50728-1A	SW846 6010C	27-JUN-17 15:01	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE

Internal Sample Tracking Chronicle

BL Companies

Job No: MC50728

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-2A HA-2 0-2'	Collected: 21-JUN-17 12:20 By: WJ		Received: 22-JUN-17 By: TF			
MC50728-2A	SW846 7470A	27-JUN-17 11:43	ANJ	27-JUN-17	ANJ	EHG
MC50728-2A	SW846 6010C	27-JUN-17 15:10	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-3A HA-3 0-2'	Collected: 21-JUN-17 13:05 By: WJ		Received: 22-JUN-17 By: TF			
MC50728-3A	SW846 7470A	27-JUN-17 11:44	ANJ	27-JUN-17	ANJ	EHG
MC50728-3A	SW846 6010C	27-JUN-17 15:14	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-4A B-1 0-2'	Collected: 21-JUN-17 11:30 By: WJ		Received: 22-JUN-17 By: TF			
MC50728-4A	SW846 7470A	27-JUN-17 11:45	ANJ	27-JUN-17	ANJ	EHG
MC50728-4A	SW846 6010C	27-JUN-17 15:19	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-5A B-1 2-4'	Collected: 21-JUN-17 11:30 By: WJ		Received: 22-JUN-17 By: TF			
MC50728-5A	SW846 7470A	27-JUN-17 11:47	ANJ	27-JUN-17	ANJ	EHG
MC50728-5A	SW846 6010C	27-JUN-17 15:23	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-6A B-2 1-3'	Collected: 21-JUN-17 11:05 By: WJ		Received: 22-JUN-17 By: TF			
MC50728-6A	SW846 7470A	27-JUN-17 11:48	ANJ	27-JUN-17	ANJ	EHG
MC50728-6A	SW846 6010C	27-JUN-17 15:27	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-7A B-2 3-5'	Collected: 21-JUN-17 11:10 By: WJ		Received: 22-JUN-17 By: TF			
MC50728-7A	SW846 7470A	27-JUN-17 11:49	ANJ	27-JUN-17	ANJ	EHG
MC50728-7A	SW846 6010C	27-JUN-17 15:40	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-8A B-3 2-4'	Collected: 21-JUN-17 10:10 By: WJ		Received: 22-JUN-17 By: TF			

Internal Sample Tracking Chronicle

BL Companies

Job No: MC50728

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-8A	SW846 7470A	27-JUN-17 11:50	ANJ	27-JUN-17	ANJ	EHG
MC50728-8A	SW846 6010C	27-JUN-17 15:44	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-9A	Collected: 21-JUN-17 10:20 By: WJ		Received: 22-JUN-17 By: TF			
B-3 6-8'						
MC50728-9A	SW846 7470A	27-JUN-17 11:52	ANJ	27-JUN-17	ANJ	EHG
MC50728-9A	SW846 6010C	27-JUN-17 15:49	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-10A	Collected: 21-JUN-17 10:30 By: WJ		Received: 22-JUN-17 By: TF			
B-3 10-12'						
MC50728-10A	SW846 7470A	27-JUN-17 11:56	ANJ	27-JUN-17	ANJ	EHG
MC50728-10A	SW846 6010C	27-JUN-17 15:53	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-11A	Collected: 21-JUN-17 10:40 By: WJ		Received: 22-JUN-17 By: TF			
B-3 15-17'						
MC50728-11A	SW846 7470A	27-JUN-17 11:57	ANJ	27-JUN-17	ANJ	EHG
MC50728-11A	SW846 6010C	27-JUN-17 15:57	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-12A	Collected: 21-JUN-17 09:10 By: WJ		Received: 22-JUN-17 By: TF			
B-4 1-3'						
MC50728-12A	SW846 7470A	27-JUN-17 11:59	ANJ	27-JUN-17	ANJ	EHG
MC50728-12A	SW846 6010C	27-JUN-17 16:02	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-13A	Collected: 21-JUN-17 09:15 By: WJ		Received: 22-JUN-17 By: TF			
B-4 4-6'						
MC50728-13A	SW846 7470A	27-JUN-17 12:00	ANJ	27-JUN-17	ANJ	EHG
MC50728-13A	SW846 6010C	27-JUN-17 16:06	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-14A	Collected: 21-JUN-17 09:40 By: WJ		Received: 22-JUN-17 By: TF			
B-4 10-12'						
MC50728-14A	SW846 7470A	27-JUN-17 12:01	ANJ	27-JUN-17	ANJ	EHG
MC50728-14A	SW846 6010C	27-JUN-17 16:10	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE

Internal Sample Tracking Chronicle

BL Companies

Job No: MC50728

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-15A B-4 14-16'	Collected: 21-JUN-17 09:50 By: WJ		Received: 22-JUN-17 By: TF			
MC50728-15A	SW846 7470A	27-JUN-17 12:03	ANJ	27-JUN-17	ANJ	EHG
MC50728-15A	SW846 6010C	27-JUN-17 16:15	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-16A DUP	Collected: 21-JUN-17 00:00 By: WJ		Received: 22-JUN-17 By: TF			
MC50728-16A	SW846 7470A	27-JUN-17 12:04	ANJ	27-JUN-17	ANJ	EHG
MC50728-16A	SW846 6010C	27-JUN-17 16:27	ANJ	26-JUN-17	ANJ	EAG,EAS,EBA,ECD,ECR,EPB,ESE

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSM3045	SW846 8260C						
MSM3045-BS	67-64-1	Acetone	BSP	REC	148	%	70-130
MSM3045-BS	107-13-1	Acrylonitrile	BSP	REC	96	%	70-130
MSM3045-BS	71-43-2	Benzene	BSP	REC	97	%	70-130
MSM3045-BS	108-86-1	Bromobenzene	BSP	REC	97	%	70-130
MSM3045-BS	75-27-4	Bromodichloromethane	BSP	REC	107	%	70-130
MSM3045-BS	75-25-2	Bromoform	BSP	REC	92	%	70-130
MSM3045-BS	74-83-9	Bromomethane	BSP	REC	98	%	70-130
MSM3045-BS	78-93-3	2-Butanone (MEK)	BSP	REC	120	%	70-130
MSM3045-BS	104-51-8	n-Butylbenzene	BSP	REC	102	%	70-130
MSM3045-BS	135-98-8	sec-Butylbenzene	BSP	REC	102	%	70-130
MSM3045-BS	98-06-6	tert-Butylbenzene	BSP	REC	105	%	70-130
MSM3045-BS	75-15-0	Carbon disulfide	BSP	REC	108	%	70-130
MSM3045-BS	56-23-5	Carbon tetrachloride	BSP	REC	112	%	70-130
MSM3045-BS	108-90-7	Chlorobenzene	BSP	REC	99	%	70-130
MSM3045-BS	75-00-3	Chloroethane	BSP	REC	100	%	70-130
MSM3045-BS	67-66-3	Chloroform	BSP	REC	107	%	70-130
MSM3045-BS	74-87-3	Chloromethane	BSP	REC	85	%	70-130
MSM3045-BS	95-49-8	o-Chlorotoluene	BSP	REC	101	%	70-130
MSM3045-BS	106-43-4	p-Chlorotoluene	BSP	REC	100	%	70-130
MSM3045-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	89	%	70-130
MSM3045-BS	124-48-1	Dibromochloromethane	BSP	REC	98	%	70-130
MSM3045-BS	106-93-4	1,2-Dibromoethane	BSP	REC	95	%	70-130
MSM3045-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	97	%	70-130
MSM3045-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	98	%	70-130
MSM3045-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	99	%	70-130
MSM3045-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	78	%	70-130
MSM3045-BS	75-34-3	1,1-Dichloroethane	BSP	REC	105	%	70-130
MSM3045-BS	107-06-2	1,2-Dichloroethane	BSP	REC	110	%	70-130
MSM3045-BS	75-35-4	1,1-Dichloroethene	BSP	REC	105	%	70-130
MSM3045-BS	156-59-2	cis-1,2-Dichloroethene	BSP	REC	102	%	70-130
MSM3045-BS	156-60-5	trans-1,2-Dichloroethene	BSP	REC	104	%	70-130
MSM3045-BS	78-87-5	1,2-Dichloropropane	BSP	REC	100	%	70-130
MSM3045-BS	142-28-9	1,3-Dichloropropane	BSP	REC	95	%	70-130
MSM3045-BS	594-20-7	2,2-Dichloropropane	BSP	REC	117	%	70-130
MSM3045-BS	563-58-6	1,1-Dichloropropene	BSP	REC	104	%	70-130
MSM3045-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	103	%	70-130
MSM3045-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	106	%	70-130
MSM3045-BS	100-41-4	Ethylbenzene	BSP	REC	100	%	70-130
MSM3045-BS	76-13-1	Freon 113	BSP	REC	112	%	70-130
MSM3045-BS	87-68-3	Hexachlorobutadiene	BSP	REC	101	%	70-130
MSM3045-BS	591-78-6	2-Hexanone	BSP	REC	108	%	70-130
MSM3045-BS	98-82-8	Isopropylbenzene	BSP	REC	102	%	70-130

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSM3045-BS	99-87-6	p-Isopropyltoluene	BSP	REC	103	%	70-130
MSM3045-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	107	%	70-130
MSM3045-BS	108-10-1	4-Methyl-2-pentanone (MIBK)	BSP	REC	94	%	70-130
MSM3045-BS	74-95-3	Methylene bromide	BSP	REC	101	%	70-130
MSM3045-BS	75-09-2	Methylene chloride	BSP	REC	98	%	70-130
MSM3045-BS	91-20-3	Naphthalene	BSP	REC	91	%	70-130
MSM3045-BS	103-65-1	n-Propylbenzene	BSP	REC	102	%	70-130
MSM3045-BS	100-42-5	Styrene	BSP	REC	101	%	70-130
MSM3045-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	103	%	70-130
MSM3045-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	88	%	70-130
MSM3045-BS	127-18-4	Tetrachloroethene	BSP	REC	101	%	70-130
MSM3045-BS	109-99-9	Tetrahydrofuran	BSP	REC	91	%	70-130
MSM3045-BS	108-88-3	Toluene	BSP	REC	101	%	70-130
MSM3045-BS	110-57-6	Trans-1,4-Dichloro-2-Butene	BSP	REC	98	%	70-130
MSM3045-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	100	%	70-130
MSM3045-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	101	%	70-130
MSM3045-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	113	%	70-130
MSM3045-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	95	%	70-130
MSM3045-BS	79-01-6	Trichloroethene	BSP	REC	102	%	70-130
MSM3045-BS	75-69-4	Trichlorofluoromethane	BSP	REC	110	%	70-130
MSM3045-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	94	%	70-130
MSM3045-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	103	%	70-130
MSM3045-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	104	%	70-130
MSM3045-BS	75-01-4	Vinyl chloride	BSP	REC	92	%	70-130
MSM3045-BS		m,p-Xylene	BSP	REC	99	%	70-130
MSM3045-BS	95-47-6	o-Xylene	BSP	REC	100	%	70-130
MSM3045-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	100	%	70-130
MSM3045-BS	2037-26-5	Toluene-D8	BSP	SURR	101	%	70-130
MSM3045-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	100	%	70-130
MSM3045-MB	1868-53-7	Dibromofluoromethane	MB	SURR	106	%	70-130
MSM3045-MB	2037-26-5	Toluene-D8	MB	SURR	108	%	70-130
MSM3045-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	101	%	70-130
MC50728-1	1868-53-7	Dibromofluoromethane	SAMP	SURR	111	%	70-130
MC50728-1	2037-26-5	Toluene-D8	SAMP	SURR	98	%	70-130
MC50728-1	460-00-4	4-Bromofluorobenzene	SAMP	SURR	124	%	70-130
MC50728-2	1868-53-7	Dibromofluoromethane	SAMP	SURR	113	%	70-130
MC50728-2	2037-26-5	Toluene-D8	SAMP	SURR	107	%	70-130
MC50728-2	460-00-4	4-Bromofluorobenzene	SAMP	SURR	112	%	70-130
MC50728-3	1868-53-7	Dibromofluoromethane	SAMP	SURR	113	%	70-130
MC50728-3	2037-26-5	Toluene-D8	SAMP	SURR	99	%	70-130
MC50728-3	460-00-4	4-Bromofluorobenzene	SAMP	SURR	117	%	70-130
MC50728-4	1868-53-7	Dibromofluoromethane	SAMP	SURR	116	%	70-130
MC50728-4	2037-26-5	Toluene-D8	SAMP	SURR	100	%	70-130
MC50728-4	460-00-4	4-Bromofluorobenzene	SAMP	SURR	156 [a]	%	70-130
MC50728-5	1868-53-7	Dibromofluoromethane	SAMP	SURR	112	%	70-130

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC50728-5	2037-26-5	Toluene-D8	SAMP	SURR	97	%	70-130
MC50728-5	460-00-4	4-Bromofluorobenzene	SAMP	SURR	123	%	70-130
MSM3048	SW846 8260C						
MSM3048-BS	67-64-1	Acetone	BSP	REC	158	%	70-130
MSM3048-BS	107-13-1	Acrylonitrile	BSP	REC	87	%	70-130
MSM3048-BS	71-43-2	Benzene	BSP	REC	97	%	70-130
MSM3048-BS	108-86-1	Bromobenzene	BSP	REC	97	%	70-130
MSM3048-BS	75-27-4	Bromodichloromethane	BSP	REC	120	%	70-130
MSM3048-BS	75-25-2	Bromoform	BSP	REC	94	%	70-130
MSM3048-BS	74-83-9	Bromomethane	BSP	REC	109	%	70-130
MSM3048-BS	78-93-3	2-Butanone (MEK)	BSP	REC	117	%	70-130
MSM3048-BS	104-51-8	n-Butylbenzene	BSP	REC	105	%	70-130
MSM3048-BS	135-98-8	sec-Butylbenzene	BSP	REC	98	%	70-130
MSM3048-BS	98-06-6	tert-Butylbenzene	BSP	REC	104	%	70-130
MSM3048-BS	75-15-0	Carbon disulfide	BSP	REC	107	%	70-130
MSM3048-BS	56-23-5	Carbon tetrachloride	BSP	REC	140 [b]	%	70-130
MSM3048-BS	108-90-7	Chlorobenzene	BSP	REC	92	%	70-130
MSM3048-BS	75-00-3	Chloroethane	BSP	REC	105	%	70-130
MSM3048-BS	67-66-3	Chloroform	BSP	REC	116	%	70-130
MSM3048-BS	74-87-3	Chloromethane	BSP	REC	83	%	70-130
MSM3048-BS	95-49-8	o-Chlorotoluene	BSP	REC	102	%	70-130
MSM3048-BS	106-43-4	p-Chlorotoluene	BSP	REC	103	%	70-130
MSM3048-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	93	%	70-130
MSM3048-BS	124-48-1	Dibromochloromethane	BSP	REC	98	%	70-130
MSM3048-BS	106-93-4	1,2-Dibromoethane	BSP	REC	89	%	70-130
MSM3048-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	95	%	70-130
MSM3048-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	98	%	70-130
MSM3048-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	98	%	70-130
MSM3048-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	82	%	70-130
MSM3048-BS	75-34-3	1,1-Dichloroethane	BSP	REC	109	%	70-130
MSM3048-BS	107-06-2	1,2-Dichloroethane	BSP	REC	129 [b]	%	70-130
MSM3048-BS	75-35-4	1,1-Dichloroethene	BSP	REC	106	%	70-130
MSM3048-BS	156-59-2	cis-1,2-Dichloroethene	BSP	REC	101	%	70-130
MSM3048-BS	156-60-5	trans-1,2-Dichloroethene	BSP	REC	104	%	70-130
MSM3048-BS	78-87-5	1,2-Dichloropropane	BSP	REC	100	%	70-130
MSM3048-BS	142-28-9	1,3-Dichloropropane	BSP	REC	92	%	70-130
MSM3048-BS	594-20-7	2,2-Dichloropropane	BSP	REC	135	%	70-130
MSM3048-BS	563-58-6	1,1-Dichloropropene	BSP	REC	114	%	70-130
MSM3048-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	109	%	70-130
MSM3048-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	125	%	70-130
MSM3048-BS	100-41-4	Ethylbenzene	BSP	REC	95	%	70-130
MSM3048-BS	76-13-1	Freon 113	BSP	REC	121	%	70-130
MSM3048-BS	87-68-3	Hexachlorobutadiene	BSP	REC	106	%	70-130

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSM3048-BS	591-78-6	2-Hexanone	BSP	REC	97	%	70-130
MSM3048-BS	98-82-8	Isopropylbenzene	BSP	REC	95	%	70-130
MSM3048-BS	99-87-6	p-Isopropyltoluene	BSP	REC	102	%	70-130
MSM3048-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	113	%	70-130
MSM3048-BS	108-10-1	4-Methyl-2-pentanone (MIBK)	BSP	REC	92	%	70-130
MSM3048-BS	74-95-3	Methylene bromide	BSP	REC	109	%	70-130
MSM3048-BS	75-09-2	Methylene chloride	BSP	REC	100	%	70-130
MSM3048-BS	91-20-3	Naphthalene	BSP	REC	87	%	70-130
MSM3048-BS	103-65-1	n-Propylbenzene	BSP	REC	101	%	70-130
MSM3048-BS	100-42-5	Styrene	BSP	REC	97	%	70-130
MSM3048-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	97	%	70-130
MSM3048-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	81	%	70-130
MSM3048-BS	127-18-4	Tetrachloroethene	BSP	REC	94	%	70-130
MSM3048-BS	109-99-9	Tetrahydrofuran	BSP	REC	80	%	70-130
MSM3048-BS	108-88-3	Toluene	BSP	REC	104	%	70-130
MSM3048-BS	110-57-6	Trans-1,4-Dichloro-2-Butene	BSP	REC	101	%	70-130
MSM3048-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	97	%	70-130
MSM3048-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	98	%	70-130
MSM3048-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	132 [b]	%	70-130
MSM3048-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	101	%	70-130
MSM3048-BS	79-01-6	Trichloroethene	BSP	REC	107	%	70-130
MSM3048-BS	75-69-4	Trichlorofluoromethane	BSP	REC	130	%	70-130
MSM3048-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	96	%	70-130
MSM3048-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	103	%	70-130
MSM3048-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	103	%	70-130
MSM3048-BS	75-01-4	Vinyl chloride	BSP	REC	94	%	70-130
MSM3048-BS		m,p-Xylene	BSP	REC	93	%	70-130
MSM3048-BS	95-47-6	o-Xylene	BSP	REC	90	%	70-130
MSM3048-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	111	%	70-130
MSM3048-BS	2037-26-5	Toluene-D8	BSP	SURR	105	%	70-130
MSM3048-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	101	%	70-130
MSM3048-MB	1868-53-7	Dibromofluoromethane	MB	SURR	118	%	70-130
MSM3048-MB	2037-26-5	Toluene-D8	MB	SURR	100	%	70-130
MSM3048-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	100	%	70-130
MC50728-1	1868-53-7	Dibromofluoromethane	SAMP	SURR	120	%	70-130
MC50728-1	2037-26-5	Toluene-D8	SAMP	SURR	106	%	70-130
MC50728-1	460-00-4	4-Bromofluorobenzene	SAMP	SURR	134	%	70-130
MC50728-3	1868-53-7	Dibromofluoromethane	SAMP	SURR	119	%	70-130
MC50728-3	2037-26-5	Toluene-D8	SAMP	SURR	101	%	70-130
MC50728-3	460-00-4	4-Bromofluorobenzene	SAMP	SURR	128	%	70-130
MC50728-4	1868-53-7	Dibromofluoromethane	SAMP	SURR	128	%	70-130
MC50728-4	2037-26-5	Toluene-D8	SAMP	SURR	100	%	70-130
MC50728-4	460-00-4	4-Bromofluorobenzene	SAMP	SURR	137	%	70-130
MC50728-5	1868-53-7	Dibromofluoromethane	SAMP	SURR	124	%	70-130
MC50728-5	2037-26-5	Toluene-D8	SAMP	SURR	104	%	70-130

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC50728-5	460-00-4	4-Bromofluorobenzene	SAMP	SURR	132	%	70-130
MC50728-6	1868-53-7	Dibromofluoromethane	SAMP	SURR	128	%	70-130
MC50728-6	2037-26-5	Toluene-D8	SAMP	SURR	106	%	70-130
MC50728-6	460-00-4	4-Bromofluorobenzene	SAMP	SURR	104	%	70-130
MC50728-7	1868-53-7	Dibromofluoromethane	SAMP	SURR	128	%	70-130
MC50728-7	2037-26-5	Toluene-D8	SAMP	SURR	103	%	70-130
MC50728-7	460-00-4	4-Bromofluorobenzene	SAMP	SURR	97	%	70-130
MC50728-9	1868-53-7	Dibromofluoromethane	SAMP	SURR	131	%	70-130
MC50728-9	2037-26-5	Toluene-D8	SAMP	SURR	105	%	70-130
MC50728-9	460-00-4	4-Bromofluorobenzene	SAMP	SURR	107	%	70-130
MC50728-10	1868-53-7	Dibromofluoromethane	SAMP	SURR	131	%	70-130
MC50728-10	2037-26-5	Toluene-D8	SAMP	SURR	104	%	70-130
MC50728-10	460-00-4	4-Bromofluorobenzene	SAMP	SURR	100	%	70-130
MC50728-12	1868-53-7	Dibromofluoromethane	SAMP	SURR	136	%	70-130
MC50728-12	2037-26-5	Toluene-D8	SAMP	SURR	103	%	70-130
MC50728-12	460-00-4	4-Bromofluorobenzene	SAMP	SURR	107	%	70-130
MC50728-16	1868-53-7	Dibromofluoromethane	SAMP	SURR	145 [c]	%	70-130
MC50728-16	2037-26-5	Toluene-D8	SAMP	SURR	101	%	70-130
MC50728-16	460-00-4	4-Bromofluorobenzene	SAMP	SURR	120	%	70-130
MC50728-17	1868-53-7	Dibromofluoromethane	SAMP	SURR	122	%	70-130
MC50728-17	2037-26-5	Toluene-D8	SAMP	SURR	103	%	70-130
MC50728-17	460-00-4	4-Bromofluorobenzene	SAMP	SURR	99	%	70-130
MSM3049	SW846 8260C						
MSM3049-BS	67-64-1	Acetone	BSP	REC	158	%	70-130
MSM3049-BS	107-13-1	Acrylonitrile	BSP	REC	88	%	70-130
MSM3049-BS	71-43-2	Benzene	BSP	REC	98	%	70-130
MSM3049-BS	108-86-1	Bromobenzene	BSP	REC	98	%	70-130
MSM3049-BS	75-27-4	Bromodichloromethane	BSP	REC	123 [b]	%	70-130
MSM3049-BS	75-25-2	Bromoform	BSP	REC	103	%	70-130
MSM3049-BS	74-83-9	Bromomethane	BSP	REC	118	%	70-130
MSM3049-BS	78-93-3	2-Butanone (MEK)	BSP	REC	123	%	70-130
MSM3049-BS	104-51-8	n-Butylbenzene	BSP	REC	112	%	70-130
MSM3049-BS	135-98-8	sec-Butylbenzene	BSP	REC	107	%	70-130
MSM3049-BS	98-06-6	tert-Butylbenzene	BSP	REC	117	%	70-130
MSM3049-BS	75-15-0	Carbon disulfide	BSP	REC	111	%	70-130
MSM3049-BS	56-23-5	Carbon tetrachloride	BSP	REC	151 [b]	%	70-130
MSM3049-BS	108-90-7	Chlorobenzene	BSP	REC	97	%	70-130
MSM3049-BS	75-00-3	Chloroethane	BSP	REC	113	%	70-130
MSM3049-BS	67-66-3	Chloroform	BSP	REC	121	%	70-130
MSM3049-BS	74-87-3	Chloromethane	BSP	REC	82	%	70-130
MSM3049-BS	95-49-8	o-Chlorotoluene	BSP	REC	108	%	70-130
MSM3049-BS	106-43-4	p-Chlorotoluene	BSP	REC	104	%	70-130
MSM3049-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	110	%	70-130

