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TASK 210 – SUBSURFACE SITE INVESTIGATION REPORT

CONNECTICUT DEPARTMENT OF TRANSPORTATION
REPLACEMENT OF CULVERT AT M.P. 3.4
NAUGATUCK RAILROAD OVER UNNAMED BROOK
WATERTOWN, CONNECTICUT

Prepared for:

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BL Companies Project Number 14EC0019
ConnDOT Project No. 0170-3319
Assignment No. 314-5075

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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. 0170-3319, Replacement of Culvert at M.P. 3.4, Naugatuck Railroad over Unnamed Brook, in Watertown, 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 milepoint 3.4 on the Naugatuck Railroad over an unnamed brook in Watertown, Connecticut. The project involves the construction of temporary railroad crossings, temporary management of surface water from unnamed brook, and removal and replacement of the existing culvert. The site's location and pertinent features are depicted on the Site Location Map and Sample Location Plan (EV-01) in Appendix A.

Fill material along railroad embankments typically contain ash, coal, and cinders with metals (arsenic and lead), polyaromatic hydrocarbons (PAHs), and total petroleum hydrocarbons (TPH) at concentrations exceeding the Department of Energy and Environmental Protection (DEEP) Remediation Standard Regulations (RSR) criteria. Railroad embankment fill materials also occasionally contain volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and pesticides at concentrations exceeding the RSR criteria.

The purpose of this Task 210 SSI was to collect soil, sediment, and surface water data in order to evaluate whether the proposed construction activities require management of contaminated soil, sediment, and/or surface water.

1.2 Previous Environmental Reports

No previous environmental investigation reports were available for review by BL Companies.

1.3 Scope of Work

BL Companies completed this Task 210 SSI pursuant to our work plan, dated June 9, 2015 and approved by ConnDOT. The scope of work included the following tasks:

- Collection and laboratory analysis of two composite soil samples (east and west side of culvert) and a grab sediment for one or more of the following:
    - VOCs by Environmental Protection Agency (EPA) Method 8260;
    - PAHs by EPA Method 8270;
    - Extractable Total Petroleum Hydrocarbons (ETPH) by CT DPH Method;
    - Total RCRA 8 metals by EPA Methods 6010/ 7471;
    - Leachable RCRA 8 metals using the toxicity characteristic leaching procedure (TCLP);

  - PCBs by EPA Method 8082;
  - Pesticides by EPA Method 8081;
  - Free liquids, Ignitability; Reactivity; and pH.

- Collection and laboratory analysis of a surface water sample from the unnamed stream for the following:
  - VOCs by EPA Method 624;
  - SVOCs by EPA Method 625;
  - TPH by EPA Method 1664;
  - Pesticides/PCBs by EPA Method 608; and
  - Total and Dissolved RCRA-8 Metals, Copper, and Zinc by EPA Method 200.7/7470.

2.0 LOCAL ENVIRONMENT AND RECEPTORS

2.1 Surficial Geology

According to the "Surficial Materials Map of Connecticut", dated 1992, surficial materials of the project area consist of sand and gravel. Based observations during sample collection activities, surficial materials consist of brown to dark brown fine to coarse sand with gravel and trace coal.

2.2 Bedrock Geology

According to the “Bedrock Geological Map of Connecticut”, dated 1985, the project area is underlain by Straits Schist, which is described as a silvery to gray, coarse-grained schist. Bedrock outcrops were observed surrounding the investigation area.

2.3 Groundwater

Based on a review of the Water Quality Classifications Map for Watertown, Connecticut, dated August 2014, the project area has been designated by DEEP as “GA” quality. The GA classification indicates that the Site is located within the area of influence of private and/or public water supply wells and is presumed suitable for direct human consumption without treatment. The site is not located in an Aquifer Protection Area.

Based on the presence of the unnamed brook and Naugatuck River, located within the investigation area, the general direction of groundwater flow is inferred to be toward the east/southeast.

2.4 Surface Water

According the above referenced DEEP map, the Naugatuck River is classified as a class “B” surface water body. Class B surface waters are designated for use as a fish, aquatic life, and wildlife habitat, recreation, navigation, and/or industrial and agricultural water supply.

3.0 FIELD INVESTIGATION AND SAMPLING METHODS

This Task 210 SSI included the collection and laboratory analysis of two composite soil samples, a grab sediment sample, and a surface water sample from the unnamed stream. The sampling locations are depicted on the Sample Location Plan (EV-01).

The samples were analyzed for regulated constituents of concern associated with the historical and current use of the project area. Table 1 provides a summary of the sampling rationale and the laboratory analyses requested for each sample. The following sections summarize the field investigation and sampling methodologies used during this investigation.

3.1 Soil and Sediment Sampling

On June 11, 2015, a BL Companies project scientist collected two composite soil samples, identified as WC-WEST and WC-EAST, from the railroad embankment surrounding the culvert. In addition, a sediment sample, identified as SED-1 was collected from the eastern end of the culvert. VOC samples were collected as grab samples per EPA method 5035.

Soil sample WC-WEST was collected from the west side of the tracks by compositing soils from the northern and southern sides of the culvert pipe. Soils on the southern