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSM3049-BS	124-48-1	Dibromochloromethane	BSP	REC	105	%	70-130
MSM3049-BS	106-93-4	1,2-Dibromoethane	BSP	REC	91	%	70-130
MSM3049-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	103	%	70-130
MSM3049-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	106	%	70-130
MSM3049-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	105	%	70-130
MSM3049-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	75	%	70-130
MSM3049-BS	75-34-3	1,1-Dichloroethane	BSP	REC	109	%	70-130
MSM3049-BS	107-06-2	1,2-Dichloroethane	BSP	REC	134 [b]	%	70-130
MSM3049-BS	75-35-4	1,1-Dichloroethene	BSP	REC	110	%	70-130
MSM3049-BS	156-59-2	cis-1,2-Dichloroethene	BSP	REC	101	%	70-130
MSM3049-BS	156-60-5	trans-1,2-Dichloroethene	BSP	REC	104	%	70-130
MSM3049-BS	78-87-5	1,2-Dichloropropane	BSP	REC	98	%	70-130
MSM3049-BS	142-28-9	1,3-Dichloropropane	BSP	REC	94	%	70-130
MSM3049-BS	594-20-7	2,2-Dichloropropane	BSP	REC	145	%	70-130
MSM3049-BS	563-58-6	1,1-Dichloropropene	BSP	REC	115	%	70-130
MSM3049-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	103	%	70-130
MSM3049-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	114	%	70-130
MSM3049-BS	100-41-4	Ethylbenzene	BSP	REC	101	%	70-130
MSM3049-BS	76-13-1	Freon 113	BSP	REC	129	%	70-130
MSM3049-BS	87-68-3	Hexachlorobutadiene	BSP	REC	120	%	70-130
MSM3049-BS	591-78-6	2-Hexanone	BSP	REC	99	%	70-130
MSM3049-BS	98-82-8	Isopropylbenzene	BSP	REC	102	%	70-130
MSM3049-BS	99-87-6	p-Isopropyltoluene	BSP	REC	111	%	70-130
MSM3049-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	116	%	70-130
MSM3049-BS	108-10-1	4-Methyl-2-pentanone (MIBK)	BSP	REC	91	%	70-130
MSM3049-BS	74-95-3	Methylene bromide	BSP	REC	112	%	70-130
MSM3049-BS	75-09-2	Methylene chloride	BSP	REC	103	%	70-130
MSM3049-BS	91-20-3	Naphthalene	BSP	REC	100	%	70-130
MSM3049-BS	103-65-1	n-Propylbenzene	BSP	REC	105	%	70-130
MSM3049-BS	100-42-5	Styrene	BSP	REC	99	%	70-130
MSM3049-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	116	%	70-130
MSM3049-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	88	%	70-130
MSM3049-BS	127-18-4	Tetrachloroethene	BSP	REC	101	%	70-130
MSM3049-BS	109-99-9	Tetrahydrofuran	BSP	REC	78	%	70-130
MSM3049-BS	108-88-3	Toluene	BSP	REC	99	%	70-130
MSM3049-BS	110-57-6	Trans-1,4-Dichloro-2-Butene	BSP	REC	113	%	70-130
MSM3049-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	113	%	70-130
MSM3049-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	112	%	70-130
MSM3049-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	140 [b]	%	70-130
MSM3049-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	95	%	70-130
MSM3049-BS	79-01-6	Trichloroethene	BSP	REC	109	%	70-130
MSM3049-BS	75-69-4	Trichlorofluoromethane	BSP	REC	141	%	70-130
MSM3049-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	101	%	70-130
MSM3049-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	111	%	70-130
MSM3049-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	111	%	70-130

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSM3049-BS	75-01-4	Vinyl chloride	BSP	REC	95	%	70-130
MSM3049-BS		m,p-Xylene	BSP	REC	99	%	70-130
MSM3049-BS	95-47-6	o-Xylene	BSP	REC	98	%	70-130
MSM3049-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	111	%	70-130
MSM3049-BS	2037-26-5	Toluene-D8	BSP	SURR	98	%	70-130
MSM3049-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	94	%	70-130
MSM3049-MB	1868-53-7	Dibromofluoromethane	MB	SURR	128	%	70-130
MSM3049-MB	2037-26-5	Toluene-D8	MB	SURR	101	%	70-130
MSM3049-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	99	%	70-130
MC50728-8	1868-53-7	Dibromofluoromethane	SAMP	SURR	126	%	70-130
MC50728-8	2037-26-5	Toluene-D8	SAMP	SURR	101	%	70-130
MC50728-8	460-00-4	4-Bromofluorobenzene	SAMP	SURR	107	%	70-130
MC50728-9	1868-53-7	Dibromofluoromethane	SAMP	SURR	130	%	70-130
MC50728-9	2037-26-5	Toluene-D8	SAMP	SURR	101	%	70-130
MC50728-9	460-00-4	4-Bromofluorobenzene	SAMP	SURR	121	%	70-130
MC50728-11	1868-53-7	Dibromofluoromethane	SAMP	SURR	131	%	70-130
MC50728-11	2037-26-5	Toluene-D8	SAMP	SURR	104	%	70-130
MC50728-11	460-00-4	4-Bromofluorobenzene	SAMP	SURR	97	%	70-130
MC50728-12	1868-53-7	Dibromofluoromethane	SAMP	SURR	138	%	70-130
MC50728-12	2037-26-5	Toluene-D8	SAMP	SURR	103	%	70-130
MC50728-12	460-00-4	4-Bromofluorobenzene	SAMP	SURR	113	%	70-130
MC50728-13	1868-53-7	Dibromofluoromethane	SAMP	SURR	136	%	70-130
MC50728-13	2037-26-5	Toluene-D8	SAMP	SURR	102	%	70-130
MC50728-13	460-00-4	4-Bromofluorobenzene	SAMP	SURR	109	%	70-130
MC50728-14	1868-53-7	Dibromofluoromethane	SAMP	SURR	134	%	70-130
MC50728-14	2037-26-5	Toluene-D8	SAMP	SURR	106	%	70-130
MC50728-14	460-00-4	4-Bromofluorobenzene	SAMP	SURR	101	%	70-130
MC50728-15	1868-53-7	Dibromofluoromethane	SAMP	SURR	131	%	70-130
MC50728-15	2037-26-5	Toluene-D8	SAMP	SURR	102	%	70-130
MC50728-15	460-00-4	4-Bromofluorobenzene	SAMP	SURR	101	%	70-130
MC50728-16	1868-53-7	Dibromofluoromethane	SAMP	SURR	141	%	70-130
MC50728-16	2037-26-5	Toluene-D8	SAMP	SURR	102	%	70-130
MC50728-16	460-00-4	4-Bromofluorobenzene	SAMP	SURR	107	%	70-130
OP49803	SW846 8270D						
OP49803-BS	95-57-8	2-Chlorophenol	BSP	REC	92	%	30-130
OP49803-BS	59-50-7	4-Chloro-3-methyl phenol	BSP	REC	88	%	30-130
OP49803-BS	120-83-2	2,4-Dichlorophenol	BSP	REC	87	%	30-130
OP49803-BS	105-67-9	2,4-Dimethylphenol	BSP	REC	85	%	30-130
OP49803-BS	51-28-5	2,4-Dinitrophenol	BSP	REC	74	%	30-130
OP49803-BS	534-52-1	4,6-Dinitro-o-cresol	BSP	REC	94	%	30-130
OP49803-BS	95-48-7	2-Methylphenol	BSP	REC	94	%	30-130
OP49803-BS	106-44-5	4-Methylphenol	BSP	REC	91	%	30-130
OP49803-BS	88-75-5	2-Nitrophenol	BSP	REC	97	%	30-130

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP49803-BS	100-02-7	4-Nitrophenol	BSP	REC	102	%	30-130
OP49803-BS	87-86-5	Pentachlorophenol	BSP	REC	64	%	30-130
OP49803-BS	108-95-2	Phenol	BSP	REC	104	%	30-130
OP49803-BS	95-95-4	2,4,5-Trichlorophenol	BSP	REC	88	%	30-130
OP49803-BS	88-06-2	2,4,6-Trichlorophenol	BSP	REC	91	%	30-130
OP49803-BS	83-32-9	Acenaphthene	BSP	REC	98	%	40-140
OP49803-BS	208-96-8	Acenaphthylene	BSP	REC	98	%	40-140
OP49803-BS	62-53-3	Aniline	BSP	REC	56	%	40-140
OP49803-BS	120-12-7	Anthracene	BSP	REC	99	%	40-140
OP49803-BS	56-55-3	Benzo(a)anthracene	BSP	REC	107	%	40-140
OP49803-BS	50-32-8	Benzo(a)pyrene	BSP	REC	116	%	40-140
OP49803-BS	205-99-2	Benzo(b)fluoranthene	BSP	REC	114	%	40-140
OP49803-BS	191-24-2	Benzo(g,h,i)perylene	BSP	REC	118	%	40-140
OP49803-BS	207-08-9	Benzo(k)fluoranthene	BSP	REC	111	%	40-140
OP49803-BS	101-55-3	4-Bromophenyl phenyl ether	BSP	REC	99	%	40-140
OP49803-BS	85-68-7	Butyl benzyl phthalate	BSP	REC	130 [b]	%	40-140
OP49803-BS	91-58-7	2-Chloronaphthalene	BSP	REC	101	%	40-140
OP49803-BS	106-47-8	4-Chloroaniline	BSP	REC	60	%	40-140
OP49803-BS	86-74-8	Carbazole	BSP	REC	102	%	40-140
OP49803-BS	218-01-9	Chrysene	BSP	REC	102	%	40-140
OP49803-BS	111-91-1	bis(2-Chloroethoxy)methane	BSP	REC	107 [b]	%	40-140
OP49803-BS	111-44-4	bis(2-Chloroethyl)ether	BSP	REC	115 [b]	%	40-140
OP49803-BS	108-60-1	bis(2-Chloroisopropyl)ether	BSP	REC	137 [b]	%	40-140
OP49803-BS	7005-72-3	4-Chlorophenyl phenyl ether	BSP	REC	96	%	40-140
OP49803-BS	121-14-2	2,4-Dinitrotoluene	BSP	REC	111	%	40-140
OP49803-BS	606-20-2	2,6-Dinitrotoluene	BSP	REC	107	%	40-140
OP49803-BS	91-94-1	3,3'-Dichlorobenzidine	BSP	REC	72	%	40-140
OP49803-BS	53-70-3	Dibenzo(a,h)anthracene	BSP	REC	118	%	40-140
OP49803-BS	132-64-9	Dibenzofuran	BSP	REC	94	%	40-140
OP49803-BS	84-74-2	Di-n-butyl phthalate	BSP	REC	108	%	40-140
OP49803-BS	117-84-0	Di-n-octyl phthalate	BSP	REC	132 [b]	%	40-140
OP49803-BS	84-66-2	Diethyl phthalate	BSP	REC	102	%	40-140
OP49803-BS	131-11-3	Dimethyl phthalate	BSP	REC	103	%	40-140
OP49803-BS	117-81-7	bis(2-Ethylhexyl)phthalate	BSP	REC	138 [b]	%	40-140
OP49803-BS	206-44-0	Fluoranthene	BSP	REC	105	%	40-140
OP49803-BS	86-73-7	Fluorene	BSP	REC	102	%	40-140
OP49803-BS	118-74-1	Hexachlorobenzene	BSP	REC	94	%	40-140
OP49803-BS	87-68-3	Hexachlorobutadiene	BSP	REC	87	%	40-140
OP49803-BS	77-47-4	Hexachlorocyclopentadiene	BSP	REC	62	%	40-140
OP49803-BS	67-72-1	Hexachloroethane	BSP	REC	95	%	40-140
OP49803-BS	193-39-5	Indeno(1,2,3-cd)pyrene	BSP	REC	121 [d]	%	40-140
OP49803-BS	78-59-1	Isophorone	BSP	REC	107 [b]	%	40-140
OP49803-BS	91-57-6	2-Methylnaphthalene	BSP	REC	92	%	40-140
OP49803-BS	88-74-4	2-Nitroaniline	BSP	REC	114	%	40-140
OP49803-BS	99-09-2	3-Nitroaniline	BSP	REC	78	%	40-140

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP49803-BS	100-01-6	4-Nitroaniline	BSP	REC	100	%	40-140
OP49803-BS	91-20-3	Naphthalene	BSP	REC	102	%	40-140
OP49803-BS	98-95-3	Nitrobenzene	BSP	REC	104	%	40-140
OP49803-BS	621-64-7	N-Nitroso-di-n-propylamine	BSP	REC	118 [b]	%	40-140
OP49803-BS	86-30-6	N-Nitrosodiphenylamine	BSP	REC	102	%	40-140
OP49803-BS	82-68-8	Pentachloronitrobenzene	BSP	REC	90	%	40-140
OP49803-BS	85-01-8	Phenanthrene	BSP	REC	102	%	40-140
OP49803-BS	129-00-0	Pyrene	BSP	REC	111	%	40-140
OP49803-BS	110-86-1	Pyridine	BSP	REC	81	%	40-140
OP49803-BS	95-94-3	1,2,4,5-Tetrachlorobenzene	BSP	REC	82	%	40-140
OP49803-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	94	%	40-140
OP49803-BS	367-12-4	2-Fluorophenol	BSP	SURR	101	%	30-130
OP49803-BS	4165-62-2	Phenol-d5	BSP	SURR	103	%	30-130
OP49803-BS	118-79-6	2,4,6-Tribromophenol	BSP	SURR	86	%	30-130
OP49803-BS	4165-60-0	Nitrobenzene-d5	BSP	SURR	92	%	30-130
OP49803-BS	321-60-8	2-Fluorobiphenyl	BSP	SURR	85	%	30-130
OP49803-BS	1718-51-0	Terphenyl-d14	BSP	SURR	92	%	30-130
OP49803-MB	367-12-4	2-Fluorophenol	MB	SURR	92	%	30-130
OP49803-MB	4165-62-2	Phenol-d5	MB	SURR	93	%	30-130
OP49803-MB	118-79-6	2,4,6-Tribromophenol	MB	SURR	74	%	30-130
OP49803-MB	4165-60-0	Nitrobenzene-d5	MB	SURR	83	%	30-130
OP49803-MB	321-60-8	2-Fluorobiphenyl	MB	SURR	76	%	30-130
OP49803-MB	1718-51-0	Terphenyl-d14	MB	SURR	85	%	30-130
MC50728-1	367-12-4	2-Fluorophenol	SAMP	SURR	85	%	30-130
MC50728-1	4165-62-2	Phenol-d5	SAMP	SURR	89	%	30-130
MC50728-1	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	80	%	30-130
MC50728-1	4165-60-0	Nitrobenzene-d5	SAMP	SURR	79	%	30-130
MC50728-1	321-60-8	2-Fluorobiphenyl	SAMP	SURR	76	%	30-130
MC50728-1	1718-51-0	Terphenyl-d14	SAMP	SURR	89	%	30-130
MC50728-2	367-12-4	2-Fluorophenol	SAMP	SURR	91	%	30-130
MC50728-2	4165-62-2	Phenol-d5	SAMP	SURR	93	%	30-130
MC50728-2	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	82	%	30-130
MC50728-2	4165-60-0	Nitrobenzene-d5	SAMP	SURR	82	%	30-130
MC50728-2	321-60-8	2-Fluorobiphenyl	SAMP	SURR	80	%	30-130
MC50728-2	1718-51-0	Terphenyl-d14	SAMP	SURR	91	%	30-130
MC50728-3	367-12-4	2-Fluorophenol	SAMP	SURR	78	%	30-130
MC50728-3	4165-62-2	Phenol-d5	SAMP	SURR	80	%	30-130
MC50728-3	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	68	%	30-130
MC50728-3	4165-60-0	Nitrobenzene-d5	SAMP	SURR	72	%	30-130
MC50728-3	321-60-8	2-Fluorobiphenyl	SAMP	SURR	68	%	30-130
MC50728-3	1718-51-0	Terphenyl-d14	SAMP	SURR	73	%	30-130
MC50728-4	367-12-4	2-Fluorophenol	SAMP	SURR	73	%	30-130
MC50728-4	367-12-4	2-Fluorophenol	SAMP	SURR	67	%	30-130
MC50728-4	4165-62-2	Phenol-d5	SAMP	SURR	67	%	30-130
MC50728-4	4165-62-2	Phenol-d5	SAMP	SURR	74	%	30-130

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC50728-4	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	74	%	30-130
MC50728-4	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	71	%	30-130
MC50728-4	4165-60-0	Nitrobenzene-d5	SAMP	SURR	68	%	30-130
MC50728-4	4165-60-0	Nitrobenzene-d5	SAMP	SURR	64	%	30-130
MC50728-4	321-60-8	2-Fluorobiphenyl	SAMP	SURR	69	%	30-130
MC50728-4	321-60-8	2-Fluorobiphenyl	SAMP	SURR	71	%	30-130
MC50728-4	1718-51-0	Terphenyl-d14	SAMP	SURR	82	%	30-130
MC50728-4	1718-51-0	Terphenyl-d14	SAMP	SURR	77	%	30-130
MC50728-5	367-12-4	2-Fluorophenol	SAMP	SURR	92	%	30-130
MC50728-5	4165-62-2	Phenol-d5	SAMP	SURR	94	%	30-130
MC50728-5	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	83	%	30-130
MC50728-5	4165-60-0	Nitrobenzene-d5	SAMP	SURR	84	%	30-130
MC50728-5	321-60-8	2-Fluorobiphenyl	SAMP	SURR	79	%	30-130
MC50728-5	1718-51-0	Terphenyl-d14	SAMP	SURR	92	%	30-130
MC50728-6	367-12-4	2-Fluorophenol	SAMP	SURR	91	%	30-130
MC50728-6	4165-62-2	Phenol-d5	SAMP	SURR	92	%	30-130
MC50728-6	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	79	%	30-130
MC50728-6	4165-60-0	Nitrobenzene-d5	SAMP	SURR	85	%	30-130
MC50728-6	321-60-8	2-Fluorobiphenyl	SAMP	SURR	80	%	30-130
MC50728-6	1718-51-0	Terphenyl-d14	SAMP	SURR	91	%	30-130
MC50728-7	367-12-4	2-Fluorophenol	SAMP	SURR	97	%	30-130
MC50728-7	4165-62-2	Phenol-d5	SAMP	SURR	98	%	30-130
MC50728-7	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	83	%	30-130
MC50728-7	4165-60-0	Nitrobenzene-d5	SAMP	SURR	88	%	30-130
MC50728-7	321-60-8	2-Fluorobiphenyl	SAMP	SURR	83	%	30-130
MC50728-7	1718-51-0	Terphenyl-d14	SAMP	SURR	96	%	30-130
MC50728-8	367-12-4	2-Fluorophenol	SAMP	SURR	102	%	30-130
MC50728-8	4165-62-2	Phenol-d5	SAMP	SURR	103	%	30-130
MC50728-8	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	87	%	30-130
MC50728-8	4165-60-0	Nitrobenzene-d5	SAMP	SURR	93	%	30-130
MC50728-8	321-60-8	2-Fluorobiphenyl	SAMP	SURR	87	%	30-130
MC50728-8	1718-51-0	Terphenyl-d14	SAMP	SURR	99	%	30-130
MC50728-9	367-12-4	2-Fluorophenol	SAMP	SURR	92	%	30-130
MC50728-9	4165-62-2	Phenol-d5	SAMP	SURR	93	%	30-130
MC50728-9	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	83	%	30-130
MC50728-9	4165-60-0	Nitrobenzene-d5	SAMP	SURR	82	%	30-130
MC50728-9	321-60-8	2-Fluorobiphenyl	SAMP	SURR	80	%	30-130
MC50728-9	1718-51-0	Terphenyl-d14	SAMP	SURR	91	%	30-130
MC50728-10	367-12-4	2-Fluorophenol	SAMP	SURR	93	%	30-130
MC50728-10	4165-62-2	Phenol-d5	SAMP	SURR	94	%	30-130
MC50728-10	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	86	%	30-130
MC50728-10	4165-60-0	Nitrobenzene-d5	SAMP	SURR	85	%	30-130
MC50728-10	321-60-8	2-Fluorobiphenyl	SAMP	SURR	82	%	30-130
MC50728-10	1718-51-0	Terphenyl-d14	SAMP	SURR	91	%	30-130
MC50728-11	367-12-4	2-Fluorophenol	SAMP	SURR	97	%	30-130

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC50728-11	4165-62-2	Phenol-d5	SAMP	SURR	97	%	30-130
MC50728-11	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	80	%	30-130
MC50728-11	4165-60-0	Nitrobenzene-d5	SAMP	SURR	88	%	30-130
MC50728-11	321-60-8	2-Fluorobiphenyl	SAMP	SURR	81	%	30-130
MC50728-11	1718-51-0	Terphenyl-d14	SAMP	SURR	93	%	30-130
MC50728-12	367-12-4	2-Fluorophenol	SAMP	SURR	92	%	30-130
MC50728-12	4165-62-2	Phenol-d5	SAMP	SURR	94	%	30-130
MC50728-12	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	79	%	30-130
MC50728-12	4165-60-0	Nitrobenzene-d5	SAMP	SURR	83	%	30-130
MC50728-12	321-60-8	2-Fluorobiphenyl	SAMP	SURR	80	%	30-130
MC50728-12	1718-51-0	Terphenyl-d14	SAMP	SURR	87	%	30-130
MC50728-13	367-12-4	2-Fluorophenol	SAMP	SURR	91	%	30-130
MC50728-13	4165-62-2	Phenol-d5	SAMP	SURR	95	%	30-130
MC50728-13	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	80	%	30-130
MC50728-13	4165-60-0	Nitrobenzene-d5	SAMP	SURR	82	%	30-130
MC50728-13	321-60-8	2-Fluorobiphenyl	SAMP	SURR	82	%	30-130
MC50728-13	1718-51-0	Terphenyl-d14	SAMP	SURR	88	%	30-130
MC50728-14	367-12-4	2-Fluorophenol	SAMP	SURR	86	%	30-130
MC50728-14	4165-62-2	Phenol-d5	SAMP	SURR	87	%	30-130
MC50728-14	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	79	%	30-130
MC50728-14	4165-60-0	Nitrobenzene-d5	SAMP	SURR	80	%	30-130
MC50728-14	321-60-8	2-Fluorobiphenyl	SAMP	SURR	78	%	30-130
MC50728-14	1718-51-0	Terphenyl-d14	SAMP	SURR	86	%	30-130
MC50728-15	367-12-4	2-Fluorophenol	SAMP	SURR	91	%	30-130
MC50728-15	4165-62-2	Phenol-d5	SAMP	SURR	95	%	30-130
MC50728-15	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	83	%	30-130
MC50728-15	4165-60-0	Nitrobenzene-d5	SAMP	SURR	83	%	30-130
MC50728-15	321-60-8	2-Fluorobiphenyl	SAMP	SURR	83	%	30-130
MC50728-15	1718-51-0	Terphenyl-d14	SAMP	SURR	91	%	30-130
MC50728-16	367-12-4	2-Fluorophenol	SAMP	SURR	88	%	30-130
MC50728-16	4165-62-2	Phenol-d5	SAMP	SURR	92	%	30-130
MC50728-16	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	83	%	30-130
MC50728-16	4165-60-0	Nitrobenzene-d5	SAMP	SURR	80	%	30-130
MC50728-16	321-60-8	2-Fluorobiphenyl	SAMP	SURR	78	%	30-130
MC50728-16	1718-51-0	Terphenyl-d14	SAMP	SURR	89	%	30-130
OP49805	SW846 8082A						
OP49805-BS	12674-11-2	Aroclor 1016	BSP	REC	80	%	40-140
OP49805-BS	11096-82-5	Aroclor 1260	BSP	REC	73	%	40-140
OP49805-BS	877-09-8	Tetrachloro-m-xylene (sig#1)	BSP	SURR	97	%	30-150
OP49805-BS	877-09-8	Tetrachloro-m-xylene (sig#2)	BSP	SURR	92	%	30-150
OP49805-BS	2051-24-3	Decachlorobiphenyl (sig#1)	BSP	SURR	76	%	30-150
OP49805-BS	2051-24-3	Decachlorobiphenyl (sig#2)	BSP	SURR	52	%	30-150
OP49805-MB	877-09-8	Tetrachloro-m-xylene (sig#1)	MB	SURR	67	%	30-150

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP49805-MB	877-09-8	Tetrachloro-m-xylene (sig#2)	MB	SURR	95	%	30-150
OP49805-MB	2051-24-3	Decachlorobiphenyl (sig#1)	MB	SURR	74	%	30-150
OP49805-MB	2051-24-3	Decachlorobiphenyl (sig#2)	MB	SURR	44	%	30-150
MC50728-1	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	92	%	30-150
MC50728-1	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	79	%	30-150
MC50728-1	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	93	%	30-150
MC50728-1	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	68	%	30-150
MC50728-2	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	73	%	30-150
MC50728-2	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	69	%	30-150
MC50728-2	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	65	%	30-150
MC50728-2	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	52	%	30-150
MC50728-3	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	85	%	30-150
MC50728-3	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	78	%	30-150
MC50728-3	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	82	%	30-150
MC50728-3	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	61	%	30-150
MC50728-4	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	87	%	30-150
MC50728-4	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	59	%	30-150
MC50728-4	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	99	%	30-150
MC50728-4	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	68	%	30-150
MC50728-5	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	78	%	30-150
MC50728-5	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	75	%	30-150
MC50728-5	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	83	%	30-150
MC50728-5	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	64	%	30-150
MC50728-6	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	98	%	30-150
MC50728-6	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	98	%	30-150
MC50728-6	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	86	%	30-150
MC50728-6	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	71	%	30-150
MC50728-7	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	96	%	30-150
MC50728-7	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	98	%	30-150
MC50728-7	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	76	%	30-150
MC50728-7	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	67	%	30-150
MC50728-8	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	97	%	30-150
MC50728-8	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	99	%	30-150
MC50728-8	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	83	%	30-150
MC50728-8	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	74	%	30-150
MC50728-9	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	90	%	30-150
MC50728-9	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	95	%	30-150
MC50728-9	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	82	%	30-150
MC50728-9	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	74	%	30-150
MC50728-10	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	105	%	30-150
MC50728-10	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	100	%	30-150
MC50728-10	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	100	%	30-150
MC50728-10	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	72	%	30-150
MC50728-11	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	103	%	30-150
MC50728-11	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	102	%	30-150

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC50728-11	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	104	%	30-150
MC50728-11	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	95	%	30-150
MC50728-12	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	88	%	30-150
MC50728-12	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	85	%	30-150
MC50728-12	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	90	%	30-150
MC50728-12	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	79	%	30-150
MC50728-13	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	94	%	30-150
MC50728-13	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	90	%	30-150
MC50728-13	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	101	%	30-150
MC50728-13	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	78	%	30-150
MC50728-14	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	89	%	30-150
MC50728-14	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	85	%	30-150
MC50728-14	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	99	%	30-150
MC50728-14	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	81	%	30-150
MC50728-15	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	92	%	30-150
MC50728-15	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	89	%	30-150
MC50728-15	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	100	%	30-150
MC50728-15	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	77	%	30-150
MC50728-16	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	76	%	30-150
MC50728-16	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	74	%	30-150
MC50728-16	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	67	%	30-150
MC50728-16	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	52	%	30-150
OP49806	SW846 8081B						
OP49806-BS	15972-60-8	Alachlor	BSP	REC	108	%	40-140
OP49806-BS	309-00-2	Aldrin	BSP	REC	94	%	40-140
OP49806-BS	319-84-6	alpha-BHC	BSP	REC	100	%	40-140
OP49806-BS	319-85-7	beta-BHC	BSP	REC	92	%	40-140
OP49806-BS	319-86-8	delta-BHC	BSP	REC	65	%	40-140
OP49806-BS	58-89-9	gamma-BHC (Lindane)	BSP	REC	93	%	40-140
OP49806-BS	60-57-1	Dieldrin	BSP	REC	131	%	40-140
OP49806-BS	72-54-8	4,4'-DDD	BSP	REC	109	%	40-140
OP49806-BS	72-55-9	4,4'-DDE	BSP	REC	94	%	40-140
OP49806-BS	50-29-3	4,4'-DDT	BSP	REC	108	%	40-140
OP49806-BS	72-20-8	Endrin	BSP	REC	112	%	40-140
OP49806-BS	1031-07-8	Endosulfan sulfate	BSP	REC	112	%	40-140
OP49806-BS	7421-93-4	Endrin aldehyde	BSP	REC	87	%	40-140
OP49806-BS	959-98-8	Endosulfan-I	BSP	REC	109	%	40-140
OP49806-BS	33213-65-9	Endosulfan-II	BSP	REC	111	%	40-140
OP49806-BS	76-44-8	Heptachlor	BSP	REC	98	%	40-140
OP49806-BS	1024-57-3	Heptachlor epoxide	BSP	REC	102	%	40-140
OP49806-BS	72-43-5	Methoxychlor	BSP	REC	104	%	40-140
OP49806-BS	53494-70-5	Endrin ketone	BSP	REC	119	%	40-140
OP49806-BS	877-09-8	Tetrachloro-m-xylene (sig#1)	BSP	SURR	102	%	30-150

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP49806-BS	877-09-8	Tetrachloro-m-xylene (sig#2)	BSP	SURR	81	%	30-150
OP49806-BS	2051-24-3	Decachlorobiphenyl (sig#1)	BSP	SURR	131	%	30-150
OP49806-BS	2051-24-3	Decachlorobiphenyl (sig#2)	BSP	SURR	111	%	30-150
OP49806-MB	877-09-8	Tetrachloro-m-xylene (sig#1)	MB	SURR	111	%	30-150
OP49806-MB	877-09-8	Tetrachloro-m-xylene (sig#2)	MB	SURR	90	%	30-150
OP49806-MB	2051-24-3	Decachlorobiphenyl (sig#1)	MB	SURR	154	%	30-150
OP49806-MB	2051-24-3	Decachlorobiphenyl (sig#2)	MB	SURR	128	%	30-150
MC50728-1	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	86	%	30-150
MC50728-1	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	76	%	30-150
MC50728-1	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	122	%	30-150
MC50728-1	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	212 [a]	%	30-150
MC50728-2	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	81	%	30-150
MC50728-2	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	66	%	30-150
MC50728-2	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	147	%	30-150
MC50728-2	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	350 [a]	%	30-150
MC50728-3	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	91	%	30-150
MC50728-3	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	77	%	30-150
MC50728-3	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	102	%	30-150
MC50728-3	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	144	%	30-150
MC50728-4	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	88	%	30-150
MC50728-4	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	122	%	30-150
MC50728-4	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	98	%	30-150
MC50728-4	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	81	%	30-150
MC50728-4	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	498 [e]	%	30-150
MC50728-4	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	846 [e]	%	30-150
MC50728-4	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	2594 [e]	%	30-150
MC50728-4	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	2189 [e]	%	30-150
MC50728-5	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	88	%	30-150
MC50728-5	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	74	%	30-150
MC50728-5	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	176 [a]	%	30-150
MC50728-5	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	157	%	30-150
MC50728-6	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	103	%	30-150
MC50728-6	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	86	%	30-150
MC50728-6	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	120	%	30-150
MC50728-6	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	110	%	30-150
MC50728-7	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	92	%	30-150
MC50728-7	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	73	%	30-150
MC50728-7	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	106	%	30-150
MC50728-7	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	93	%	30-150
MC50728-8	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	94	%	30-150
MC50728-8	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	75	%	30-150
MC50728-8	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	115	%	30-150
MC50728-8	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	96	%	30-150
MC50728-9	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	89	%	30-150
MC50728-9	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	72	%	30-150

* Sample used for QC is not from job MC50728

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC50728-9	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	120	%	30-150
MC50728-9	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	103	%	30-150
MC50728-10	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	86	%	30-150
MC50728-10	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	71	%	30-150
MC50728-10	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	54	%	30-150
MC50728-10	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	76	%	30-150
MC50728-11	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	106	%	30-150
MC50728-11	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	86	%	30-150
MC50728-11	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	135	%	30-150
MC50728-11	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	115	%	30-150
MC50728-12	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	86	%	30-150
MC50728-12	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	70	%	30-150
MC50728-12	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	124	%	30-150
MC50728-12	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	121	%	30-150
MC50728-13	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	90	%	30-150
MC50728-13	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	76	%	30-150
MC50728-13	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	83	%	30-150
MC50728-13	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	93	%	30-150
MC50728-14	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	91	%	30-150
MC50728-14	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	72	%	30-150
MC50728-14	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	55	%	30-150
MC50728-14	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	84	%	30-150
MC50728-15	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	98	%	30-150
MC50728-15	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	75	%	30-150
MC50728-15	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	64	%	30-150
MC50728-15	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	83	%	30-150
MC50728-16	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	82	%	30-150
MC50728-16	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	62	%	30-150
MC50728-16	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	64	%	30-150
MC50728-16	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	90	%	30-150

(a) Outside control limits due to possible matrix interference.
(b) Outside control limits. Associated samples are non-detect for this compound.
(c) Outside control limits due to possible matrix interference. Confirmed by reanalysis.
(d) Outside control limits. Blank Spike meets program technical requirements.
(e) Outside control limits due to matrix interference. Confirmed by reanalysis.

* Sample used for QC is not from job MC50728

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3045-MB	M84425.D	1	06/27/17	DRY	n/a	n/a	MSM3045

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-1, MC50728-2, MC50728-3, MC50728-5

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	20	ug/kg	
107-13-1	Acrylonitrile	ND	25	ug/kg	
71-43-2	Benzene	ND	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	ug/kg	
75-25-2	Bromoform	ND	2.0	ug/kg	
74-83-9	Bromomethane	ND	10	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	ug/kg	
75-00-3	Chloroethane	ND	10	ug/kg	
67-66-3	Chloroform	ND	2.0	ug/kg	
74-87-3	Chloromethane	ND	5.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ug/kg	

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3045-MB	M84425.D	1	06/27/17	DRY	n/a	n/a	MSM3045

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-1, MC50728-2, MC50728-3, MC50728-5

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	ug/kg	
76-13-1	Freon 113	ND	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/kg	
591-78-6	2-Hexanone	ND	5.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	ug/kg	
75-09-2	Methylene chloride	ND	5.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	ug/kg	
100-42-5	Styrene	ND	5.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	ug/kg	
109-99-9	Tetrahydrofuran	ND	10	ug/kg	
108-88-3	Toluene	ND	5.0	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	10	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ug/kg	
79-01-6	Trichloroethene	ND	2.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/kg	
75-01-4	Vinyl chloride	ND	10	ug/kg	
	m,p-Xylene	ND	2.0	ug/kg	
95-47-6	o-Xylene	ND	2.0	ug/kg	

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3045-MB	M84425.D	1	06/27/17	DRY	n/a	n/a	MSM3045

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-1, MC50728-2, MC50728-3, MC50728-5

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	106%	65-141%
2037-26-5	Toluene-D8	108%	65-129%
460-00-4	4-Bromofluorobenzene	101%	63-137%

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3048-MB	M84490.D	1	06/29/17	DRY	n/a	n/a	MSM3048

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-4, MC50728-6, MC50728-7, MC50728-9, MC50728-10, MC50728-12, MC50728-17

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	20	ug/kg	
107-13-1	Acrylonitrile	ND	25	ug/kg	
71-43-2	Benzene	ND	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	ug/kg	
75-25-2	Bromoform	ND	2.0	ug/kg	
74-83-9	Bromomethane	ND	10	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	ug/kg	
75-00-3	Chloroethane	ND	10	ug/kg	
67-66-3	Chloroform	ND	2.0	ug/kg	
74-87-3	Chloromethane	ND	5.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ug/kg	

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3048-MB	M84490.D	1	06/29/17	DRY	n/a	n/a	MSM3048

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-4, MC50728-6, MC50728-7, MC50728-9, MC50728-10, MC50728-12, MC50728-17

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	ug/kg	
76-13-1	Freon 113	ND	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/kg	
591-78-6	2-Hexanone	ND	5.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	ug/kg	
75-09-2	Methylene chloride	ND	5.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	ug/kg	
100-42-5	Styrene	ND	5.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	ug/kg	
109-99-9	Tetrahydrofuran	ND	10	ug/kg	
108-88-3	Toluene	ND	5.0	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	10	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ug/kg	
79-01-6	Trichloroethene	ND	2.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/kg	
75-01-4	Vinyl chloride	ND	10	ug/kg	
	m,p-Xylene	ND	2.0	ug/kg	
95-47-6	o-Xylene	ND	2.0	ug/kg	

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3048-MB	M84490.D	1	06/29/17	DRY	n/a	n/a	MSM3048

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-4, MC50728-6, MC50728-7, MC50728-9, MC50728-10, MC50728-12, MC50728-17

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	118%	65-141%
2037-26-5	Toluene-D8	100%	65-129%
460-00-4	4-Bromofluorobenzene	100%	63-137%

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3049-MB	M84513.D	1	06/30/17	DRY	n/a	n/a	MSM3049

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-8, MC50728-11, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	20	ug/kg	
107-13-1	Acrylonitrile	ND	25	ug/kg	
71-43-2	Benzene	ND	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	ug/kg	
75-25-2	Bromoform	ND	2.0	ug/kg	
74-83-9	Bromomethane	ND	10	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	ug/kg	
75-00-3	Chloroethane	ND	10	ug/kg	
67-66-3	Chloroform	ND	2.0	ug/kg	
74-87-3	Chloromethane	ND	5.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ug/kg	

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3049-MB	M84513.D	1	06/30/17	DRY	n/a	n/a	MSM3049

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-8, MC50728-11, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	ug/kg	
76-13-1	Freon 113	ND	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/kg	
591-78-6	2-Hexanone	ND	5.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	ug/kg	
75-09-2	Methylene chloride	ND	5.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	ug/kg	
100-42-5	Styrene	ND	5.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	ug/kg	
109-99-9	Tetrahydrofuran	ND	10	ug/kg	
108-88-3	Toluene	ND	5.0	ug/kg	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	10	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ug/kg	
79-01-6	Trichloroethene	ND	2.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/kg	
75-01-4	Vinyl chloride	ND	10	ug/kg	
	m,p-Xylene	ND	2.0	ug/kg	
95-47-6	o-Xylene	ND	2.0	ug/kg	

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3049-MB	M84513.D	1	06/30/17	DRY	n/a	n/a	MSM3049

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-8, MC50728-11, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	128%	65-141%
2037-26-5	Toluene-D8	101%	65-129%
460-00-4	4-Bromofluorobenzene	99%	63-137%

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3045-BS	M84423.D	1	06/27/17	DRY	n/a	n/a	MSM3045

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-1, MC50728-2, MC50728-3, MC50728-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	50	74.1	148	24-179
107-13-1	Acrylonitrile	50	47.9	96	52-159
71-43-2	Benzene	50	48.3	97	73-115
108-86-1	Bromobenzene	50	48.4	97	76-121
75-27-4	Bromodichloromethane	50	53.4	107	76-122
75-25-2	Bromoform	50	46.0	92	67-151
74-83-9	Bromomethane	50	49.2	98	52-139
78-93-3	2-Butanone (MEK)	50	59.8	120	32-151
104-51-8	n-Butylbenzene	50	51.1	102	71-124
135-98-8	sec-Butylbenzene	50	50.8	102	71-124
98-06-6	tert-Butylbenzene	50	52.4	105	66-125
75-15-0	Carbon disulfide	50	54.1	108	57-143
56-23-5	Carbon tetrachloride	50	56.1	112	73-129
108-90-7	Chlorobenzene	50	49.4	99	79-123
75-00-3	Chloroethane	50	50.0	100	51-159
67-66-3	Chloroform	50	53.7	107	72-122
74-87-3	Chloromethane	50	42.4	85	57-143
95-49-8	o-Chlorotoluene	50	50.4	101	68-121
106-43-4	p-Chlorotoluene	50	49.9	100	68-119
96-12-8	1,2-Dibromo-3-chloropropane	50	44.5	89	52-132
124-48-1	Dibromochloromethane	50	49.2	98	74-139
106-93-4	1,2-Dibromoethane	50	47.5	95	76-130
95-50-1	1,2-Dichlorobenzene	50	48.5	97	73-122
541-73-1	1,3-Dichlorobenzene	50	48.9	98	74-119
106-46-7	1,4-Dichlorobenzene	50	49.3	99	75-118
75-71-8	Dichlorodifluoromethane	50	38.9	78	11-183
75-34-3	1,1-Dichloroethane	50	52.3	105	70-128
107-06-2	1,2-Dichloroethane	50	54.8	110	70-126
75-35-4	1,1-Dichloroethene	50	52.4	105	71-136
156-59-2	cis-1,2-Dichloroethene	50	50.9	102	78-128
156-60-5	trans-1,2-Dichloroethene	50	51.8	104	71-131
78-87-5	1,2-Dichloropropane	50	49.8	100	79-124
142-28-9	1,3-Dichloropropane	50	47.7	95	78-128
594-20-7	2,2-Dichloropropane	50	58.3	117	54-145
563-58-6	1,1-Dichloropropene	50	52.2	104	67-125
10061-01-5	cis-1,3-Dichloropropene	50	51.6	103	75-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3045-BS	M84423.D	1	06/27/17	DRY	n/a	n/a	MSM3045

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-1, MC50728-2, MC50728-3, MC50728-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	53.0	106	75-128
100-41-4	Ethylbenzene	50	50.0	100	76-122
76-13-1	Freon 113	50	55.8	112	70-137
87-68-3	Hexachlorobutadiene	50	50.5	101	73-137
591-78-6	2-Hexanone	50	53.9	108	26-169
98-82-8	Isopropylbenzene	50	51.2	102	69-124
99-87-6	p-Isopropyltoluene	50	51.7	103	73-124
1634-04-4	Methyl Tert Butyl Ether	50	53.5	107	58-133
108-10-1	4-Methyl-2-pentanone (MIBK)	50	47.1	94	43-166
74-95-3	Methylene bromide	50	50.4	101	76-125
75-09-2	Methylene chloride	50	49.2	98	74-125
91-20-3	Naphthalene	50	45.7	91	39-158
103-65-1	n-Propylbenzene	50	50.9	102	69-121
100-42-5	Styrene	50	50.3	101	79-124
630-20-6	1,1,1,2-Tetrachloroethane	50	51.7	103	75-136
79-34-5	1,1,2,2-Tetrachloroethane	50	44.2	88	66-134
127-18-4	Tetrachloroethene	50	50.4	101	76-125
109-99-9	Tetrahydrofuran	50	45.3	91	34-177
108-88-3	Toluene	50	50.3	101	76-119
110-57-6	Trans-1,4-Dichloro-2-Butene	50	48.8	98	57-140
87-61-6	1,2,3-Trichlorobenzene	50	49.9	100	52-146
120-82-1	1,2,4-Trichlorobenzene	50	50.7	101	66-133
71-55-6	1,1,1-Trichloroethane	50	56.5	113	70-130
79-00-5	1,1,2-Trichloroethane	50	47.6	95	75-124
79-01-6	Trichloroethene	50	50.8	102	74-127
75-69-4	Trichlorofluoromethane	50	54.9	110	48-156
96-18-4	1,2,3-Trichloropropane	50	47.2	94	65-130
95-63-6	1,2,4-Trimethylbenzene	50	51.6	103	69-119
108-67-8	1,3,5-Trimethylbenzene	50	52.0	104	69-123
75-01-4	Vinyl chloride	50	46.1	92	33-166
	m,p-Xylene	100	99.1	99	78-122
95-47-6	o-Xylene	50	49.9	100	77-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3045-BS	M84423.D	1	06/27/17	DRY	n/a	n/a	MSM3045

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-1, MC50728-2, MC50728-3, MC50728-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	65-141%
2037-26-5	Toluene-D8	101%	65-129%
460-00-4	4-Bromofluorobenzene	100%	63-137%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3048-BS	M84488.D	1	06/29/17	DRY	n/a	n/a	MSM3048

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-4, MC50728-6, MC50728-7, MC50728-9, MC50728-10, MC50728-12, MC50728-17

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	50	79.0	158	24-179
107-13-1	Acrylonitrile	50	43.7	87	52-159
71-43-2	Benzene	50	48.3	97	73-115
108-86-1	Bromobenzene	50	48.4	97	76-121
75-27-4	Bromodichloromethane	50	59.9	120	76-122
75-25-2	Bromoform	50	47.2	94	67-151
74-83-9	Bromomethane	50	54.7	109	52-139
78-93-3	2-Butanone (MEK)	50	58.6	117	32-151
104-51-8	n-Butylbenzene	50	52.3	105	71-124
135-98-8	sec-Butylbenzene	50	49.0	98	71-124
98-06-6	tert-Butylbenzene	50	51.8	104	66-125
75-15-0	Carbon disulfide	50	53.5	107	57-143
56-23-5	Carbon tetrachloride	50	70.2	140* [a]	73-129
108-90-7	Chlorobenzene	50	45.9	92	79-123
75-00-3	Chloroethane	50	52.5	105	51-159
67-66-3	Chloroform	50	58.2	116	72-122
74-87-3	Chloromethane	50	41.6	83	57-143
95-49-8	o-Chlorotoluene	50	51.0	102	68-121
106-43-4	p-Chlorotoluene	50	51.5	103	68-119
96-12-8	1,2-Dibromo-3-chloropropane	50	46.7	93	52-132
124-48-1	Dibromochloromethane	50	48.9	98	74-139
106-93-4	1,2-Dibromoethane	50	44.7	89	76-130
95-50-1	1,2-Dichlorobenzene	50	47.5	95	73-122
541-73-1	1,3-Dichlorobenzene	50	49.1	98	74-119
106-46-7	1,4-Dichlorobenzene	50	48.8	98	75-118
75-71-8	Dichlorodifluoromethane	50	40.9	82	11-183
75-34-3	1,1-Dichloroethane	50	54.4	109	70-128
107-06-2	1,2-Dichloroethane	50	64.5	129* [a]	70-126
75-35-4	1,1-Dichloroethene	50	53.0	106	71-136
156-59-2	cis-1,2-Dichloroethene	50	50.5	101	78-128
156-60-5	trans-1,2-Dichloroethene	50	52.2	104	71-131
78-87-5	1,2-Dichloropropane	50	50.2	100	79-124
142-28-9	1,3-Dichloropropane	50	45.8	92	78-128
594-20-7	2,2-Dichloropropane	50	67.6	135	54-145
563-58-6	1,1-Dichloropropene	50	57.0	114	67-125
10061-01-5	cis-1,3-Dichloropropene	50	54.5	109	75-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3048-BS	M84488.D	1	06/29/17	DRY	n/a	n/a	MSM3048

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-4, MC50728-6, MC50728-7, MC50728-9, MC50728-10, MC50728-12, MC50728-17

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	62.3	125	75-128
100-41-4	Ethylbenzene	50	47.5	95	76-122
76-13-1	Freon 113	50	60.5	121	70-137
87-68-3	Hexachlorobutadiene	50	52.8	106	73-137
591-78-6	2-Hexanone	50	48.4	97	26-169
98-82-8	Isopropylbenzene	50	47.3	95	69-124
99-87-6	p-Isopropyltoluene	50	51.1	102	73-124
1634-04-4	Methyl Tert Butyl Ether	50	56.3	113	58-133
108-10-1	4-Methyl-2-pentanone (MIBK)	50	46.0	92	43-166
74-95-3	Methylene bromide	50	54.3	109	76-125
75-09-2	Methylene chloride	50	50.1	100	74-125
91-20-3	Naphthalene	50	43.3	87	39-158
103-65-1	n-Propylbenzene	50	50.3	101	69-121
100-42-5	Styrene	50	48.5	97	79-124
630-20-6	1,1,1,2-Tetrachloroethane	50	48.6	97	75-136
79-34-5	1,1,2,2-Tetrachloroethane	50	40.7	81	66-134
127-18-4	Tetrachloroethene	50	46.8	94	76-125
109-99-9	Tetrahydrofuran	50	39.8	80	34-177
108-88-3	Toluene	50	52.1	104	76-119
110-57-6	Trans-1,4-Dichloro-2-Butene	50	50.7	101	57-140
87-61-6	1,2,3-Trichlorobenzene	50	48.6	97	52-146
120-82-1	1,2,4-Trichlorobenzene	50	49.1	98	66-133
71-55-6	1,1,1-Trichloroethane	50	65.8	132* [a]	70-130
79-00-5	1,1,2-Trichloroethane	50	50.4	101	75-124
79-01-6	Trichloroethene	50	53.7	107	74-127
75-69-4	Trichlorofluoromethane	50	65.2	130	48-156
96-18-4	1,2,3-Trichloropropane	50	48.2	96	65-130
95-63-6	1,2,4-Trimethylbenzene	50	51.3	103	69-119
108-67-8	1,3,5-Trimethylbenzene	50	51.4	103	69-123
75-01-4	Vinyl chloride	50	46.9	94	33-166
	m,p-Xylene	100	93.4	93	78-122
95-47-6	o-Xylene	50	45.0	90	77-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3048-BS	M84488.D	1	06/29/17	DRY	n/a	n/a	MSM3048

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-4, MC50728-6, MC50728-7, MC50728-9, MC50728-10, MC50728-12, MC50728-17

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	111%	65-141%
2037-26-5	Toluene-D8	105%	65-129%
460-00-4	4-Bromofluorobenzene	101%	63-137%

(a) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3049-BS	M84511.D	1	06/30/17	DRY	n/a	n/a	MSM3049

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-8, MC50728-11, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	50	78.8	158	24-179
107-13-1	Acrylonitrile	50	44.0	88	52-159
71-43-2	Benzene	50	48.8	98	73-115
108-86-1	Bromobenzene	50	48.9	98	76-121
75-27-4	Bromodichloromethane	50	61.3	123* [a]	76-122
75-25-2	Bromoform	50	51.3	103	67-151
74-83-9	Bromomethane	50	58.9	118	52-139
78-93-3	2-Butanone (MEK)	50	61.3	123	32-151
104-51-8	n-Butylbenzene	50	55.8	112	71-124
135-98-8	sec-Butylbenzene	50	53.4	107	71-124
98-06-6	tert-Butylbenzene	50	58.3	117	66-125
75-15-0	Carbon disulfide	50	55.6	111	57-143
56-23-5	Carbon tetrachloride	50	75.4	151* [a]	73-129
108-90-7	Chlorobenzene	50	48.4	97	79-123
75-00-3	Chloroethane	50	56.5	113	51-159
67-66-3	Chloroform	50	60.3	121	72-122
74-87-3	Chloromethane	50	41.0	82	57-143
95-49-8	o-Chlorotoluene	50	53.8	108	68-121
106-43-4	p-Chlorotoluene	50	51.9	104	68-119
96-12-8	1,2-Dibromo-3-chloropropane	50	54.9	110	52-132
124-48-1	Dibromochloromethane	50	52.5	105	74-139
106-93-4	1,2-Dibromoethane	50	45.7	91	76-130
95-50-1	1,2-Dichlorobenzene	50	51.7	103	73-122
541-73-1	1,3-Dichlorobenzene	50	52.8	106	74-119
106-46-7	1,4-Dichlorobenzene	50	52.6	105	75-118
75-71-8	Dichlorodifluoromethane	50	37.5	75	11-183
75-34-3	1,1-Dichloroethane	50	54.6	109	70-128
107-06-2	1,2-Dichloroethane	50	67.0	134* [a]	70-126
75-35-4	1,1-Dichloroethene	50	55.0	110	71-136
156-59-2	cis-1,2-Dichloroethene	50	50.3	101	78-128
156-60-5	trans-1,2-Dichloroethene	50	52.1	104	71-131
78-87-5	1,2-Dichloropropane	50	49.1	98	79-124
142-28-9	1,3-Dichloropropane	50	47.1	94	78-128
594-20-7	2,2-Dichloropropane	50	72.5	145	54-145
563-58-6	1,1-Dichloropropene	50	57.5	115	67-125
10061-01-5	cis-1,3-Dichloropropene	50	51.3	103	75-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3049-BS	M84511.D	1	06/30/17	DRY	n/a	n/a	MSM3049

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-8, MC50728-11, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	56.8	114	75-128
100-41-4	Ethylbenzene	50	50.3	101	76-122
76-13-1	Freon 113	50	64.6	129	70-137
87-68-3	Hexachlorobutadiene	50	59.8	120	73-137
591-78-6	2-Hexanone	50	49.4	99	26-169
98-82-8	Isopropylbenzene	50	51.2	102	69-124
99-87-6	p-Isopropyltoluene	50	55.7	111	73-124
1634-04-4	Methyl Tert Butyl Ether	50	58.1	116	58-133
108-10-1	4-Methyl-2-pentanone (MIBK)	50	45.5	91	43-166
74-95-3	Methylene bromide	50	55.9	112	76-125
75-09-2	Methylene chloride	50	51.3	103	74-125
91-20-3	Naphthalene	50	50.0	100	39-158
103-65-1	n-Propylbenzene	50	52.6	105	69-121
100-42-5	Styrene	50	49.7	99	79-124
630-20-6	1,1,1,2-Tetrachloroethane	50	58.2	116	75-136
79-34-5	1,1,2,2-Tetrachloroethane	50	44.1	88	66-134
127-18-4	Tetrachloroethene	50	50.5	101	76-125
109-99-9	Tetrahydrofuran	50	39.2	78	34-177
108-88-3	Toluene	50	49.5	99	76-119
110-57-6	Trans-1,4-Dichloro-2-Butene	50	56.7	113	57-140
87-61-6	1,2,3-Trichlorobenzene	50	56.4	113	52-146
120-82-1	1,2,4-Trichlorobenzene	50	56.0	112	66-133
71-55-6	1,1,1-Trichloroethane	50	70.0	140* [a]	70-130
79-00-5	1,1,2-Trichloroethane	50	47.7	95	75-124
79-01-6	Trichloroethene	50	54.3	109	74-127
75-69-4	Trichlorofluoromethane	50	70.5	141	48-156
96-18-4	1,2,3-Trichloropropane	50	50.3	101	65-130
95-63-6	1,2,4-Trimethylbenzene	50	55.4	111	69-119
108-67-8	1,3,5-Trimethylbenzene	50	55.4	111	69-123
75-01-4	Vinyl chloride	50	47.5	95	33-166
	m,p-Xylene	100	98.5	99	78-122
95-47-6	o-Xylene	50	49.2	98	77-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM3049-BS	M84511.D	1	06/30/17	DRY	n/a	n/a	MSM3049

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC50728-8, MC50728-11, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	111%	65-141%
2037-26-5	Toluene-D8	98%	65-129%
460-00-4	4-Bromofluorobenzene	94%	63-137%

(a) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Check Std:	MSM3045-CC3033	**Injection Date:**	06/27/17
Lab File ID:	M84422.D	**Injection Time:**	09:51
Instrument ID:	GCMSM	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	202503	9.77	289014	10.67	156436	13.90	182554	16.48	104098	7.68
Upper Limit [a]	405006	10.27	578028	11.17	312872	14.40	365108	16.98	208196	8.18
Lower Limit [b]	101252	9.27	144507	10.17	78218	13.40	91277	15.98	52049	7.18

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSM3045-BS	208520	9.77	304945	10.66	163193	13.90	190179	16.48	100522	7.68
MSM3045-MB	168540	9.77	249238	10.66	147105	13.89	158483	16.48	81443	7.67
MC50692-1	164626	9.77	239083	10.66	112158	13.89	67444[c]	16.47	70482	7.67
ZZZZZZ	156963	9.76	228048	10.66	106491	13.89	65194[c]	16.47	65331	7.68
ZZZZZZ	144799	9.76	210601	10.66	97033	13.89	63781[c]	16.48	67556	7.67
ZZZZZZ	135954	9.76	199122	10.66	98346	13.89	63949[c]	16.48	68206	7.66
MC50692-1	136208	9.76	198739	10.66	94982	13.89	61390[c]	16.48	63987	7.67
ZZZZZZ	150087	9.77	217773	10.66	103432	13.89	65980[c]	16.47	64106	7.67
ZZZZZZ	128159	9.77	186467	10.66	84964	13.89	59523[c]	16.47	60153	7.67
ZZZZZZ	158195	9.77	225669	10.66	119645	13.89	122168	16.47	73119	7.67
ZZZZZZ	117024	9.76	167843	10.66	80379	13.89	47849[c]	16.48	55545	7.66
MC50692-1MS	150997	9.77	215300	10.66	100643	13.89	68906[c]	16.47	77630	7.68
MC50692-1MSD	164004	9.77	238079	10.66	142425	13.89	149758	16.48	93124	7.68
MC50728-1	133446	9.77	188390	10.66	95399	13.89	74602[c]	16.47	56285	7.68
MC50728-2	141615	9.77	199797	10.66	120280	13.90	111969	16.48	73791	7.67
MC50728-3	121843	9.77	168872	10.66	84944	13.89	70077[c]	16.47	54557	7.66
MC50728-4 [d]	121537	9.77	179312	10.66	81724	13.89	40319[c]	16.47	54475	7.67
MC50728-5	115108	9.77	155667	10.66	69272[c]	13.89	48622[c]	16.48	45821[e]	7.66

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to possible matrix interference. Confirmed by reanalysis.
(d) Confirmation run.
(e) Outside control limits. Target analytes not associated with this internal standard.

Volatile Internal Standard Area Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Check Std:	MSM3048-CC3033	**Injection Date:**	06/29/17
Lab File ID:	M84487.D	**Injection Time:**	18:08
Instrument ID:	GCMSM	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	198881	9.77	277837	10.66	161714	13.89	195385	16.47	105057	7.68
Upper Limit [a]	397762	10.27	555674	11.16	323428	14.39	390770	16.97	210114	8.18
Lower Limit [b]	99441	9.27	138919	10.16	80857	13.39	97693	15.97	52529	7.18

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSM3048-BS	206988	9.76	289895	10.66	182630	13.89	211553	16.47	102132	7.68
MSM3048-MB	161669	9.77	223630	10.66	128797	13.89	144147	16.47	80110	7.67
MC50728-17	149717	9.76	212097	10.66	124013	13.89	141461	16.47	78058	7.66
MC50728-1 [c]	134731	9.77	194227	10.66	108117	13.89	72470[d]	16.47	55000	7.67
MC50728-3 [c]	139681	9.76	191612	10.66	98486	13.89	68099[d]	16.47	54803	7.66
MC50728-4	130794	9.77	183040	10.66	96015	13.89	60268[d]	16.47	64562	7.67
MC50728-5 [c]	104471	9.76	139681	10.66	67080[d]	13.89	40251[d]	16.48	46897[e]	7.66
MC50728-6	123285	9.76	172504	10.66	104000	13.90	100519[d]	16.48	52949	7.67
MC50728-7	104925	9.76	147959	10.66	92913	13.89	101933[d]	16.48	56475	7.66
MC50728-9	116782	9.77	161012	10.66	94455	13.89	87312[d]	16.47	45799[e]	7.67
MC50728-10	121429	9.77	173413	10.66	101595	13.89	110269	16.48	52573	7.67
MC50728-12	114684	9.77	164152	10.66	95452	13.89	88145[d]	16.47	59315	7.68
MC50728-16 [c]	85290[d]	9.76	114791[d]	10.66	61011[d]	13.89	44513[d]	16.47	47552[e]	7.67

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run.
(d) Outside control limits due to possible matrix interference. Confirmed by reanalysis.
(e) Outside control limits. Target analytes not associated with this internal standard.

Volatile Internal Standard Area Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Check Std:	MSM3049-CC3033	**Injection Date:**	06/30/17
Lab File ID:	M84510.D	**Injection Time:**	10:38
Instrument ID:	GCMSM	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	194171	9.77	270497	10.67	153704	13.89	186447	16.48	93282	7.68
Upper Limit [a]	388342	10.27	540994	11.17	307408	14.39	372894	16.98	186564	8.18
Lower Limit [b]	97086	9.27	135249	10.17	76852	13.39	93224	15.98	46641	7.18

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSM3049-BS	200531	9.76	279236	10.66	152797	13.89	183732	16.48	99377	7.68
MSM3049-MB	158980	9.77	223093	10.66	125667	13.90	136788	16.48	72224	7.67
MC50728-8	154910	9.77	213311	10.67	117787	13.90	107149	16.48	67239	7.68
MC50728-9 [c]	146513	9.77	199088	10.67	105210	13.89	76442[d]	16.47	54187	7.68
MC50728-11	139373	9.77	195717	10.66	112295	13.89	117004	16.48	54568	7.67
MC50728-12 [c]	122573	9.77	167689	10.66	90514	13.90	74327[d]	16.48	54747	7.67
MC50728-13	140937	9.77	194383	10.66	108126	13.89	98000	16.47	62569	7.68
MC50728-14	133998	9.77	185328	10.66	104642	13.89	108248	16.47	58939	7.68
MC50728-15	133457	9.77	185455	10.66	103202	13.89	103039	16.48	51677	7.67
MC50728-16	115689	9.76	160773	10.66	88874[d]	13.89	81818[d]	16.48	52286	7.67

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run.
(d) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

Volatile Surrogate Recovery Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Method: SW846 8260C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC50728-1	M84492.D	120	106	134
MC50728-1	M84439.D	111	98	124
MC50728-2	M84440.D	113	107	112
MC50728-3	M84493.D	119	101	128
MC50728-3	M84441.D	113	99	117
MC50728-4	M84494.D	128	100	137
MC50728-4	M84442.D	116	100	156* [a]
MC50728-5	M84495.D	124	104	132
MC50728-5	M84443.D	112	97	123
MC50728-6	M84496.D	128	106	104
MC50728-7	M84497.D	128	103	97
MC50728-8	M84514.D	126	101	107
MC50728-9	M84515.D	130	101	121
MC50728-9	M84499.D	131	105	107
MC50728-10	M84500.D	131	104	100
MC50728-11	M84516.D	131	104	97
MC50728-12	M84517.D	138	103	113
MC50728-12	M84502.D	136	103	107
MC50728-13	M84518.D	136	102	109
MC50728-14	M84519.D	134	106	101
MC50728-15	M84520.D	131	102	101
MC50728-16	M84521.D	141	102	107
MC50728-16	M84506.D	145* [b]	101	120
MC50728-17	M84491.D	122	103	99
MSM3045-BS	M84423.D	100	101	100
MSM3045-MB	M84425.D	106	108	101
MSM3048-BS	M84488.D	111	105	101
MSM3048-MB	M84490.D	118	100	100
MSM3049-BS	M84511.D	111	98	94
MSM3049-MB	M84513.D	128	101	99

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	65-141%
S2 = Toluene-D8	65-129%
S3 = 4-Bromofluorobenzene	63-137%

(a) Outside control limits due to possible matrix interference.
(b) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49803-MB	R52295.D	1	06/27/17	DRY	06/23/17	OP49803	MSR1980

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	250	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	500	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	500	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	500	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	500	ug/kg	
95-48-7	2-Methylphenol	ND	500	ug/kg	
106-44-5	4-Methylphenol	ND	500	ug/kg	
88-75-5	2-Nitrophenol	ND	500	ug/kg	
100-02-7	4-Nitrophenol	ND	500	ug/kg	
87-86-5	Pentachlorophenol	ND	500	ug/kg	
108-95-2	Phenol	ND	250	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	ug/kg	
83-32-9	Acenaphthene	ND	100	ug/kg	
208-96-8	Acenaphthylene	ND	100	ug/kg	
62-53-3	Aniline	ND	500	ug/kg	
120-12-7	Anthracene	ND	100	ug/kg	
56-55-3	Benzo(a)anthracene	ND	100	ug/kg	
50-32-8	Benzo(a)pyrene	ND	250	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	100	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	250	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	250	ug/kg	
91-58-7	2-Chloronaphthalene	ND	250	ug/kg	
106-47-8	4-Chloroaniline	ND	500	ug/kg	
86-74-8	Carbazole	ND	100	ug/kg	
218-01-9	Chrysene	ND	100	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	250	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	250	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	250	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	250	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	500	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	500	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	500	ug/kg	

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49803-MB	R52295.D	1	06/27/17	DRY	06/23/17	OP49803	MSR1980

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Result	RL	Units	Q
53-70-3	Dibenzo(a,h)anthracene	ND	100	ug/kg	
132-64-9	Dibenzofuran	ND	100	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	250	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	250	ug/kg	
84-66-2	Diethyl phthalate	ND	250	ug/kg	
131-11-3	Dimethyl phthalate	ND	250	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	250	ug/kg	
206-44-0	Fluoranthene	ND	100	ug/kg	
86-73-7	Fluorene	ND	100	ug/kg	
118-74-1	Hexachlorobenzene	ND	250	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	500	ug/kg	
67-72-1	Hexachloroethane	ND	250	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	250	ug/kg	
78-59-1	Isophorone	ND	250	ug/kg	
91-57-6	2-Methylnaphthalene	ND	100	ug/kg	
88-74-4	2-Nitroaniline	ND	500	ug/kg	
99-09-2	3-Nitroaniline	ND	500	ug/kg	
100-01-6	4-Nitroaniline	ND	500	ug/kg	
91-20-3	Naphthalene	ND	100	ug/kg	
98-95-3	Nitrobenzene	ND	250	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	250	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	250	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	500	ug/kg	
85-01-8	Phenanthrene	ND	100	ug/kg	
129-00-0	Pyrene	ND	100	ug/kg	
110-86-1	Pyridine	ND	500	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	500	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	92%	25-109%
4165-62-2	Phenol-d5	93%	29-113%
118-79-6	2,4,6-Tribromophenol	74%	20-141%

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49803-MB	R52295.D	1	06/27/17	DRY	06/23/17	OP49803	MSR1980

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	83%	27-115%
321-60-8	2-Fluorobiphenyl	76%	34-118%
1718-51-0	Terphenyl-d14	85%	42-139%

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49803-BS	R52296.D	1	06/27/17	DRY	06/23/17	OP49803	MSR1980

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	2500	2310	92	39-104
59-50-7	4-Chloro-3-methyl phenol	2500	2210	88	51-110
120-83-2	2,4-Dichlorophenol	2500	2180	87	47-109
105-67-9	2,4-Dimethylphenol	2500	2130	85	43-105
51-28-5	2,4-Dinitrophenol	2500	1860	74	10-130
534-52-1	4,6-Dinitro-o-cresol	2500	2340	94	16-140
95-48-7	2-Methylphenol	2500	2360	94	40-105
106-44-5	4-Methylphenol	5000	4550	91	38-114
88-75-5	2-Nitrophenol	2500	2420	97	41-112
100-02-7	4-Nitrophenol	2500	2560	102	28-134
87-86-5	Pentachlorophenol	2500	1600	64	22-123
108-95-2	Phenol	2500	2590	104	40-107
95-95-4	2,4,5-Trichlorophenol	2500	2210	88	54-115
88-06-2	2,4,6-Trichlorophenol	2500	2270	91	51-110
83-32-9	Acenaphthene	2500	2450	98	49-108
208-96-8	Acenaphthylene	2500	2440	98	37-102
62-53-3	Aniline	2500	1400	56	10-90
120-12-7	Anthracene	2500	2470	99	54-111
56-55-3	Benzo(a)anthracene	2500	2670	107	56-117
50-32-8	Benzo(a)pyrene	2500	2900	116	57-117
205-99-2	Benzo(b)fluoranthene	2500	2840	114	55-122
191-24-2	Benzo(g,h,i)perylene	2500	2940	118	52-123
207-08-9	Benzo(k)fluoranthene	2500	2780	111	54-117
101-55-3	4-Bromophenyl phenyl ether	2500	2470	99	54-118
85-68-7	Butyl benzyl phthalate	2500	3250	130* [a]	54-121
91-58-7	2-Chloronaphthalene	2500	2530	101	46-114
106-47-8	4-Chloroaniline	2500	1510	60	12-88
86-74-8	Carbazole	2500	2540	102	56-116
218-01-9	Chrysene	2500	2550	102	56-114
111-91-1	bis(2-Chloroethoxy)methane	2500	2670	107* [a]	41-106
111-44-4	bis(2-Chloroethyl)ether	2500	2880	115* [a]	28-113
108-60-1	bis(2-Chloroisopropyl)ether	2500	3430	137* [a]	30-132
7005-72-3	4-Chlorophenyl phenyl ether	2500	2410	96	54-114
121-14-2	2,4-Dinitrotoluene	2500	2780	111	50-121
606-20-2	2,6-Dinitrotoluene	2500	2680	107	52-115
91-94-1	3,3'-Dichlorobenzidine	2500	1800	72	17-120

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49803-BS	R52296.D	1	06/27/17	DRY	06/23/17	OP49803	MSR1980

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
53-70-3	Dibenzo(a,h)anthracene	2500	2960	118	54-121
132-64-9	Dibenzofuran	2500	2360	94	52-109
84-74-2	Di-n-butyl phthalate	2500	2700	108	55-113
117-84-0	Di-n-octyl phthalate	2500	3290	132* [a]	53-126
84-66-2	Diethyl phthalate	2500	2540	102	54-111
131-11-3	Dimethyl phthalate	2500	2570	103	53-111
117-81-7	bis(2-Ethylhexyl)phthalate	2500	3450	138* [a]	55-125
206-44-0	Fluoranthene	2500	2630	105	55-116
86-73-7	Fluorene	2500	2550	102	52-111
118-74-1	Hexachlorobenzene	2500	2360	94	52-117
87-68-3	Hexachlorobutadiene	2500	2170	87	36-108
77-47-4	Hexachlorocyclopentadiene	2500	1540	62	10-99
67-72-1	Hexachloroethane	2500	2380	95	33-100
193-39-5	Indeno(1,2,3-cd)pyrene	2500	3030	121* [b]	55-120
78-59-1	Isophorone	2500	2670	107* [a]	37-101
91-57-6	2-Methylnaphthalene	2500	2310	92	38-114
88-74-4	2-Nitroaniline	2500	2850	114	55-120
99-09-2	3-Nitroaniline	2500	1950	78	31-103
100-01-6	4-Nitroaniline	2500	2510	100	50-112
91-20-3	Naphthalene	2500	2550	102	27-128
98-95-3	Nitrobenzene	2500	2600	104	33-108
621-64-7	N-Nitroso-di-n-propylamine	2500	2960	118* [a]	37-112
86-30-6	N-Nitrosodiphenylamine	2500	2550	102	47-114
82-68-8	Pentachloronitrobenzene	2500	2250	90	50-125
85-01-8	Phenanthrene	2500	2550	102	54-112
129-00-0	Pyrene	2500	2780	111	54-118
110-86-1	Pyridine	2500	2020	81	23-81
95-94-3	1,2,4,5-Tetrachlorobenzene	2500	2050	82	43-113
120-82-1	1,2,4-Trichlorobenzene	2500	2340	94	38-105

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	101%	25-109%
4165-62-2	Phenol-d5	103%	29-113%
118-79-6	2,4,6-Tribromophenol	86%	20-141%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49803-BS	R52296.D	1	06/27/17	DRY	06/23/17	OP49803	MSR1980

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	92%	27-115%
321-60-8	2-Fluorobiphenyl	85%	34-118%
1718-51-0	Terphenyl-d14	92%	42-139%

(a) Outside control limits. Associated samples are non-detect for this compound.
(b) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Check Std:	MSR1980-CC1934	**Injection Date:**	06/27/17
Lab File ID:	R52293.D	**Injection Time:**	12:02
Instrument ID:	GCMSR	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	356907	4.25	1415997	5.31	801150	6.85	1507263	8.14	1509869	11.26	1429618	14.55
Upper Limit [a]	713814	4.75	2831994	5.81	1602300	7.35	3014526	8.64	3019738	11.76	2859236	15.05
Lower Limit [b]	178454	3.75	707999	4.81	400575	6.35	753632	7.64	754935	10.76	714809	14.05

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP49803-MB	442917	4.25	1718325	5.31	968560	6.85	1807831	8.14	1760170	11.24	1528911	14.54
OP49803-BS	427858	4.25	1676585	5.31	941164	6.85	1737078	8.14	1669139	11.24	1432215	14.54
ZZZZZZ	484939	4.25	1849178	5.31	1005892	6.85	1810026	8.14	1649284	11.25	1461965	14.56
ZZZZZZ	448013	4.25	1734153	5.31	983902	6.85	1824161	8.14	1653581	11.25	1411621	14.55
ZZZZZZ	409471	4.25	1588583	5.31	873567	6.85	1627517	8.14	1487785	11.24	1315296	14.55
ZZZZZZ	412038	4.25	1590847	5.31	891235	6.85	1615817	8.14	1429008	11.24	1243147	14.54
ZZZZZZ	383034	4.25	1489380	5.31	827440	6.85	1518400	8.14	1389314	11.23	1245111	14.54
ZZZZZZ	407680	4.25	1583942	5.31	879200	6.85	1591030	8.14	1466516	11.23	1297358	14.53
ZZZZZZ	396610	4.25	1533004	5.31	858324	6.84	1575057	8.14	1455746	11.23	1269016	14.53
MC50728-5	385658	4.25	1501964	5.31	839397	6.84	1533856	8.14	1404681	11.23	1250497	14.53
MC50728-6	385134	4.25	1491087	5.31	831910	6.84	1535705	8.13	1425529	11.23	1267345	14.53
MC50728-7	392649	4.25	1517407	5.31	852702	6.84	1583446	8.13	1441813	11.23	1250168	14.53
MC50728-8	386773	4.25	1500139	5.31	832951	6.84	1533273	8.13	1394291	11.23	1218953	14.53
MC50728-9	414931	4.25	1619601	5.31	894826	6.84	1656276	8.13	1530631	11.23	1351983	14.53
MC50728-11	413976	4.25	1603388	5.30	891762	6.84	1654445	8.13	1501232	11.22	1313939	14.52
MC50728-1	412667	4.25	1588640	5.30	882293	6.84	1649070	8.13	1473678	11.23	1325853	14.53
MC50728-2	410793	4.25	1603303	5.31	884669	6.84	1628326	8.13	1475341	11.24	1336135	14.54
MC50728-3	406176	4.25	1559401	5.31	862056	6.84	1604551	8.13	1480094	11.23	1328930	14.53
MC50728-10	404469	4.25	1551979	5.31	864758	6.84	1555902	8.13	1406354	11.23	1258408	14.53
MC50728-12	409251	4.25	1600652	5.31	883731	6.84	1607381	8.13	1483970	11.23	1330691	14.53
MC50728-13	421798	4.25	1660106	5.31	906503	6.84	1647150	8.13	1484920	11.23	1296174	14.53
MC50728-14	466870	4.25	1803105	5.31	965532	6.84	1718692	8.13	1569024	11.23	1357398	14.54
MC50728-15	390431	4.25	1496361	5.31	833053	6.84	1511657	8.13	1385814	11.23	1207302	14.53
MC50728-16	433848	4.25	1678313	5.31	924808	6.84	1655281	8.13	1552705	11.23	1319928	14.54
MC50728-4	342893	4.25	1375058	5.31	768249	6.84	1439436	8.14	1401379	11.25	1131559	14.56

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Check Std:	MSR1982-CC1934	**Injection Date:**	06/28/17
Lab File ID:	R52326.D	**Injection Time:**	14:59
Instrument ID:	GCMSR	**Method:**	SW846 8270D

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	302878	4.25	1205519	5.31	682202	6.85	1294466	8.14	1296048	11.25	1204510	14.54
Upper Limit [a]	605756	4.75	2411038	5.81	1364404	7.35	2588932	8.64	2592096	11.75	2409020	15.04
Lower Limit [b]	151439	3.75	602760	4.81	341101	6.35	647233	7.64	648024	10.75	602255	14.04

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP49812-MB	324825	4.25	1300437	5.31	740971	6.84	1403950	8.13	1406741	11.22	1255211	14.52
OP49812-BS	332306	4.25	1346588	5.31	768246	6.84	1441052	8.14	1427830	11.23	1279521	14.52
OP49812-BSD	331187	4.25	1325632	5.31	741778	6.84	1402056	8.13	1384776	11.23	1227517	14.52
ZZZZZZ	334808	4.25	1337323	5.30	778124	6.84	1458438	8.13	1442812	11.22	1299519	14.52
ZZZZZZ	318203	4.25	1291155	5.30	742006	6.84	1391248	8.13	1367907	11.22	1228498	14.52
ZZZZZZ	299873	4.25	1218050	5.30	691631	6.84	1343111	8.13	1319634	11.22	1189207	14.52
MC50728-4	278353	4.25	1160919	5.30	666649	6.84	1273140	8.13	1256595	11.22	1122044	14.52

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Method: SW846 8270D **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC50728-1	R52310.D	85	89	80	79	76	89
MC50728-2	R52311.D	91	93	82	82	80	91
MC50728-3	R52312.D	78	80	68	72	68	73
MC50728-4	R52334.D	67	67	74	64	71	82
MC50728-4	R52319.D	73	74	71	68	69	77
MC50728-5	R52304.D	92	94	83	84	79	92
MC50728-6	R52305.D	91	92	79	85	80	91
MC50728-7	R52306.D	97	98	83	88	83	96
MC50728-8	R52307.D	102	103	87	93	87	99
MC50728-9	R52308.D	92	93	83	82	80	91
MC50728-10	R52313.D	93	94	86	85	82	91
MC50728-11	R52309.D	97	97	80	88	81	93
MC50728-12	R52314.D	92	94	79	83	80	87
MC50728-13	R52315.D	91	95	80	82	82	88
MC50728-14	R52316.D	86	87	79	80	78	86
MC50728-15	R52317.D	91	95	83	83	83	91
MC50728-16	R52318.D	88	92	83	80	78	89
OP49803-BS	R52296.D	101	103	86	92	85	92
OP49803-MB	R52295.D	92	93	74	83	76	85

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	25-109%
S2 = Phenol-d5	29-113%
S3 = 2,4,6-Tribromophenol	20-141%
S4 = Nitrobenzene-d5	27-115%
S5 = 2-Fluorobiphenyl	34-118%
S6 = Terphenyl-d14	42-139%

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- DDT/Endrin Breakdown Checks
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49804-MB	CR5517.D	1	06/28/17	AP	06/23/17	OP49804	GCR1330

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	ND	17	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	91%	50-137%

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49806-MB	BE55340.D	1	06/26/17	AP	06/23/17	OP49806	GBE2772

The QC reported here applies to the following samples: **Method:** SW846 8081B

MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Result	RL	Units	Q
15972-60-8	Alachlor	ND	50	ug/kg	
309-00-2	Aldrin	ND	5.0	ug/kg	
319-84-6	alpha-BHC	ND	5.0	ug/kg	
319-85-7	beta-BHC	ND	5.0	ug/kg	
319-86-8	delta-BHC	ND	5.0	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	5.0	ug/kg	
12789-03-6	Chlordane	ND	50	ug/kg	
60-57-1	Dieldrin	ND	5.0	ug/kg	
72-54-8	4,4'-DDD	ND	5.0	ug/kg	
72-55-9	4,4'-DDE	ND	5.0	ug/kg	
50-29-3	4,4'-DDT	ND	5.0	ug/kg	
72-20-8	Endrin	ND	5.0	ug/kg	
1031-07-8	Endosulfan sulfate	ND	5.0	ug/kg	
7421-93-4	Endrin aldehyde	ND	5.0	ug/kg	
959-98-8	Endosulfan-I	ND	5.0	ug/kg	
33213-65-9	Endosulfan-II	ND	5.0	ug/kg	
76-44-8	Heptachlor	ND	5.0	ug/kg	
1024-57-3	Heptachlor epoxide	ND	5.0	ug/kg	
72-43-5	Methoxychlor	ND	5.0	ug/kg	
53494-70-5	Endrin ketone	ND	5.0	ug/kg	
8001-35-2	Toxaphene	ND	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	111%	10-143%
877-09-8	Tetrachloro-m-xylene	90%	10-143%
2051-24-3	Decachlorobiphenyl	154%	10-172%
2051-24-3	Decachlorobiphenyl	128%	10-172%

Method Blank Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49805-MB	BK65935.D	1	06/28/17	AP	06/23/17	OP49805	GBK2113

The QC reported here applies to the following samples: **Method:** SW846 8082A

MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	25	ug/kg	
11104-28-2	Aroclor 1221	ND	25	ug/kg	
11141-16-5	Aroclor 1232	ND	25	ug/kg	
53469-21-9	Aroclor 1242	ND	25	ug/kg	
12672-29-6	Aroclor 1248	ND	25	ug/kg	
11097-69-1	Aroclor 1254	ND	25	ug/kg	
11096-82-5	Aroclor 1260	ND	25	ug/kg	
37324-23-5	Aroclor 1262	ND	25	ug/kg	
11100-14-4	Aroclor 1268	ND	25	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	67%	25-145%
877-09-8	Tetrachloro-m-xylene	95%	25-145%
2051-24-3	Decachlorobiphenyl	74%	25-179%
2051-24-3	Decachlorobiphenyl	44%	25-179%

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49804-BS	CR5518.D	1	06/28/17	AP	06/23/17	OP49804	GCR1330

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	CT-ETPH (C9-C36)	46.7	36.6	78	60-120

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	99%	50-137%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49806-BS	BE55341.D	1	06/26/17	AP	06/23/17	OP49806	GBE2772

The QC reported here applies to the following samples: **Method:** SW846 8081B

MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
15972-60-8	Alachlor	333	361	108	40-164
309-00-2	Aldrin	33.3	31.5	94	37-165
319-84-6	alpha-BHC	33.3	33.2	100	32-157
319-85-7	beta-BHC	33.3	30.7	92	41-159
319-86-8	delta-BHC	33.3	21.8	65	26-157
58-89-9	gamma-BHC (Lindane)	33.3	31.0	93	34-156
60-57-1	Dieldrin	33.3	43.6	131	42-171
72-54-8	4,4'-DDD	33.3	36.2	109	41-168
72-55-9	4,4'-DDE	33.3	31.5	94	42-167
50-29-3	4,4'-DDT	33.3	35.9	108	37-172
72-20-8	Endrin	33.3	37.5	112	30-191
1031-07-8	Endosulfan sulfate	33.3	37.3	112	41-162
7421-93-4	Endrin aldehyde	33.3	28.9	87	32-161
959-98-8	Endosulfan-I	33.3	36.5	109	42-168
33213-65-9	Endosulfan-II	33.3	36.9	111	41-166
76-44-8	Heptachlor	33.3	32.7	98	43-159
1024-57-3	Heptachlor epoxide	33.3	33.9	102	42-167
72-43-5	Methoxychlor	33.3	34.8	104	28-187
53494-70-5	Endrin ketone	33.3	39.6	119	32-170

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	102%	10-143%
877-09-8	Tetrachloro-m-xylene	81%	10-143%
2051-24-3	Decachlorobiphenyl	131%	10-172%
2051-24-3	Decachlorobiphenyl	111%	10-172%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49805-BS	BK65936.D	1	06/28/17	AP	06/23/17	OP49805	GBK2113

The QC reported here applies to the following samples: **Method:** SW846 8082A

MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	267	213	80	47-144
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	267	195	73	45-156
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	97%	25-145%
877-09-8	Tetrachloro-m-xylene	92%	25-145%
2051-24-3	Decachlorobiphenyl	76%	25-179%
2051-24-3	Decachlorobiphenyl	52%	25-179%

* = Outside of Control Limits.

DDT/Endrin Breakdown Check

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample:	GBE2772-DDT	**Injection Date:**	06/26/17
Lab File ID:	BE55329.D	**Injection Time:**	21:01
Instrument ID:	GCBE		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	7402213	929655
4,4'-DDE	4673566	613882
4,4'-DDT	824319372	86603325
DDT Breakdown [a]	1.4 %	1.8 %
Endrin aldehyde	2787183	303457
Endrin ketone	7065118	1202600
Endrin	469767963	65691952
Endrin Breakdown [b]	2.1 %	2.2 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GBE2772-IC2772	BE55331.D	06/26/17	21:30	00:29	Initial cal 5
GBE2772-IC2772	BE55332.D	06/26/17	21:44	00:43	Initial cal 10
GBE2772-IC2772	BE55333.D	06/26/17	21:59	00:58	Initial cal 50
GBE2772-ICC2772	BE55334.D	06/26/17	22:13	01:12	Initial cal 100
GBE2772-IC2772	BE55335.D	06/26/17	22:28	01:27	Initial cal 150
GBE2772-IC2772	BE55336.D	06/26/17	22:42	01:41	Initial cal 200
GBE2772-IC2772	BE55337.D	06/26/17	22:57	01:56	Initial cal 1000
GBE2772-IC2772	BE55338.D	06/26/17	23:11	02:10	Initial cal 500
GBE2772-ICV2772	BE55339.D	06/26/17	23:26	02:25	Initial cal verification 100
OP49806-MB	BE55340.D	06/26/17	23:40	02:39	Method Blank
OP49806-BS	BE55341.D	06/26/17	23:55	02:54	Blank Spike
MC50728-12	BE55342.D	06/27/17	00:09	03:08	B-4 1-3'
MC50728-13	BE55343.D	06/27/17	00:24	03:23	B-4 4-6'
MC50728-5	BE55344.D	06/27/17	00:38	03:37	B-1 2-4'
MC50728-6	BE55345.D	06/27/17	00:53	03:52	B-2 1-3'
MC50728-7	BE55346.D	06/27/17	01:07	04:06	B-2 3-5'
MC50728-8	BE55347.D	06/27/17	01:22	04:21	B-3 2-4'
MC50728-9	BE55348.D	06/27/17	01:36	04:35	B-3 6-8'
MC50728-11	BE55349.D	06/27/17	01:51	04:50	B-3 15-17'
GBE2772-ECC2772	BE55350.D	06/27/17	02:05	05:04	Ending cal 100

DDT/Endrin Breakdown Check

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample:	GBE2773-DDT	**Injection Date:**	06/27/17
Lab File ID:	BE55363.D	**Injection Time:**	12:12
Instrument ID:	GCBE		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	18732485	3597661
4,4'-DDE	5063543	616652
4,4'-DDT	321144132	36221496
DDT Breakdown [a]	6.9 %	10.4 %
Endrin aldehyde	1296555	241518
Endrin ketone	4191343	774588
Endrin	281971734	40119395
Endrin Breakdown [b]	1.9 %	2.5 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GBE2773-IC2773	BE55365.D	06/27/17	12:53	00:41	Initial cal 5
GBE2773-IC2773	BE55366.D	06/27/17	13:08	00:56	Initial cal 10
GBE2773-IC2773	BE55367.D	06/27/17	13:22	01:10	Initial cal 50
GBE2773-ICC2773	BE55368.D	06/27/17	13:37	01:25	Initial cal 100
GBE2773-IC2773	BE55369.D	06/27/17	13:51	01:39	Initial cal 150
GBE2773-IC2773	BE55370.D	06/27/17	14:06	01:54	Initial cal 200
GBE2773-IC2773	BE55371.D	06/27/17	14:20	02:08	Initial cal 1000
GBE2773-IC2773	BE55372.D	06/27/17	14:35	02:23	Initial cal 500
GBE2773-ICV2773	BE55373.D	06/27/17	14:49	02:37	Initial cal verification 100
MC50728-1	BE55375.D	06/27/17	15:18	03:05	HA-1 0-2'
MC50728-2	BE55376.D	06/27/17	15:33	03:20	HA-2 0-2'
MC50728-3	BE55377.D	06/27/17	15:47	03:35	HA-3 0-2'
MC50728-4	BE55378.D	06/27/17	16:02	03:50	B-1 0-2'
MC50728-4	BE55379.D	06/27/17	16:16	04:04	B-1 0-2'
MC50728-10	BE55380.D	06/27/17	16:31	04:19	B-3 10-12'
MC50728-14	BE55381.D	06/27/17	16:45	04:33	B-4 10-12'
MC50728-15	BE55382.D	06/27/17	17:00	04:48	B-4 14-16'
MC50728-16	BE55383.D	06/27/17	17:14	05:02	DUP
GBE2773-ECC2773	BE55384.D	06/27/17	17:29	05:17	Ending cal 100

Semivolatile Surrogate Recovery Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Method: SW846 8081B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
MC50728-1	BE55375.D	86	76	122	212* [c]
MC50728-2	BE55376.D	81	66	147	350* [c]
MC50728-3	BE55377.D	91	77	102	144
MC50728-4	BE55378.D	122	98	846* [d]	2189* [d]
MC50728-4	BE55379.D	88	81	498* [d]	2594* [d]
MC50728-5	BE55344.D	88	74	176* [c]	157
MC50728-6	BE55345.D	103	86	120	110
MC50728-7	BE55346.D	92	73	106	93
MC50728-8	BE55347.D	94	75	115	96
MC50728-9	BE55348.D	89	72	120	103
MC50728-10	BE55380.D	86	71	54	76
MC50728-11	BE55349.D	106	86	135	115
MC50728-12	BE55342.D	86	70	124	121
MC50728-13	BE55343.D	90	76	83	93
MC50728-14	BE55381.D	91	72	55	84
MC50728-15	BE55382.D	98	75	64	83
MC50728-16	BE55383.D	82	62	64	90
OP49806-BS	BE55341.D	102	81	131	111
OP49806-MB	BE55340.D	111	90	154	128

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	10-143%
S2 = Decachlorobiphenyl	10-172%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2
(c) Outside control limits due to possible matrix interference.
(d) Outside control limits due to matrix interference. Confirmed by reanalysis.

Semivolatile Surrogate Recovery Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Method: SW846 8082A **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
MC50728-1	BK65938.D	92	79	93	68
MC50728-2	BK65939.D	73	69	65	52
MC50728-3	BK65940.D	85	78	82	61
MC50728-4	BK65941.D	87	59	99	68
MC50728-5	BK65942.D	78	75	83	64
MC50728-6	BK65943.D	98	98	86	71
MC50728-7	BK65944.D	96	98	76	67
MC50728-8	BK65945.D	97	99	83	74
MC50728-9	BK65946.D	90	95	82	74
MC50728-10	BK65947.D	105	100	100	72
MC50728-11	BK65949.D	103	102	104	95
MC50728-12	BK65950.D	88	85	90	79
MC50728-13	BK65951.D	94	90	101	78
MC50728-14	BK65952.D	89	85	99	81
MC50728-15	BK65953.D	92	89	100	77
MC50728-16	BK65954.D	76	74	67	52
OP49805-BS	BK65936.D	97	92	76	52
OP49805-MB	BK65935.D	67	95	74	44

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	25-145%
S2 = Decachlorobiphenyl	25-179%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

Semivolatile Surrogate Recovery Summary

Job Number: MC50728
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Method: CT-ETPH 7/06 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
MC50728-1	CR5524.D	92
MC50728-2	CR5525.D	84
MC50728-3	CR5526.D	86
MC50728-4	CR5558.D	123
MC50728-5	CR5529.D	96
MC50728-6	CR5523.D	88
MC50728-7	CR5519.D	94
MC50728-8	CR5520.D	99
MC50728-9	CR5521.D	83
MC50728-10	CR5530.D	92
MC50728-11	CR5522.D	97
MC50728-12	CR5531.D	103
MC50728-13	CR5532.D	94
MC50728-14	CR5533.D	89
MC50728-15	CR5534.D	94
MC50728-16	CR5535.D	95
OP49804-BS	CR5518.D	99
OP49804-MB	CR5517.D	91

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	50-137%

(a) Recovery from GC signal #1

Misc. Forms

Custody Documents and Other Forms

(SGS Accutest New Jersey)

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- QC Evaluation: CT RCP Limits

CHAIN OF CUSTODY

SGS ACCUTEST

50 D'Angelo Drive, 495 Technology Center West, Bldg One, Marlborough, MA 01752
TEL: 508-481-6200 FAX: 508-481-7753
www.sgs.com

FED-EX Tracking # 7278 7516 3606
Bottle Order Control #
SGS Accutest Quote #
SGS Accutest Job MC50728

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 50 D'Angelo Drive, 495 Technolgy Center West, BLDG One
City State Zip: Marlbourough, MA 0175;
Project Contact E-mail: TAMMY MCCLOSKEY@Accutest.com
Phone #: 508-481-6200 Fax #:
Sampler(s) Name(s): WJ Phone:

Project Information

Project Name: Replacement of Bridge No. 03993, West Street, Middletown, CT
Street:
City State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	CREAC , IGN , PH , SOL104, SREAC , HMB	SOL104 , HMB	SPLPE, SPLPM								LAB USE ONLY
1	HA-1 0-2'		6/21/17	12:45:00 PM	WJ	SO	1					x				X										
1A	HA-1 0-2'		6/21/17	12:45:00 PM	WJ	SO												X								M29
2	HA-2 0-2'		6/21/17	12:20:00 PM	WJ	SO	1					x				X										
2A	HA-2 0-2'		6/21/17	12:20:00 PM	WJ	SO												X								
3	HA-3 0-2'		6/21/17	1:05:00 PM	WJ	SO	1					x				X										
3A	HA-3 0-2'		6/21/17	1:05:00 PM	WJ	SO												X								
4	B-1 0-2'		6/21/17	11:30:00 AM	WJ	SO	1					x				X										
4A	B-1 0-2'		6/21/17	11:30:00 AM	WJ	SO												X								
5	B-1 2-4'		6/21/17	11:30:00 AM	WJ	SO	1					x					X									
5A	B-1 2-4'		6/21/17	11:30:00 AM	WJ	SO												X								
6	B-2 1-3'		6/21/17	11:05:00 AM	WJ	SO	1					x				X										
6A	B-2 1-3'		6/21/17	11:05:00 AM	WJ	SO												X								

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 6/29/2017

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other CTRCP

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Ship to ALNJ -- 5 Day TAT
RCP Criteria Needed
FINAL ASESSMENT RJ 3B
LABEL VERIFICATION DG

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Tim	Received By:	Relinquished By:	Date Time:	Received By:
1	6-23-17	1 FEDEX	2 FEDEX	6-24-17 1020	2
3		3	4		4
5		5			

Custody Seal # 605 [ ] Intact [ ] Not intact
Preserved where applicable [ ]
On Ice [✓] Cooler Temp. 2.6 C

IP

91
9

CHAIN OF CUSTODY

SGS ACCUTEST

50 D'Angelo Drive, 495 Technology Center West, Bldg One, Marlborough, MA 01752
TEL. 508-481-6200 FAX: 508-481-7753
www.sgs.com

FED-EX Tracking #
Bottle Order Control #
SGS Accutest Quote #
SGS Accutest Job: MC50728

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 50 D'Angelo Drive, 495 Technology Center West, BLDG One
City State Zip: Marlbourough, MA 0175
Project Contact: TAMMY MCCLOSKEY@Accutest.com
E-mail:
Phone #: 508-481-6200
Fax #:
Sampler(s) Name(s): WJ
Phone:

Project Information

Project Name: Replacement of Bridge No. 03993, West Street, Middletown, CT
Street:
City State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	CREAC , IGN , PH , SOL104 , SREAC , HM8	SOL104 , HM8	SPLPE, SPLPM									LAB USE ONLY
7	B-2 3-5'		6/21/17	11:10:00 AM	WJ	SO	1					x					X										
7A	B-2 3-5'		6/21/17	11:10:00 AM	WJ	SO												X									
8	B-3 2-4'		6/21/17	10:10:00 AM	WJ	SO	1					x				X											
8A	B-3 2-4'		6/21/17	10:10:00 AM	WJ	SO												X									
9	B-3 6-8'		6/21/17	10:20:00 AM	WJ	SO	1					x					X										
9A	B-3 6-8'		6/21/17	10:20:00 AM	WJ	SO												X									
10	B-3 10-12'		6/21/17	10:30:00 AM	WJ	SO	1					x					X										
10A	B-3 10-12'		6/21/17	10:30:00 AM	WJ	SO												X									
11	B-3 15-17'		6/21/17	10:40:00 AM	WJ	SO	1					x					X										
11A	B-3 15-17'		6/21/17	10:40:00 AM	WJ	SO												X									
12	B-4 1-3'		6/21/17	9:10:00 AM	WJ	SO	1					x				X											
12A	B-4 1-3'		6/21/17	9:10:00 AM	WJ	SO												X									

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 6/29/2017

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other CTRCP

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Ship to ALNJ -- 5 Day TAT

RCP Criteria Needed

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Roy	6-21-17	1 FEDX	2 FEDEX	1020 6-24-17	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not intact	Preserved where applicable [ ]

On Ice [ ] Cooler Temp.

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MC50728: Chain of Custody
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CHAIN OF CUSTODY

SGS ACCUTEST

50 D'Angelo Drive, 495 Technology Center West, Bldg One, Marlborough, MA 01752
TEL. 508-481-6200 FAX: 508-481-7753
www.sgs.com

FED-EX Tracking #	Bottle Order Control #
SGS Accutest Quote #	SGS Accutest Job MC50728

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 50 D'Angelo Drive, 495 Technology Center West, BLDG One
City State Zip: Marlbourough, MA 0175
Project Contact E-mail: TAMMY MCCLOSKEY@Accutest.com
Phone #: 508-481-6200 Fax #:
Sampler(s) Name(s): WJ Phone:

Project Information

Project Name: Replacement of Bridge No. 03993, West Street, Middletown, CT
Street:
City State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	CREAC , IGN , PH , SOL104 , SREAC , HM8	SOL104 , HM8	SPLPE, SPLPM	LAB USE ONLY
13	B-4 4-6'		6/21/17	9:15:00 AM	WJ	SO	1					x					X		
13A	B-4 4-6'		6/21/17	9:15:00 AM	WJ	SO												X	
14	B-4 10-12'		6/21/17	9:40:00 AM	WJ	SO	1					x					X		
14A	B-4 10-12'		6/21/17	9:40:00 AM	WJ	SO												X	
15	B-4 14-16'		6/21/17	9:50:00 AM	WJ	SO	1					x					X		
15A	B-4 14-16'		6/21/17	9:50:00 AM	WJ	SO												X	
16	DUP		6/21/17	12:00:00 AM	WJ	SO	1					x					X		
16A	DUP		6/21/17	12:00:00 AM	WJ	SO												X	

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [x] other Due 6/29/2017

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [x] Other CTRCP

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Ship to ALNJ – 5 Day TAT
RCP Criteria Needed

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	6-23-17	1 FedEx	2 FED EX	6-24-17 1020	2 [signature]
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not intact	Preserved where applicable [ ]

On Ice [ ] Cooler Temp.

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MC50728: Chain of Custody
Page 3 of 4

SGS Accutest Sample Receipt Summary

Job Number: MC50728 **Client:** _____ **Project:** _____

Date / Time Received: 6/24/2017 10:20:00 AM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.6);

Cooler Temps (Corrected) °C: Cooler 1: (3.9);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

SM089-02
Rev. Date 12/1/16

9.1

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MC50728: Chain of Custody
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Internal Sample Tracking Chronicle

SGS Accutest New England

Job No: MC50728

BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-1	Collected: 21-JUN-17 12:45 By: WJ		Received: 22-JUN-17 By: DDH			
HA-1 0-2'						
MC50728-1	SW846 CHAP7/9034	26-JUN-17 03:19	MP	26-JUN-17	CD	SREAC
MC50728-1	SW846 CHAP7/9012 B	26-JUN-17 14:56	TG	26-JUN-17	CD	CREAC
MC50728-1	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-1	SW846 6010C	26-JUN-17 19:26	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-1	SW846 7471B	27-JUN-17 10:57	JPM	27-JUN-17	JPM	HG
MC50728-1	SW846 9045D	27-JUN-17 16:44	JA			PH
MC50728-1	SW846 1010A/ASTM D23	28-JUN-17 16:49	JA			IGN
MC50728-2	Collected: 21-JUN-17 12:20 By: WJ		Received: 22-JUN-17 By: DDH			
HA-2 0-2'						
MC50728-2	SW846 CHAP7/9034	26-JUN-17 03:19	MP	26-JUN-17	CD	SREAC
MC50728-2	SW846 CHAP7/9012 B	26-JUN-17 15:00	TG	26-JUN-17	CD	CREAC
MC50728-2	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-2	SW846 6010C	26-JUN-17 19:35	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-2	SW846 7471B	27-JUN-17 11:02	JPM	27-JUN-17	JPM	HG
MC50728-2	SW846 9045D	27-JUN-17 16:30	JA			PH
MC50728-2	SW846 1010A/ASTM D23	28-JUN-17 16:49	JA			IGN
MC50728-3	Collected: 21-JUN-17 13:05 By: WJ		Received: 22-JUN-17 By: DDH			
HA-3 0-2'						
MC50728-3	SW846 CHAP7/9034	26-JUN-17 03:19	MP	26-JUN-17	CD	SREAC
MC50728-3	SW846 CHAP7/9012 B	26-JUN-17 15:01	TG	26-JUN-17	CD	CREAC
MC50728-3	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-3	SW846 6010C	26-JUN-17 19:38	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-3	SW846 7471B	27-JUN-17 11:03	JPM	27-JUN-17	JPM	HG
MC50728-3	SW846 9045D	27-JUN-17 16:36	JA			PH
MC50728-3	SW846 1010A/ASTM D23	28-JUN-17 16:49	JA			IGN
MC50728-4	Collected: 21-JUN-17 11:30 By: WJ		Received: 22-JUN-17 By: DDH			
B-1 0-2'						
MC50728-4	SW846 CHAP7/9034	26-JUN-17 03:19	MP	26-JUN-17	CD	SREAC
MC50728-4	SW846 CHAP7/9012 B	26-JUN-17 15:03	TG	26-JUN-17	CD	CREAC
MC50728-4	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-4	SW846 6010C	26-JUN-17 19:41	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE

Internal Sample Tracking Chronicle

SGS Accutest New England

Job No: MC50728

BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-4	SW846 7471B	27-JUN-17 11:05	JPM	27-JUN-17	JPM	HG
MC50728-4	SW846 9045D	27-JUN-17 16:37	JA			PH
MC50728-4	SW846 1010A/ASTM D93	28-JUN-17 16:49	JA			IGN
MC50728-5	Collected: 21-JUN-17 11:30 By: WJ		Received: 22-JUN-17 By: DDH			
B-1 2-4'						
MC50728-5	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-5	SW846 6010C	26-JUN-17 19:44	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-5	SW846 7471B	27-JUN-17 11:06	JPM	27-JUN-17	JPM	HG
MC50728-6	Collected: 21-JUN-17 11:05 By: WJ		Received: 22-JUN-17 By: DDH			
B-2 1-3'						
MC50728-6	SW846 CHAP7/9034	26-JUN-17 03:19	MP	26-JUN-17	CD	SREAC
MC50728-6	SW846 CHAP7/9012 B	26-JUN-17 15:04	TG	26-JUN-17	CD	CREAC
MC50728-6	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-6	SW846 6010C	26-JUN-17 19:48	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-6	SW846 7471B	27-JUN-17 11:07	JPM	27-JUN-17	JPM	HG
MC50728-6	SW846 9045D	27-JUN-17 16:39	JA			PH
MC50728-6	SW846 1010A/ASTM D93	28-JUN-17 16:49	JA			IGN
MC50728-7	Collected: 21-JUN-17 11:10 By: WJ		Received: 22-JUN-17 By: DDH			
B-2 3-5'						
MC50728-7	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-7	SW846 6010C	26-JUN-17 19:13	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-7	SW846 7471B	27-JUN-17 11:09	JPM	27-JUN-17	JPM	HG
MC50728-8	Collected: 21-JUN-17 10:10 By: WJ		Received: 22-JUN-17 By: DDH			
B-3 2-4'						
MC50728-8	SW846 CHAP7/9034	26-JUN-17 03:19	MP	26-JUN-17	CD	SREAC
MC50728-8	SW846 CHAP7/9012 B	26-JUN-17 15:05	TG	26-JUN-17	CD	CREAC
MC50728-8	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-8	SW846 6010C	26-JUN-17 19:52	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-8	SW846 7471B	27-JUN-17 11:10	JPM	27-JUN-17	JPM	HG
MC50728-8	SW846 9045D	27-JUN-17 16:43	JA			PH
MC50728-8	SW846 1010A/ASTM D93	28-JUN-17 16:49	JA			IGN

Internal Sample Tracking Chronicle

SGS Accutest New England

Job No: MC50728

BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-9 B-3 6-8'	Collected: 21-JUN-17 10:20 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-9	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-9	SW846 6010C	26-JUN-17 19:55	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-9	SW846 7471B	27-JUN-17 11:12	JPM	27-JUN-17	JPM	HG
MC50728-10 B-3 10-12'	Collected: 21-JUN-17 10:30 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-10	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-10	SW846 6010C	26-JUN-17 19:58	ND	25-JUN-17	AA	AS,BA,CD,CR,PB
MC50728-10	SW846 7471B	27-JUN-17 11:13	JPM	27-JUN-17	JPM	HG
MC50728-10	SW846 6010C	27-JUN-17 12:41	AB	25-JUN-17	AA	AG,SE
MC50728-11 B-3 15-17'	Collected: 21-JUN-17 10:40 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-11	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-11	SW846 6010C	26-JUN-17 20:02	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-11	SW846 7471B	27-JUN-17 11:17	JPM	27-JUN-17	JPM	HG
MC50728-12 B-4 1-3'	Collected: 21-JUN-17 09:10 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-12	SW846 CHAP7/9034	26-JUN-17 03:19	MP	26-JUN-17	CD	SREAC
MC50728-12	SW846 CHAP7/9012 B	26-JUN-17 15:07	TG	26-JUN-17	CD	CREAC
MC50728-12	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-12	SW846 6010C	26-JUN-17 20:11	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-12	SW846 7471B	27-JUN-17 11:19	JPM	27-JUN-17	JPM	HG
MC50728-12	SW846 9045D	27-JUN-17 16:27	JA			PH
MC50728-12	SW846 1010A/ASTM D93	28-JUN-17 16:49	JA			IGN
MC50728-13 B-4 4-6'	Collected: 21-JUN-17 09:15 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-13	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-13	SW846 6010C	26-JUN-17 20:14	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-13	SW846 7471B	27-JUN-17 11:20	JPM	27-JUN-17	JPM	HG

Internal Sample Tracking Chronicle

SGS Accutest New England

Job No: MC50728

BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-14 B-4 10-12'	Collected: 21-JUN-17 09:40 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-14	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-14	SW846 6010C	26-JUN-17 20:17	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-14	SW846 7471B	27-JUN-17 11:21	JPM	27-JUN-17	JPM	HG
MC50728-15 B-4 14-16'	Collected: 21-JUN-17 09:50 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-15	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-15	SW846 6010C	26-JUN-17 20:20	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-15	SW846 7471B	27-JUN-17 11:23	JPM	27-JUN-17	JPM	HG
MC50728-16 DUP	Collected: 21-JUN-17 00:00 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-16	SM2540 G-97	26-JUN-17 17:00	DJ			SOL104
MC50728-16	SW846 6010C	26-JUN-17 20:23	ND	25-JUN-17	AA	AG,AS,BA,CD,CR,PB,SE
MC50728-16	SW846 7471B	27-JUN-17 11:24	JPM	27-JUN-17	JPM	HG
MC50728-1A HA-1 0-2'	Collected: 21-JUN-17 12:45 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-1A	SW846 7470A	27-JUN-17 11:41	JA	27-JUN-17	JA	EHG
MC50728-1A	SW846 6010C	27-JUN-17 15:01	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-2A HA-2 0-2'	Collected: 21-JUN-17 12:20 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-2A	SW846 7470A	27-JUN-17 11:43	JA	27-JUN-17	JA	EHG
MC50728-2A	SW846 6010C	27-JUN-17 15:10	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-3A HA-3 0-2'	Collected: 21-JUN-17 13:05 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-3A	SW846 7470A	27-JUN-17 11:44	JA	27-JUN-17	JA	EHG
MC50728-3A	SW846 6010C	27-JUN-17 15:14	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE

Internal Sample Tracking Chronicle

SGS Accutest New England

Job No: MC50728

BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-4A B-1 0-2'	Collected: 21-JUN-17 11:30 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-4A	SW846 7470A	27-JUN-17 11:45	JA	27-JUN-17	JA	EHG
MC50728-4A	SW846 6010C	27-JUN-17 15:19	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-5A B-1 2-4'	Collected: 21-JUN-17 11:30 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-5A	SW846 7470A	27-JUN-17 11:47	JA	27-JUN-17	JA	EHG
MC50728-5A	SW846 6010C	27-JUN-17 15:23	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-6A B-2 1-3'	Collected: 21-JUN-17 11:05 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-6A	SW846 7470A	27-JUN-17 11:48	JA	27-JUN-17	JA	EHG
MC50728-6A	SW846 6010C	27-JUN-17 15:27	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-7A B-2 3-5'	Collected: 21-JUN-17 11:10 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-7A	SW846 7470A	27-JUN-17 11:49	JA	27-JUN-17	JA	EHG
MC50728-7A	SW846 6010C	27-JUN-17 15:40	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-8A B-3 2-4'	Collected: 21-JUN-17 10:10 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-8A	SW846 7470A	27-JUN-17 11:50	JA	27-JUN-17	JA	EHG
MC50728-8A	SW846 6010C	27-JUN-17 15:44	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-9A B-3 6-8'	Collected: 21-JUN-17 10:20 By: WJ		Received: 22-JUN-17 By: DDH			
MC50728-9A	SW846 7470A	27-JUN-17 11:52	JA	27-JUN-17	JA	EHG
MC50728-9A	SW846 6010C	27-JUN-17 15:49	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-10A B-3 10-12'	Collected: 21-JUN-17 10:30 By: WJ		Received: 22-JUN-17 By: DDH			

Internal Sample Tracking Chronicle

SGS Accutest New England

Job No: MC50728

BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50728-10A	SW846 7470A	27-JUN-17 11:56	JA	27-JUN-17	JA	EHG
MC50728-10A	SW846 6010C	27-JUN-17 15:53	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-11A	Collected: 21-JUN-17 10:40 By: WJ		Received: 22-JUN-17 By: DDH			
B-3 15-17'						
MC50728-11A	SW846 7470A	27-JUN-17 11:57	JA	27-JUN-17	JA	EHG
MC50728-11A	SW846 6010C	27-JUN-17 15:57	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-12A	Collected: 21-JUN-17 09:10 By: WJ		Received: 22-JUN-17 By: DDH			
B-4 1-3'						
MC50728-12A	SW846 7470A	27-JUN-17 11:59	JA	27-JUN-17	JA	EHG
MC50728-12A	SW846 6010C	27-JUN-17 16:02	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-13A	Collected: 21-JUN-17 09:15 By: WJ		Received: 22-JUN-17 By: DDH			
B-4 4-6'						
MC50728-13A	SW846 7470A	27-JUN-17 12:00	JA	27-JUN-17	JA	EHG
MC50728-13A	SW846 6010C	27-JUN-17 16:06	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-14A	Collected: 21-JUN-17 09:40 By: WJ		Received: 22-JUN-17 By: DDH			
B-4 10-12'						
MC50728-14A	SW846 7470A	27-JUN-17 12:01	JA	27-JUN-17	JA	EHG
MC50728-14A	SW846 6010C	27-JUN-17 16:10	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-15A	Collected: 21-JUN-17 09:50 By: WJ		Received: 22-JUN-17 By: DDH			
B-4 14-16'						
MC50728-15A	SW846 7470A	27-JUN-17 12:03	JA	27-JUN-17	JA	EHG
MC50728-15A	SW846 6010C	27-JUN-17 16:15	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE
MC50728-16A	Collected: 21-JUN-17 00:00 By: WJ		Received: 22-JUN-17 By: DDH			
DUP						
MC50728-16A	SW846 7470A	27-JUN-17 12:04	JA	27-JUN-17	JA	EHG
MC50728-16A	SW846 6010C	27-JUN-17 16:27	ND	26-JUN-17	DP	EAG,EAS,EBA,ECD,ECR,EPB,ESE

QC Evaluation: CT RCP Limits

Job Number: MC50728
Account: SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 06/21/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

No Exceptions found.

* Sample used for QC is not from job MC50728

Metals Analysis

QC Data Summaries

(SGS Accutest New Jersey)

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1622
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 06/25/17

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.9	5.2		
Antimony	2.0	.26	.37		
Arsenic	2.0	.2	.25	-0.080	<2.0
Barium	20	.07	.17	-0.060	<20
Beryllium	0.20	.01	.049		
Bismuth	2.0	.4	.49		
Boron	10	.18	1.3		
Cadmium	0.50	.05	.057	0.0	<0.50
Calcium	500	1.5	42		
Chromium	1.0	.07	.18	0.23	<1.0
Cobalt	5.0	.06	.07		
Copper	2.5	.14	.39		
Iron	50	.47	4.6		
Lead	2.0	.24	.34	-0.020	<2.0
Lithium	5.0	.37	1.2		
Magnesium	500	2.8	13		
Manganese	1.5	.02	.087		
Molybdenum	2.0	.06	.15		
Nickel	4.0	.08	.25		
Palladium	5.0	.42			
Phosphorus	10	.8	4		
Potassium	1000	9.1	30		
Selenium	2.0	.2	.64	0.24	<2.0
Silicon	20	.18	2.5		
Silver	0.50	.1	.29	0.040	<0.50
Sodium	1000	2.7	14		
Strontium	5.0	.02	.95		
Sulfur	10	.23	2.9		
Thallium	1.0	.18	.4		
Tin	10	.12	2.6		
Titanium	1.0	.1	.27		
Tungsten	5.0	.27	1.2		
Vanadium	5.0	.1	.088		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1622
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 06/25/17

Metal	RL	IDL	MDL	MB raw	final
Zinc	5.0	.13	3.8		
Zirconium	2.0	.05	.25		

Associated samples MP1622: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1622
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 06/25/17

Metal	MC50728-7 Original	MS	Spikelot MPSPK2	% Rec	QC Limits
Aluminum	anr				
Antimony	anr				
Arsenic	3.0	179	207	85.2	75-125
Barium	38.4	229	207	92.2	75-125
Beryllium	anr				
Bismuth					
Boron					
Cadmium	0.23	180	207	87.0	75-125
Calcium	anr				
Chromium	13.3	202	207	91.3	75-125
Cobalt	anr				
Copper	anr				
Iron	anr				
Lead	6.3	191	207	89.4	75-125
Lithium					
Magnesium	anr				
Manganese	anr				
Molybdenum					
Nickel	anr				
Palladium					
Phosphorus					
Potassium	anr				
Selenium	0.0	178	207	86.1	75-125
Silicon					
Silver	0.0	22.9	25.8	88.7	75-125
Sodium	anr				
Strontium					
Sulfur					
Thallium	anr				
Tin					
Titanium					
Tungsten					
Vanadium	anr				

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1622 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 06/25/17

Metal	MC50728-7 Original MS	Spikelot MPSPK2	% Rec	QC Limits
Zinc	anr			
Zirconium				

Associated samples MP1622: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1622
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 06/25/17

Metal	MC50728-7 Original	MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	3.0	191	209	89.8	6.5	20
Barium	38.4	246	209	99.1	7.2	20
Beryllium	anr					
Bismuth						
Boron						
Cadmium	0.23	191	209	91.1	5.9	20
Calcium	anr					
Chromium	13.3	214	209	95.8	5.8	20
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	6.3	202	209	93.5	5.6	20
Lithium						
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	anr					
Palladium						
Phosphorus						
Potassium	anr					
Selenium	0.0	189	209	90.3	6.0	20
Silicon						
Silver	0.0	24.5	26.2	93.6	6.8	20
Sodium	anr					
Strontium						
Sulfur						
Thallium	anr					
Tin						
Titanium						
Tungsten						
Vanadium	anr					

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1622 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 06/25/17

Metal	MC50728-7 Original MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit
Zinc	anr				
Zirconium					

Associated samples MP1622: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1622
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			06/25/17					06/25/17	
Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits	LCS Result	Spikelot MPLC54091	% Rec	QC Limits
Aluminum	anr							
Antimony	anr							
Arsenic	187	200	93.5	80-120	141	145	97.2	79-121
Barium	199	200	99.5	80-120	230	209	110.0	83-117
Beryllium	anr							
Bismuth								
Boron								
Cadmium	191	200	95.5	80-120	83.4	87.6	95.2	83-118
Calcium	anr							
Chromium	205	200	102.5	80-120	153	143	107.0	80-120
Cobalt	anr							
Copper	anr							
Iron	anr							
Lead	197	200	98.5	80-120	166	146	113.7	82-118
Lithium								
Magnesium	anr							
Manganese	anr							
Molybdenum								
Nickel	anr							
Palladium								
Phosphorus								
Potassium	anr							
Selenium	194	200	97.0	80-120	169	178	94.9	79-121
Silicon								
Silver	24.5	25	98.0	80-120	28.7	31.3	91.7	75-125
Sodium	anr							
Strontium								
Sulfur								
Thallium	anr							
Tin								
Titanium								
Tungsten								
Vanadium	anr							

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1622 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date:		06/25/17				06/25/17	
Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits	LCS Result	Spikelot MPLC54091	% Rec	QC Limits
Zinc	anr							
Zirconium								

Associated samples MP1622: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1622
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 06/25/17

Metal	LCS Result	Spikelot MPLC54091	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	138	145	95.2	79-121
Barium	205	209	98.1	83-117
Beryllium	anr			
Bismuth				
Boron				
Cadmium	82.6	87.6	94.3	83-118
Calcium	anr			
Chromium	140	143	97.9	80-120
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	143	146	97.9	82-118
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Palladium				
Phosphorus				
Potassium	anr			
Selenium	166	178	93.3	79-121
Silicon				
Silver	27.8	31.3	88.8	75-125
Sodium	anr			
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1622 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 06/25/17

Metal	LCS Result	Spikelot MPLC54091% Rec	QC Limits
Zinc	anr		
Zirconium			

Associated samples MP1622: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1622
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 06/25/17

Metal	MC50728-7 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	28.7	20.2	29.6 (a)	0-10
Barium	366	380	3.8	0-10
Beryllium	anr			
Bismuth				
Boron				
Cadmium	2.20	0.00	100.0(a)	0-10
Calcium	anr			
Chromium	126	131	3.8	0-10
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	59.9	63.0	5.2	0-10
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Palladium				
Phosphorus				
Potassium	anr			
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium	anr			
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1622 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 06/25/17

Metal	MC50728-7 Original SDL 1:5	%DIF	QC Limits
Zinc	anr		
Zirconium			

Associated samples MP1622: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1635
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 06/26/17

Metal	RL	IDL	MDL	MB raw	final
Aluminum	1.0	.036	.17		
Antimony	0.50	.0095	.022		
Arsenic	0.50	.0075	.014	-0.00060	<0.50
Barium	1.0	.001	.0063	0.0039	<1.0
Beryllium	0.025	.0005	.002		
Bismuth	0.10	.013	.025		
Boron	0.50	.006	.067		
Cadmium	0.025	.0015	.0035	-0.00020	<0.025
Calcium	10	.017	.14		
Chromium	0.050	.004	.0043	0.0037	<0.050
Cobalt	0.25	.0025	.0036		
Copper	0.050	.0045	.016		
Iron	0.50	.014	.16		
Lead	0.50	.011	.013	0.0071	<0.50
Lithium	0.25	.016	.076		
Magnesium	10	.085	.32		
Manganese	0.075	.0005	.0021		
Molybdenum	0.10	.002	.007		
Nickel	0.050	.002	.0067		
Palladium	0.25	.0085			
Potassium	10	.23	1.2		
Selenium	0.50	.013	.033	0.0022	<0.50
Silicon	1.0	.011	.22		
Silver	0.050	.005	.016	0.0037	<0.050
Sodium	10	.081	.64		
Strontium	0.050	.0005	.0015		
Sulfur	0.25	.02	.075		
Thallium	0.50	.0095	.0082		
Tin	0.050	.0065	.012		
Titanium	0.050	.003	.0092		
Tungsten	0.25	.01	.071		
Vanadium	0.25	.004	.0064		
Zinc	0.10	.001	.002		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1635
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 06/26/17

Metal	RL	IDL	MDL	MB raw	final
Zirconium	0.050	.0025	.01		

Associated samples MP1635: MC50728-1A, MC50728-2A, MC50728-3A, MC50728-4A, MC50728-5A, MC50728-6A, MC50728-7A, MC50728-8A, MC50728-9A, MC50728-10A, MC50728-11A, MC50728-12A, MC50728-13A, MC50728-14A, MC50728-15A, MC50728-16A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1635
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 06/26/17

Metal	MC50728-1A Original	MS	Spikelot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	0.0	1.8	2.0	90.0	75-125
Barium	0.016	1.9	2.0	94.2	75-125
Beryllium					
Bismuth					
Boron					
Cadmium	0.0	1.8	2.0	90.0	75-125
Calcium					
Chromium	0.0069	1.9	2.0	94.7	75-125
Cobalt					
Copper					
Iron					
Lead	0.016	1.8	2.0	89.2	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Palladium					
Potassium					
Selenium	0.0	1.8	2.0	90.0	75-125
Silicon					
Silver	0.0	0.23	0.25	92.0	75-125
Sodium					
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium					
Zinc					

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1635
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 06/26/17

Metal	MC50728-1A Original MS	Spikelot MPSPK2	% Rec	QC Limits
Zirconium				

Associated samples MP1635: MC50728-1A, MC50728-2A, MC50728-3A, MC50728-4A, MC50728-5A, MC50728-6A, MC50728-7A, MC50728-8A, MC50728-9A, MC50728-10A, MC50728-11A, MC50728-12A, MC50728-13A, MC50728-14A, MC50728-15A, MC50728-16A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1635
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 06/26/17

Metal	MC50728-1A Original	MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.0	1.8	2.0	90.0	0.0	20
Barium	0.016	1.9	2.0	94.2	0.0	20
Beryllium						
Bismuth						
Boron						
Cadmium	0.0	1.8	2.0	90.0	0.0	20
Calcium						
Chromium	0.0069	1.8	2.0	89.7	5.4	20
Cobalt						
Copper						
Iron						
Lead	0.016	1.8	2.0	89.2	0.0	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Palladium						
Potassium						
Selenium	0.0	1.8	2.0	90.0	0.0	20
Silicon						
Silver	0.0	0.23	0.25	92.0	0.0	20
Sodium						
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium						
Zinc						

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1635
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 06/26/17

Metal	MC50728-1A Original MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit
Zirconium					

Associated samples MP1635: MC50728-1A, MC50728-2A, MC50728-3A, MC50728-4A, MC50728-5A, MC50728-6A, MC50728-7A, MC50728-8A, MC50728-9A, MC50728-10A, MC50728-11A, MC50728-12A, MC50728-13A, MC50728-14A, MC50728-15A, MC50728-16A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1635
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 06/26/17

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	1.9	2.0	95.0	80-120
Barium	2.0	2.0	100.0	80-120
Beryllium				
Bismuth				
Boron				
Cadmium	1.9	2.0	95.0	80-120
Calcium				
Chromium	2.0	2.0	100.0	80-120
Cobalt				
Copper				
Iron				
Lead	2.0	2.0	100.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Palladium				
Potassium				
Selenium	1.9	2.0	95.0	80-120
Silicon				
Silver	0.25	0.25	100.0	80-120
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1635
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 06/26/17

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Zirconium				

Associated samples MP1635: MC50728-1A, MC50728-2A, MC50728-3A, MC50728-4A, MC50728-5A, MC50728-6A, MC50728-7A, MC50728-8A, MC50728-9A, MC50728-10A, MC50728-11A, MC50728-12A, MC50728-13A, MC50728-14A, MC50728-15A, MC50728-16A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1635
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: ug/l

Prep Date: 06/26/17

Metal	MC50728-1A Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	15.8	15.9	0.6	0-10
Beryllium				
Bismuth				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	6.90	0.00	100.0(a)	0-10
Cobalt				
Copper				
Iron				
Lead	15.7	0.00	100.0(a)	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Palladium				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1635 Methods: SW846 6010C
Matrix Type: LEACHATE Units: ug/l

Prep Date: 06/26/17

Metal	MC50728-1A Original SDL 5:25 %DIF	QC Limits
Zirconium		

Associated samples MP1635: MC50728-1A, MC50728-2A, MC50728-3A, MC50728-4A, MC50728-5A, MC50728-6A, MC50728-7A, MC50728-8A, MC50728-9A, MC50728-10A, MC50728-11A, MC50728-12A, MC50728-13A, MC50728-14A, MC50728-15A, MC50728-16A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1642 Methods: SW846 7471B
Matrix Type: SOLID Units: mg/kg

Prep Date: 06/27/17

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.033	.0055	.015	0.0016	<0.033

Associated samples MP1642: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1642
Matrix Type: SOLID

Methods: SW846 7471B
Units: mg/kg

Prep Date: 06/27/17

Metal	MC50728-1 Original	MS	Spikelot HGPWS1	% Rec	QC Limits
Mercury	0.023	0.38	0.361	99.0	80-120

Associated samples MP1642: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1642 Methods: SW846 7471B
Matrix Type: SOLID Units: mg/kg

Prep Date: 06/27/17

Metal	MC50728-1 Original	MSD	Spikelot HGPWS1	% Rec	MSD RPD	QC Limit
Mercury	0.023	0.37	0.368	94.4	2.7	20

Associated samples MP1642: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1642
Matrix Type: SOLID

Methods: SW846 7471B
Units: mg/kg

Prep Date:		06/27/17					06/27/17	
Metal	BSP Result	Spikelot HGPWS1	% Rec	QC Limits	LCS Result	Spikelot HGLCS54085	% Rec	QC Limits
Mercury	0.34	0.333	102.1	80-120	9.1	8.37	108.7	73-128

Associated samples MP1642: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1642 Methods: SW846 7471B
Matrix Type: SOLID Units: mg/kg

Prep Date: 06/27/17

Metal	LCS Result	Spikelot HGLCS54085	% Rec	QC Limits
Mercury	9.1	8.37	108.7	73-128

Associated samples MP1642: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-5, MC50728-6, MC50728-7, MC50728-8, MC50728-9, MC50728-10, MC50728-11, MC50728-12, MC50728-13, MC50728-14, MC50728-15, MC50728-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1647
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: ug/l

Prep Date: 06/27/17

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.058	.083	-0.020	<0.20

Associated samples MP1647: MC50728-1A, MC50728-2A, MC50728-3A, MC50728-4A, MC50728-5A, MC50728-6A, MC50728-7A, MC50728-8A, MC50728-9A, MC50728-10A, MC50728-11A, MC50728-12A, MC50728-13A, MC50728-14A, MC50728-15A, MC50728-16A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1647
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: ug/l

Prep Date: 06/27/17

Metal	MC50728-1A Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	2.1	2	105.0	75-125

Associated samples MP1647: MC50728-1A, MC50728-2A, MC50728-3A, MC50728-4A, MC50728-5A, MC50728-6A, MC50728-7A, MC50728-8A, MC50728-9A, MC50728-10A, MC50728-11A, MC50728-12A, MC50728-13A, MC50728-14A, MC50728-15A, MC50728-16A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1647
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: ug/l

Prep Date: 06/27/17

Metal	MC50728-1A Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	1.9	2	95.0	10.0	20

Associated samples MP1647: MC50728-1A, MC50728-2A, MC50728-3A, MC50728-4A, MC50728-5A, MC50728-6A, MC50728-7A, MC50728-8A, MC50728-9A, MC50728-10A, MC50728-11A, MC50728-12A, MC50728-13A, MC50728-14A, MC50728-15A, MC50728-16A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

QC Batch ID: MP1647
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: ug/l

Prep Date: 06/27/17

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	1.8	2	90.0	80-120

Associated samples MP1647: MC50728-1A, MC50728-2A, MC50728-3A, MC50728-4A, MC50728-5A, MC50728-6A, MC50728-7A, MC50728-8A, MC50728-9A, MC50728-10A, MC50728-11A, MC50728-12A, MC50728-13A, MC50728-14A, MC50728-15A, MC50728-16A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

General Chemistry

QC Data Summaries

(SGS Accutest New Jersey)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide Reactivity	GP6220/GN66133	10	0.0	mg/kg	100	5.50	5.5(a)	.5-28%
Sulfide Reactivity	GP6219/GN66117	100	0.0	mg/kg	526	283	53.8	42-107%

Associated Samples:
Batch GP6219: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-6, MC50728-8, MC50728-12
Batch GP6220: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-6, MC50728-8, MC50728-12
(*) Outside of QC limits
(a) Recovery calculated from actual instrument reading.

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Cyanide Reactivity	GP6220/GN66133	MC50728-1	mg/kg	0.0	0.0	0.0	0-20%
Ignitability (Flashpoint)	GN66235	MC50728-1	Deg. F	>200	>200	0.0	0-10%
Sulfide Reactivity	GP6219/GN66117	MC50728-1	mg/kg	0.00	0.00	0.0	0-20%

Associated Samples:
Batch GP6219: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-6, MC50728-8, MC50728-12
Batch GP6220: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-6, MC50728-8, MC50728-12
Batch GN66235: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-6, MC50728-8, MC50728-12
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC50728
Account: ALNE - SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Sulfide Reactivity	GP6219/GN66117	MC50728-1	mg/kg	0.00	594	103	17.3N(a)	20-82%

Associated Samples:
Batch GP6219: MC50728-1, MC50728-2, MC50728-3, MC50728-4, MC50728-6, MC50728-8, MC50728-12
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.

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Automated Report

Technical Report for

BL Companies

Replacement of Bridge No. 03993, West Street, Middletown, CT

14EC0058

SGS Accutest Job Number: MC50847

Sampling Date: 07/13/17

Report to:

BL Companies
355 Research Parkway
Meriden, CT 06450
jkloss@blcompanies.com

ATTN: Joy Kloss

Total number of pages in report: 39

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Tammy McCloskey 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NJ (MA926) PA (6801121) LA (AI171119) ND (R-188) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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SGS Accutest

Sample Summary

BL Companies

Job No: MC50847

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC50847-1	07/13/17	11:25	MW	07/14/17	SO	Soil	B-1A(0-2')
MC50847-2	07/13/17	11:30	MW	07/14/17	SO	Soil	B-1B(0-2')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	BL Companies	**Job No**	MC50847
Site:	Replacement of Bridge No. 03993, West Street, Middletown, CT	**Report Date**	7/19/2017 4:20:37 PM

2 Sample(s) were collected on 07/13/2017 and were received at SGS Accutest New England on 07/14/2017 properly preserved, at 2.1 Deg. C and intact. These Samples received a job number of MC50847. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** N:OP4486

- Analysis performed at SGS Accutest, Dayton, NJ.

Extractables by GC By Method CT-ETPH 7/06

Matrix: SO **Batch ID:** OP49843

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM2540 G-97

Matrix: SO **Batch ID:** N:GN66945

- MC50847-2 for Solids, Percent: Analysis performed at SGS Accutest, Dayton, NJ.
- MC50847-1 for Solids, Percent: Analysis performed at SGS Accutest, Dayton, NJ.

SGS Accutest New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC50847).

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	SGS Accutest New England	**Job No**	MC50847
Site:	BLCTM: Replacement of Bridge No. 03993, West Street, Middletow	**Report Date**	7/19/2017 8:31:44 AM

On 07/15/2017, 2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 3.6 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of MC50847 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** OP4486

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC50847-1MS, MC50847-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Indeno(1,2,3-cd)pyrene, Phenanthrene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for Fluoranthene, Pyrene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method SM2540 G-97

Matrix: SO **Batch ID:** GN66945

- The data for SM2540 G-97 meets quality control requirements.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS Accutest is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS Accutest indicated via signature on the report cover

Summary of Hits

Job Number: MC50847
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 07/13/17

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC50847-1	**B-1A(0-2')**					
Acenaphthene [a]		88.9	39		ug/kg	SW846 8270D
Acenaphthylene [a]		1220	39		ug/kg	SW846 8270D
Anthracene [a]		845	39		ug/kg	SW846 8270D
Benzo(a)anthracene [a]		2860	39		ug/kg	SW846 8270D
Benzo(a)pyrene [a]		3290	39		ug/kg	SW846 8270D
Benzo(b)fluoranthene [a]		3350	39		ug/kg	SW846 8270D
Benzo(g,h,i)perylene [a]		2400	39		ug/kg	SW846 8270D
Benzo(k)fluoranthene [a]		2580	39		ug/kg	SW846 8270D
Chrysene [a]		3670	39		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene [a]		788	39		ug/kg	SW846 8270D
Fluoranthene [a]		6060	190		ug/kg	SW846 8270D
Fluorene [a]		145	39		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene [a]		2200	39		ug/kg	SW846 8270D
Naphthalene [a]		91.5	39		ug/kg	SW846 8270D
Phenanthrene [a]		2380	39		ug/kg	SW846 8270D
Pyrene [a]		5260	190		ug/kg	SW846 8270D
CT-ETPH (C9-C36)		222	19		mg/kg	CT-ETPH 7/06
MC50847-2	**B-1B(0-2')**					
Acenaphthene [a]		904	36		ug/kg	SW846 8270D
Acenaphthylene [a]		15000	360		ug/kg	SW846 8270D
Anthracene [a]		7940	360		ug/kg	SW846 8270D
Benzo(a)anthracene [a]		24400	360		ug/kg	SW846 8270D
Benzo(a)pyrene [a]		35300	360		ug/kg	SW846 8270D
Benzo(b)fluoranthene [a]		33900	360		ug/kg	SW846 8270D
Benzo(g,h,i)perylene [a]		32000	360		ug/kg	SW846 8270D
Benzo(k)fluoranthene [a]		30500	360		ug/kg	SW846 8270D
Chrysene [a]		34200	360		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene [a]		8470	360		ug/kg	SW846 8270D
Fluoranthene [a]		62800	3600		ug/kg	SW846 8270D
Fluorene [a]		1250	36		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene [a]		28800	360		ug/kg	SW846 8270D
2-Methylnaphthalene [a]		288	72		ug/kg	SW846 8270D
Naphthalene [a]		750	36		ug/kg	SW846 8270D
Phenanthrene [a]		20100	360		ug/kg	SW846 8270D
Pyrene [a]		53900	3600		ug/kg	SW846 8270D
CT-ETPH (C9-C36)		2050	86		mg/kg	CT-ETPH 7/06

(a) Analysis performed at SGS Accutest, Dayton, NJ.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	B-1A(0-2')		
Lab Sample ID:	MC50847-1	**Date Sampled:**	07/13/17
Matrix:	SO - Soil	**Date Received:**	07/14/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M135733.D	1	07/17/17 02:32	ANJ	07/16/17 03:30	N:OP4486	N:EM5827
Run #2 [a]	M135754.D	5	07/17/17 18:21	ANJ	07/16/17 03:30	N:OP4486	N:EM5828

	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2	30.7 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	88.9	39	ug/kg	
208-96-8	Acenaphthylene	1220	39	ug/kg	
120-12-7	Anthracene	845	39	ug/kg	
56-55-3	Benzo(a)anthracene	2860	39	ug/kg	
50-32-8	Benzo(a)pyrene	3290	39	ug/kg	
205-99-2	Benzo(b)fluoranthene	3350	39	ug/kg	
191-24-2	Benzo(g,h,i)perylene	2400	39	ug/kg	
207-08-9	Benzo(k)fluoranthene	2580	39	ug/kg	
218-01-9	Chrysene	3670	39	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	788	39	ug/kg	
206-44-0	Fluoranthene	6060 [b]	190	ug/kg	
86-73-7	Fluorene	145	39	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	2200	39	ug/kg	
91-57-6	2-Methylnaphthalene	ND	77	ug/kg	
91-20-3	Naphthalene	91.5	39	ug/kg	
85-01-8	Phenanthrene	2380	39	ug/kg	
129-00-0	Pyrene	5260 [b]	190	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	70%	66%	26-134%
321-60-8	2-Fluorobiphenyl	79%	76%	39-124%
1718-51-0	Terphenyl-d14	85%	84%	36-134%

(a) Analysis performed at SGS Accutest, Dayton, NJ.
(b) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1A(0-2')		
Lab Sample ID:	MC50847-1	**Date Sampled:**	07/13/17
Matrix:	SO - Soil	**Date Received:**	07/14/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	84.1
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5661.D	1	07/19/17 13:31	AP	07/18/17 12:00	OP49843	GCR1338
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	222	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1B(0-2')		
Lab Sample ID:	MC50847-2	**Date Sampled:**	07/13/17
Matrix:	SO - Soil	**Date Received:**	07/14/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	92.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M135734.D	1	07/17/17 03:04	ANJ	07/16/17 03:30	N:OP4486	N:EM5827
Run #2 [a]	M135755.D	10	07/17/17 18:53	ANJ	07/16/17 03:30	N:OP4486	N:EM5828
Run #3 [a]	M135800.D	100	07/18/17 13:47	ANJ	07/16/17 03:30	N:OP4486	N:EM5830

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2	30.2 g	1.0 ml
Run #3	30.2 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	904	36	ug/kg	
208-96-8	Acenaphthylene	15000 [b]	360	ug/kg	
120-12-7	Anthracene	7940 [b]	360	ug/kg	
56-55-3	Benzo(a)anthracene	24400 [b]	360	ug/kg	
50-32-8	Benzo(a)pyrene	35300 [b]	360	ug/kg	
205-99-2	Benzo(b)fluoranthene	33900 [b]	360	ug/kg	
191-24-2	Benzo(g,h,i)perylene	32000 [b]	360	ug/kg	
207-08-9	Benzo(k)fluoranthene	30500 [b]	360	ug/kg	
218-01-9	Chrysene	34200 [b]	360	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	8470 [b]	360	ug/kg	
206-44-0	Fluoranthene	62800 [c]	3600	ug/kg	
86-73-7	Fluorene	1250	36	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	28800 [b]	360	ug/kg	
91-57-6	2-Methylnaphthalene	288	72	ug/kg	
91-20-3	Naphthalene	750	36	ug/kg	
85-01-8	Phenanthrene	20100 [b]	360	ug/kg	
129-00-0	Pyrene	53900 [c]	3600	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
4165-60-0	Nitrobenzene-d5	74%	70%	54%	26-134%
321-60-8	2-Fluorobiphenyl	78%	80%	70%	39-124%
1718-51-0	Terphenyl-d14	78%	84%	84%	36-134%

(a) Analysis performed at SGS Accutest, Dayton, NJ.
(b) Result is from Run# 2
(c) Result is from Run# 3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1B(0-2')		
Lab Sample ID:	MC50847-2	**Date Sampled:**	07/13/17
Matrix:	SO - Soil	**Date Received:**	07/14/17
Method:	CT-ETPH 7/06 SW846 3546	**Percent Solids:**	92.4
Project:	Replacement of Bridge No. 03993, West Street, Middletown, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CR5663.D	5	07/19/17 15:02	AP	07/18/17 12:00	OP49843	GCR1338
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	2050	86	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		50-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- RCP Form
- RCP Form (SGS Accutest New Jersey)
- Sample Tracking Chronicle
- QC Evaluation: CT RCP Limits

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest of New England
50 D'Angelo Drive/495 Technology Center West, Building One Marlborough, MA 01752
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job #: MC50847

Client / Reporting Information

Company Name: BL Companies
Street Address: 355 Research Parkway
City State Zip: Meriden CT 06450
Project Contact E-mail: Joy Kloss jkloss@blcompanies.com
Phone # Fax #: (203) 630-1406
Sampler(s) Name(s) Phone #: Matt Walker (860)681-7670

Project Information

Project Name: Replacement of Bridge No. 03993
Street: West St.
City: Middletown
Project#: 14EC0058
Client PO#: PM4 2017 337
Project Manager: Joy Kloss

Billing Information (If different from Report to)

Company Name:
Street Address:
City State Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB- Equipment Blank
RB- Rinse Blank
TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	PAHs	ETPH	LAB USE ONLY
-1	B-1a (0-2')		7/13/17	11:25	MW	S	1										X	X	
-2	B-1b (0-2')		7/13/17	11:30	MW	S	1										X	X	

Turnaround Time (Business days)

- ☐ Std. 10 Business Days
- ☑ Std. 5 Business Days (By Contract only)
- ☐ 5 Day *RUSH*
- ☑ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:

RUSH!

Data Deliverable Information

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULLT1 (Level 3+4)
- ☑ CT RCP
- ☐ MA MCP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format
- ☐ Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Matt Walker	7/13/17 11:50	1 BL Fridge	2 [signature]	7-14-17 10:40	2 [signature]
Relinquished by Sampler: 3 [signature]	Date Time: 7-14-17 1530	Received By: 3 [signature]	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time: 1540	Received By: 5	Custody Seal #	☐ Intact ☐ Not intact	Preserved where applicable ☐ On Ice ☑ Cooler Temp. 2.6

MC50847: Chain of Custody
Page 1 of 2

SGS Accutest NE Sample Receipt Summary

Job Number: MC50847 **Client:** BL COMPANIES **Project:** REPLACEMENT OF BRIDGE No 03993

Date / Time Received: 7/14/2017 6:30:00 PM **Delivery Method:** SGS Courier **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1 (2.6 / 2.1);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☐		☑	3. COC Present:	☑		☐
2. Custody Seals Intact:	☐		☑	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Thermometer ID:	;
3. Cooler media:	Ice (Bag)
4. No. Coolers:	1

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

5.1

5

MC50847: Chain of Custody

Page 2 of 2

Reasonable Confidence Protocol
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: **SGS Accutest- Marlborough** **Client:** **BL Companies**

Project Location: **Replacement of Bridge No. 03993, West Street, Middletown, CT** **Project Number:** **14EC0058**

Sampling Date(s): **7/13/2017**

Laboratory Sample ID(s): MC50847-1, MC50847-2

Methods: CT-ETPH 7/06, SM2540 G-97, SW846 8270D

1	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 CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes ☑ No ☐
1A	Where all the method specified preservation and holding time requirements met?	Yes ☑ No ☐
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes ☐ No ☐ NA ☑
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes ☑ No ☐
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No ☐
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ☐ No ☑
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes ☑ No ☐
	b) Were these reporting limits met?	Yes ☑ No ☐
6	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?	Yes ☐ No ☑
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ☑ No ☐

Note: 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".

I, the undersigned, attest under 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: Position: Lab Director

Printed Name: H. (Brad) Madadian Date: 7/19/2017
SGS Accutest- Marlborough

Reasonable Confidence Protocol
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: **Accutest New England** **Client:** **SGS Accutest New England**

Project Location: **BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT** **Project Number:** **BLCTM27045**

Sampling Date(s): **7/13/2017**

Laboratory Sample ID(s): MC50847-1, MC50847-2

Methods: SM2540 G-97, SW846 8270D

1	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 CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes ☑ No ☐
1A	Where all the method specified preservation and holding time requirements met?	Yes ☑ No ☐
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes ☐ No ☐ NA ☑
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes ☑ No ☐
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No ☐
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ☐ No ☑
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes ☑ No ☐
	b) Were these reporting limits met?	Yes ☑ No ☐
6	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?	Yes ☐ No ☑
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ☑ No ☐

Note: 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".

I, the undersigned, attest under 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: Nancy F. Cole Position: Lab Director

Printed Name: Nancy Cole Date: 7/19/2017
Mid-Atlantic Laboratory

Internal Sample Tracking Chronicle

BL Companies

Job No: MC50847

Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50847-1 B-1A(0-2')	Collected: 13-JUL-17 11:25 By: MW		Received: 14-JUL-17 By: TF			
MC50847-1	SW846 8270D	17-JUL-17 02:32	ANJ	16-JUL-17	ANJ	B8270PAH + 2MNAP
MC50847-1	SM2540 G-97	17-JUL-17 15:15	ANJ			SOL104
MC50847-1	SW846 8270D	17-JUL-17 18:21	ANJ	16-JUL-17	ANJ	B8270PAH + 2MNAP
MC50847-1	CT-ETPH 7/06	19-JUL-17 13:31	AP	18-JUL-17	AJ	BCTTPH
MC50847-2 B-1B(0-2')	Collected: 13-JUL-17 11:30 By: MW		Received: 14-JUL-17 By: TF			
MC50847-2	SW846 8270D	17-JUL-17 03:04	ANJ	16-JUL-17	ANJ	B8270PAH + 2MNAP
MC50847-2	SM2540 G-97	17-JUL-17 15:15	ANJ			SOL104
MC50847-2	SW846 8270D	17-JUL-17 18:53	ANJ	16-JUL-17	ANJ	B8270PAH + 2MNAP
MC50847-2	SW846 8270D	18-JUL-17 13:47	ANJ	16-JUL-17	ANJ	B8270PAH + 2MNAP
MC50847-2	CT-ETPH 7/06	19-JUL-17 15:02	AP	18-JUL-17	AJ	BCTTPH

QC Evaluation: CT RCP Limits

Job Number: MC50847
Account: BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 07/13/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

No Exceptions found.

* Sample used for QC is not from job MC50847

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC50847
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49843-MB	CR5659.D	1	07/19/17	AP	07/18/17	OP49843	GCR1338

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

MC50847-1, MC50847-2

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	ND	17	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	98%	50-137%

Blank Spike Summary

Job Number: MC50847
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49843-BS	CR5660.D	1	07/19/17	AP	07/18/17	OP49843	GCR1338

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

MC50847-1, MC50847-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	CT-ETPH (C9-C36)	46.7	34.2	73	60-120

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	102%	50-137%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: MC50847
Account: BLCTM BL Companies
Project: Replacement of Bridge No. 03993, West Street, Middletown, CT

Method: CT-ETPH 7/06 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
MC50847-1	CR5661.D	92
MC50847-2	CR5663.D	95
OP49843-BS	CR5660.D	102
OP49843-MB	CR5659.D	98

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	50-137%

(a) Recovery from GC signal #1

Misc. Forms

Custody Documents and Other Forms

(SGS Accutest New Jersey)

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- QC Evaluation: CT RCP Limits

CHAIN OF CUSTODY

SGS ACCUTEST

50 D'Angelo Drive, 495 Technology Center West, Bldg One, Marlborough, MA 01752
TEL. 508-481-6200 FAX: 508-481-7753
www.sgs.com

FED-EX Tracking # 7273 7516 4381
Bottle Order Control #
SGS Accutest Quote #
SGS Accutest Job MC50847

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 50 D'Angelo Drive, 495 Technology Center West, BLDG One
City State Zip: Marlbourough, MA 01752
Project Contact E-mail: TAMMY MCCLOSKEY@Accutest.com
Phone #: 508-481-6200 Fax #:
Sampler(s) Name(s): MW Phone:

Project Information

Project Name: Replacement of Bridge No. 03993, West Street, Middletown, CT
Street:
City State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	B8270PAH_SOL104	LAB USE ONLY
1	B-1A(0-2')		7/12/17	11:25:00 AM	MW	SO	1					x				X	
2	B-1B(0-2')		7/12/17	11:30:00 AM	MW	SO	1					x				X	D22

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 7/19/2017

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:

RUSH!

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other CTRCP

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Ship to ALNJ – 3 Day RUSH

RCP Criteria Needed

INITIAL ASESSMENT 3B Dom

LABEL VERIFICATION DG

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	7-14-17	1 FEDX	2 FX	7/15/17 10:30	2
3		3	4		4
5		5			

Custody Seal # 6477648 [✓] Intact [ ] Not intact
Preserved where applicable [ ]
On Ice [✓]
Cooler Temp. 2.3°C

7.1

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MC50847: Chain of Custody
Page 1 of 4
SGS Accutest New Jersey

CHAIN OF CUSTODY

SGS ACCUTEST

50 D'Angelo Drive, 495 Technology Center West, Bldg One, Marlborough, MA 01752
TEL. 508-481-6200 FAX. 508-481-7753
www.sgs.com

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job: MC50847
REV 7/14/17 tsf

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 50 D'Angelo Drive, 495 Technology Center West, BLDG One
City State Zip: Marlbourough, MA 0175:
Project Contact E-mail: TAMMY MCCLOSKEY@Accutest.com
Phone #: 508-481-6200 Fax #:
Sampler(s) Name(s): MW Phone:

Project Information

Project Name: Replacement of Bridge No. 03993, West Street, Middletown, CT
Street:
City State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

SGS Accutest Sample #	Field ID / Point of Collection	MEOHD: Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	B8270PAH+2MNAP_SOL104										LAB USE ONLY
1	B-1A(0-2')		7/13/17	11:25:00 AM	MW	SO	1					x				X										
2	B-1B(0-2')		7/13/17	11:30:00 AM	MW	SO	1					x				X										

Number of preserved Bottles

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [x] other Due 7/19/2017

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [x] Other CTRCP

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Ship to ALNJ – 3 Day RUSH

RCP Criteria Needed

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		1	2		2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not intact	Preserved where applicable [ ] On Ice [ ] Cooler Temp.

7.1

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MC50847: Chain of Custody
Page 2 of 4

CHAIN OF CUSTODY

SGS ACCUTEST

50 D'Angelo Drive, 495 Technology Center West, Bldg One, Marlborough, MA 01752
TEL. 508-481-6200 FAX: 508-481-7753
www.sgs.com

FED-EX Tracking # 7273 7516 4381
Bottle Order Control #
SGS Accutest Quote #
SGS Accutest Job MC50847

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 50 D'Angelo Drive, 495 Technology Center West, BLDG One
City State Zip: Marlbourough, MA 0175:
Project Contact E-mail: TAMMY MCCLOSKEY@Accutest.com
Phone # 508-481-6200 Fax #
Sampler(s) Name(s) MW Phone

Project Information

Project Name: Replacement of Bridge No. 03993, West Street, Middletown, CT
Street
City State
Project #
Client Purchase Order #
Project Manager

Billing Information (if different from Report to)
Company Name
Street Address
City State Zip
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	B8270PAH,SOL104,										LAB USE ONLY
1	B-1A(0-2')		7/12/17	11:25:00 AM	MW	SO	1					x				X										
2	B-1B(0-2')		7/12/17	11:30:00 AM	MW	SO	1					x				X										D22

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 7/19/2017

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:

RUSH!

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other CTRCP

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Ship to ALNJ -- 3 Day RUSH
RCP Criteria Needed
INITIAL ASESSMENT 3B Dom
LABEL VERIFICATION PD

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Tir	Received By:	Relinquished By:	Date Time:	Received By:
1	7-14-17	1 PED X	2 FX	7/15/17 10:20	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 6477648 [✓] Intact [ ] Not intact	Preserved where applicable [ ]	On Ice [✓] Cooler Temp. 2.3°C

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MC50847: Chain of Custody
Page 3 of 4

SGS Accutest Sample Receipt Summary

Job Number: MC50847 **Client:** _____ **Project:** _____

Date / Time Received: 7/15/2017 10:20:00 AM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.3);

Cooler Temps (Corrected) °C: Cooler 1: (3.6);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

SM089-02
Rev. Date 12/1/16

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MC50847: Chain of Custody
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Internal Sample Tracking Chronicle

SGS Accutest New England

Job No: MC50847

BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT
Project No: 14EC0058

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC50847-1 B-1A(0-2')	Collected: 13-JUL-17 11:25 By: MW		Received: 14-JUL-17 By: DDH			
MC50847-1	SW846 8270D	17-JUL-17 02:32	CS	16-JUL-17	SA	B8270PAH + 2MNAP
MC50847-1	SM2540 G-97	17-JUL-17 15:15	DJ			SOL104
MC50847-1	SW846 8270D	17-JUL-17 18:21	SB	16-JUL-17	SA	B8270PAH + 2MNAP
MC50847-2 B-1B(0-2')	Collected: 13-JUL-17 11:30 By: MW		Received: 14-JUL-17 By: DDH			
MC50847-2	SW846 8270D	17-JUL-17 03:04	CS	16-JUL-17	SA	B8270PAH + 2MNAP
MC50847-2	SM2540 G-97	17-JUL-17 15:15	DJ			SOL104
MC50847-2	SW846 8270D	17-JUL-17 18:53	SB	16-JUL-17	SA	B8270PAH + 2MNAP
MC50847-2	SW846 8270D	18-JUL-17 13:47	SB	16-JUL-17	SA	B8270PAH + 2MNAP

QC Evaluation: CT RCP Limits

Job Number: MC50847
Account: SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 07/13/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP4486	SW846 8270D						
OP4486-BS1	83-32-9	Acenaphthene	BSP	REC	80	%	40-140
OP4486-BS1	208-96-8	Acenaphthylene	BSP	REC	74	%	40-140
OP4486-BS1	120-12-7	Anthracene	BSP	REC	80	%	40-140
OP4486-BS1	56-55-3	Benzo(a)anthracene	BSP	REC	88	%	40-140
OP4486-BS1	50-32-8	Benzo(a)pyrene	BSP	REC	85	%	40-140
OP4486-BS1	205-99-2	Benzo(b)fluoranthene	BSP	REC	80	%	40-140
OP4486-BS1	191-24-2	Benzo(g,h,i)perylene	BSP	REC	81	%	40-140
OP4486-BS1	207-08-9	Benzo(k)fluoranthene	BSP	REC	86	%	40-140
OP4486-BS1	218-01-9	Chrysene	BSP	REC	86	%	40-140
OP4486-BS1	53-70-3	Dibenzo(a,h)anthracene	BSP	REC	83	%	40-140
OP4486-BS1	206-44-0	Fluoranthene	BSP	REC	89	%	40-140
OP4486-BS1	86-73-7	Fluorene	BSP	REC	82	%	40-140
OP4486-BS1	193-39-5	Indeno(1,2,3-cd)pyrene	BSP	REC	79	%	40-140
OP4486-BS1	91-57-6	2-Methylnaphthalene	BSP	REC	76	%	40-140
OP4486-BS1	91-20-3	Naphthalene	BSP	REC	71	%	40-140
OP4486-BS1	85-01-8	Phenanthrene	BSP	REC	80	%	40-140
OP4486-BS1	129-00-0	Pyrene	BSP	REC	83	%	40-140
OP4486-BS1	4165-60-0	Nitrobenzene-d5	BSP	SURR	79	%	30-130
OP4486-BS1	321-60-8	2-Fluorobiphenyl	BSP	SURR	84	%	30-130
OP4486-BS1	1718-51-0	Terphenyl-d14	BSP	SURR	110	%	30-130
OP4486-MS	83-32-9	Acenaphthene	MS	REC	53	%	40-140
OP4486-MS	208-96-8	Acenaphthylene	MS	REC	27	%	40-140
OP4486-MS	120-12-7	Anthracene	MS	REC	35	%	40-140
OP4486-MS	56-55-3	Benzo(a)anthracene	MS	REC	0 [a]	%	40-140
OP4486-MS	50-32-8	Benzo(a)pyrene	MS	REC	0 [a]	%	40-140
OP4486-MS	205-99-2	Benzo(b)fluoranthene	MS	REC	0 [a]	%	40-140
OP4486-MS	191-24-2	Benzo(g,h,i)perylene	MS	REC	3 [a]	%	40-140
OP4486-MS	207-08-9	Benzo(k)fluoranthene	MS	REC	0 [a]	%	40-140
OP4486-MS	218-01-9	Chrysene	MS	REC	0 [a]	%	40-140
OP4486-MS	53-70-3	Dibenzo(a,h)anthracene	MS	REC	36	%	40-140
OP4486-MS	206-44-0	Fluoranthene	MS	REC	0 [b]	%	40-140
OP4486-MS	86-73-7	Fluorene	MS	REC	56	%	40-140
OP4486-MS	193-39-5	Indeno(1,2,3-cd)pyrene	MS	REC	5 [a]	%	40-140
OP4486-MS	91-57-6	2-Methylnaphthalene	MS	REC	54	%	40-140
OP4486-MS	91-20-3	Naphthalene	MS	REC	48	%	40-140
OP4486-MS	85-01-8	Phenanthrene	MS	REC	0 [a]	%	40-140
OP4486-MS	129-00-0	Pyrene	MS	REC	0 [b]	%	40-140
OP4486-MS	4165-60-0	Nitrobenzene-d5	MS	SURR	57	%	30-130
OP4486-MS	321-60-8	2-Fluorobiphenyl	MS	SURR	58	%	30-130
OP4486-MS	1718-51-0	Terphenyl-d14	MS	SURR	65	%	30-130
OP4486-MSD	83-32-9	Acenaphthene	MSD	REC	64	%	40-140
OP4486-MSD	83-32-9	Acenaphthene	MSD	RPD	15	%	30

* Sample used for QC is not from job MC50847

QC Evaluation: CT RCP Limits

Job Number: MC50847
Account: SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 07/13/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP4486-MSD	208-96-8	Acenaphthylene	MSD	REC	48	%	40-140
OP4486-MSD	208-96-8	Acenaphthylene	MSD	RPD	20	%	30
OP4486-MSD	120-12-7	Anthracene	MSD	REC	52	%	40-140
OP4486-MSD	120-12-7	Anthracene	MSD	RPD	18	%	30
OP4486-MSD	56-55-3	Benzo(a)anthracene	MSD	REC	29	%	40-140
OP4486-MSD	56-55-3	Benzo(a)anthracene	MSD	RPD	21	%	30
OP4486-MSD	50-32-8	Benzo(a)pyrene	MSD	REC	23	%	40-140
OP4486-MSD	50-32-8	Benzo(a)pyrene	MSD	RPD	23	%	30
OP4486-MSD	205-99-2	Benzo(b)fluoranthene	MSD	REC	15	%	40-140
OP4486-MSD	205-99-2	Benzo(b)fluoranthene	MSD	RPD	25	%	30
OP4486-MSD	191-24-2	Benzo(g,h,i)perylene	MSD	REC	36	%	40-140
OP4486-MSD	191-24-2	Benzo(g,h,i)perylene	MSD	RPD	23	%	30
OP4486-MSD	207-08-9	Benzo(k)fluoranthene	MSD	REC	32	%	40-140
OP4486-MSD	207-08-9	Benzo(k)fluoranthene	MSD	RPD	22	%	30
OP4486-MSD	218-01-9	Chrysene	MSD	REC	20	%	40-140
OP4486-MSD	218-01-9	Chrysene	MSD	RPD	22	%	30
OP4486-MSD	53-70-3	Dibenzo(a,h)anthracene	MSD	REC	61	%	40-140
OP4486-MSD	53-70-3	Dibenzo(a,h)anthracene	MSD	RPD	26	%	30
OP4486-MSD	206-44-0	Fluoranthene	MSD	REC	0 [b]	%	40-140
OP4486-MSD	206-44-0	Fluoranthene	MSD	RPD	21	%	30
OP4486-MSD	86-73-7	Fluorene	MSD	REC	65	%	40-140
OP4486-MSD	86-73-7	Fluorene	MSD	RPD	10	%	30
OP4486-MSD	193-39-5	Indeno(1,2,3-cd)pyrene	MSD	REC	37	%	40-140
OP4486-MSD	193-39-5	Indeno(1,2,3-cd)pyrene	MSD	RPD	23	%	30
OP4486-MSD	91-57-6	2-Methylnaphthalene	MSD	REC	61	%	40-140
OP4486-MSD	91-57-6	2-Methylnaphthalene	MSD	RPD	10	%	30
OP4486-MSD	91-20-3	Naphthalene	MSD	REC	59	%	40-140
OP4486-MSD	91-20-3	Naphthalene	MSD	RPD	16	%	30
OP4486-MSD	85-01-8	Phenanthrene	MSD	REC	29	%	40-140
OP4486-MSD	85-01-8	Phenanthrene	MSD	RPD	21	%	30
OP4486-MSD	129-00-0	Pyrene	MSD	REC	0 [b]	%	40-140
OP4486-MSD	129-00-0	Pyrene	MSD	RPD	24	%	30
OP4486-MSD	4165-60-0	Nitrobenzene-d5	MSD	SURR	67	%	30-130
OP4486-MSD	321-60-8	2-Fluorobiphenyl	MSD	SURR	69	%	30-130
OP4486-MSD	1718-51-0	Terphenyl-d14	MSD	SURR	77	%	30-130
OP4486-MB1	4165-60-0	Nitrobenzene-d5	MB	SURR	70	%	30-130
OP4486-MB1	321-60-8	2-Fluorobiphenyl	MB	SURR	71	%	30-130
OP4486-MB1	1718-51-0	Terphenyl-d14	MB	SURR	77	%	30-130
MC50847-1	4165-60-0	Nitrobenzene-d5	SAMP	SURR	66	%	30-130
MC50847-1	4165-60-0	Nitrobenzene-d5	SAMP	SURR	70	%	30-130
MC50847-1	321-60-8	2-Fluorobiphenyl	SAMP	SURR	76	%	30-130
MC50847-1	321-60-8	2-Fluorobiphenyl	SAMP	SURR	79	%	30-130
MC50847-1	1718-51-0	Terphenyl-d14	SAMP	SURR	84	%	30-130
MC50847-1	1718-51-0	Terphenyl-d14	SAMP	SURR	85	%	30-130
MC50847-2	4165-60-0	Nitrobenzene-d5	SAMP	SURR	70	%	30-130

* Sample used for QC is not from job MC50847

QC Evaluation: CT RCP Limits

Job Number: MC50847
Account: SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT
Collected: 07/13/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MC50847-2	4165-60-0	Nitrobenzene-d5	SAMP	SURR	54	%	30-130
MC50847-2	4165-60-0	Nitrobenzene-d5	SAMP	SURR	74	%	30-130
MC50847-2	321-60-8	2-Fluorobiphenyl	SAMP	SURR	80	%	30-130
MC50847-2	321-60-8	2-Fluorobiphenyl	SAMP	SURR	78	%	30-130
MC50847-2	321-60-8	2-Fluorobiphenyl	SAMP	SURR	70	%	30-130
MC50847-2	1718-51-0	Terphenyl-d14	SAMP	SURR	84	%	30-130
MC50847-2	1718-51-0	Terphenyl-d14	SAMP	SURR	78	%	30-130
MC50847-2	1718-51-0	Terphenyl-d14	SAMP	SURR	84	%	30-130

(a) Outside control limits due to matrix interference.
(b) Outside control limits due to high level in sample relative to spike amount.

* Sample used for QC is not from job MC50847

GC/MS Semi-volatiles

QC Data Summaries

(SGS Accutest New Jersey)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC50847
Account: ALNE SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4486-MB1	M135729.D	1	07/17/17	CS	07/16/17	OP4486	EM5827

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC50847-1, MC50847-2

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	33	ug/kg	
208-96-8	Acenaphthylene	ND	33	ug/kg	
120-12-7	Anthracene	ND	33	ug/kg	
56-55-3	Benzo(a)anthracene	ND	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	33	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	33	ug/kg	
218-01-9	Chrysene	ND	33	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	33	ug/kg	
206-44-0	Fluoranthene	ND	33	ug/kg	
86-73-7	Fluorene	ND	33	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	ug/kg	
91-57-6	2-Methylnaphthalene	ND	67	ug/kg	
91-20-3	Naphthalene	ND	33	ug/kg	
85-01-8	Phenanthrene	ND	33	ug/kg	
129-00-0	Pyrene	ND	33	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	70%	26-134%
321-60-8	2-Fluorobiphenyl	71%	39-124%
1718-51-0	Terphenyl-d14	77%	36-134%

Blank Spike Summary

Job Number: MC50847
Account: ALNE SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4486-BS1	M135730.D	1	07/17/17	CS	07/16/17	OP4486	EM5827

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC50847-1, MC50847-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1340	80	53-119
208-96-8	Acenaphthylene	1670	1240	74	41-125
120-12-7	Anthracene	1670	1340	80	51-120
56-55-3	Benzo(a)anthracene	1670	1460	88	54-118
50-32-8	Benzo(a)pyrene	1670	1410	85	55-121
205-99-2	Benzo(b)fluoranthene	1670	1330	80	57-116
191-24-2	Benzo(g,h,i)perylene	1670	1350	81	40-124
207-08-9	Benzo(k)fluoranthene	1670	1440	86	59-116
218-01-9	Chrysene	1670	1440	86	51-115
53-70-3	Dibenzo(a,h)anthracene	1670	1380	83	48-121
206-44-0	Fluoranthene	1670	1490	89	58-117
86-73-7	Fluorene	1670	1370	82	56-114
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1310	79	49-124
91-57-6	2-Methylnaphthalene	1670	1260	76	37-124
91-20-3	Naphthalene	1670	1180	71	44-116
85-01-8	Phenanthrene	1670	1330	80	53-119
129-00-0	Pyrene	1670	1390	83	54-124

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	79%	26-134%
321-60-8	2-Fluorobiphenyl	84%	39-124%
1718-51-0	Terphenyl-d14	110%	36-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC50847
Account: ALNE SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4486-MS	M135731.D	1	07/17/17	CS	07/16/17	OP4486	EM5827
OP4486-MSD	M135732.D	1	07/17/17	CS	07/16/17	OP4486	EM5827
MC50847-1	M135733.D	1	07/17/17	CS	07/16/17	OP4486	EM5827
MC50847-1	M135754.D	5	07/17/17	SB	07/16/17	OP4486	EM5828

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC50847-1, MC50847-2

CAS No.	Compound	MC50847-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	88.9		1960	1120	53	1890	1300	64	15	21-136/34
208-96-8	Acenaphthylene	1220		1960	1740	27	1890	2120	48	20	10-143/36
120-12-7	Anthracene	845		1960	1520	35	1890	1820	52	18	10-147/39
56-55-3	Benzo(a)anthracene	2860		1960	2750	0* [a]	1890	3400	29	21	10-151/41
50-32-8	Benzo(a)pyrene	3290		1960	2940	0* [a]	1890	3720	23	23	10-149/40
205-99-2	Benzo(b)fluoranthene	3350		1960	2820	0* [a]	1890	3640	15	25	10-147/42
191-24-2	Benzo(g,h,i)perylene	2400		1960	2450	3* [a]	1890	3080	36	23	10-150/41
207-08-9	Benzo(k)fluoranthene	2580		1960	2540	0* [a]	1890	3180	32	22	12-142/41
218-01-9	Chrysene	3670		1960	3240	0* [a]	1890	4050	20	22	10-151/41
53-70-3	Dibenzo(a,h)anthracene	788		1960	1490	36	1890	1940	61	26	10-152/38
206-44-0	Fluoranthene	6060 [c]		1960	4590	0* [b]	1890	5660	0* [b]	21	10-151/44
86-73-7	Fluorene	145		1960	1240	56	1890	1370	65	10	19-133/36
193-39-5	Indeno(1,2,3-cd)pyrene	2200		1960	2290	5* [a]	1890	2890	37	23	10-148/41
91-57-6	2-Methylnaphthalene	43.7		1960	1090	54	1890	1200	61	10	10-141/35
91-20-3	Naphthalene	91.5		1960	1030	48	1890	1210	59	16	10-136/36
85-01-8	Phenanthrene	2380		1960	2370	0* [a]	1890	2920	29	21	11-145/45
129-00-0	Pyrene	5260 [c]		1960	3920	0* [b]	1890	4980	0* [b]	24	11-155/44

CAS No.	Surrogate Recoveries	MS	MSD	MC50847-1	MC50847-1	Limits
4165-60-0	Nitrobenzene-d5	57%	67%	70%	66%	26-134%
321-60-8	2-Fluorobiphenyl	58%	69%	79%	76%	39-124%
1718-51-0	Terphenyl-d14	65%	77%	85%	84%	36-134%

(a) Outside control limits due to matrix interference.
(b) Outside control limits due to high level in sample relative to spike amount.
(c) Result is from Run #2.

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC50847
Account: ALNE SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

Check Std:	EM5827-CC5803	**Injection Date:**	07/16/17
Lab File ID:	M135725.D	**Injection Time:**	21:47
Instrument ID:	GCMSM	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	220710	5.19	819851	6.54	506041	9.25	885314	12.01	915231	17.33	971876	20.06
Upper Limit [a]	441420	5.69	1639702	7.04	1012082	9.75	1770628	12.51	1830462	17.83	1943752	20.56
Lower Limit [b]	110355	4.69	409926	6.04	253021	8.75	442657	11.51	457616	16.83	485938	19.56

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP4486-MB1	314103	5.19	1124607	6.54	650181	9.25	1084749	12.01	1049630	17.33	959820	20.06
OP4486-BS1	236377	5.19	909537	6.54	516462	9.25	862030	12.01	806284	17.33	826088	20.05
OP4486-MS	284989	5.19	1074697	6.54	643786	9.26	1067140	12.01	1080894	17.34	1191013	20.06
OP4486-MSD	254540	5.19	964695	6.54	562894	9.26	934309	12.01	918422	17.34	999959	20.07
MC50847-1	241033	5.19	865947	6.54	485471	9.25	796180	12.01	778702	17.34	825663	20.06
MC50847-2	207082	5.19	692737	6.54	390528	9.25	651312	12.02	689238	17.38	663804	20.16

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC50847
Account: ALNE SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

Check Std:	EM5828-CC5803	**Injection Date:**	07/17/17
Lab File ID:	M135736.D	**Injection Time:**	09:16
Instrument ID:	GCMSM	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	233372	5.23	883133	6.60	562034	9.33	986687	12.09	971953	17.41	1019874	20.15
Upper Limit [a]	466744	5.73	1766266	7.10	1124068	9.83	1973374	12.59	1943906	17.91	2039748	20.65
Lower Limit [b]	116686	4.73	441567	6.10	281017	8.83	493344	11.59	485977	16.91	509937	19.65

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP4461-MB1	248583	5.23	904799	6.59	543557	9.32	939087	12.08	892171	17.40	880111	20.14
OP4461-BS1	228140	5.23	884276	6.59	507456	9.32	881215	12.08	808786	17.41	829596	20.15
OP4461-MS	221822	5.23	856145	6.60	501891	9.33	881223	12.09	825400	17.41	835597	20.15
OP4461-MSD	226389	5.23	883174	6.59	510544	9.32	887788	12.08	822644	17.41	843680	20.14
ZZZZZZ	251560	5.23	904558	6.59	561450	9.32	966342	12.08	941704	17.41	909642	20.15
ZZZZZZ	224327	5.23	782346	6.59	472722	9.32	819339	12.09	857793	17.40	841661	20.14
JC46904-1	233512	5.23	867704	6.59	534092	9.32	925833	12.08	896199	17.40	846145	20.15
ZZZZZZ	239549	5.23	880112	6.59	545356	9.32	940040	12.08	918968	17.40	862995	20.14
ZZZZZZ	254803	5.23	921990	6.59	559821	9.32	971921	12.08	954525	17.40	900507	20.14
ZZZZZZ	219185	5.23	771260	6.59	490582	9.32	839800	12.09	909547	17.40	886933	20.14
ZZZZZZ	240342	5.23	873894	6.59	529834	9.32	929688	12.08	908200	17.40	853570	20.14
ZZZZZZ	216477	5.23	828681	6.60	523804	9.32	898833	12.08	901424	17.40	852935	20.15
ZZZZZZ	217307	5.23	808382	6.59	489870	9.32	817125	12.08	819763	17.40	787204	20.14
ZZZZZZ	203725	5.23	1946269*	6.60	466518	9.32	809983	12.08	857496	17.40	821113	20.15
ZZZZZZ	222264	5.23	806790	6.59	512374	9.32	863209	12.09	868068	17.41	820507	20.15
MC50847-1	250569	5.23	906733	6.60	545680	9.33	912511	12.09	875973	17.41	864378	20.15
MC50847-2	249536	5.23	907704	6.59	523053	9.32	897324	12.08	870726	17.41	900017	20.16

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC50847
Account: ALNE SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

Check Std:	EM5830-CC5803	**Injection Date:**	07/18/17
Lab File ID:	M135778.D	**Injection Time:**	09:59
Instrument ID:	GCMSM	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	221796	5.24	843971	6.60	531926	9.33	933912	12.09	859768	17.41	865940	20.15
Upper Limit [a]	443592	5.74	1687942	7.10	1063852	9.83	1867824	12.59	1719536	17.91	1731880	20.65
Lower Limit [b]	110898	4.74	421986	6.10	265963	8.83	466956	11.59	429884	16.91	432970	19.65

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP4535-MB1	242304	5.24	867686	6.60	537731	9.33	923644	12.09	887419	17.41	808470	20.15
OP4535-BS1	216532	5.24	856854	6.60	497122	9.33	870298	12.10	805982	17.42	788379	20.15
OP4535-BS13	229519	5.24	832481	6.60	518599	9.33	918442	12.10	904506	17.41	841451	20.15
MC50847-2	248442	5.24	922733	6.60	554035	9.33	960713	12.10	893997	17.41	849187	20.15
OP4535-MS	211424	5.25	1247534	6.60	495373	9.34	885743	12.10	876005	17.42	858804	20.16
OP4535-MSD	207844	5.24	1226173	6.61	476287	9.33	846801	12.10	820513	17.42	820687	20.16
JC46611-32	231269	5.24	1195218	6.60	519244	9.33	891517	12.10	923388	17.42	863779	20.16
ZZZZZZ	222216	5.24	808387	6.61	506074	9.33	875336	12.10	845337	17.42	764373	20.15
ZZZZZZ	211000	5.24	786622	6.60	498016	9.33	859959	12.09	823449	17.41	750032	20.15
ZZZZZZ	203846	5.24	742388	6.61	460300	9.33	782340	12.09	706301	17.41	628556	20.15
ZZZZZZ	216019	5.24	810179	6.60	495415	9.33	866723	12.09	841131	17.41	752973	20.15
ZZZZZZ	217725	5.24	808534	6.60	507239	9.33	884908	12.10	808012	17.41	723438	20.15
ZZZZZZ	223593	5.24	815154	6.60	505577	9.33	867947	12.09	807678	17.41	722649	20.15
ZZZZZZ	207824	5.24	752513	6.60	459652	9.33	776529	12.09	721132	17.41	647283	20.15
ZZZZZZ	230802	5.24	860752	6.60	523255	9.33	888232	12.09	805085	17.41	747138	20.15
ZZZZZZ	230824	5.24	818798	6.60	506591	9.33	835084	12.10	802693	17.42	747781	20.16
ZZZZZZ	224903	5.24	817808	6.60	489055	9.33	828140	12.10	803779	17.41	760497	20.15
ZZZZZZ	227149	5.24	825391	6.60	496626	9.33	834071	12.09	786557	17.41	749658	20.15

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC50847
Account: ALNE SGS Accutest New England
Project: BLCTM: Replacement of Bridge No. 03993, West Street, Middletown, CT

Method: SW846 8270D **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC50847-1	M135733.D	70	79	85
MC50847-1	M135754.D	66	76	84
MC50847-2	M135800.D	54	70	84
MC50847-2	M135734.D	74	78	78
MC50847-2	M135755.D	70	80	84
OP4486-BS1	M135730.D	79	84	110
OP4486-MB1	M135729.D	70	71	77
OP4486-MS	M135731.D	57	58	65
OP4486-MSD	M135732.D	67	69	77

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	26-134%
S2 = 2-Fluorobiphenyl	39-124%
S3 = Terphenyl-d14	36-134%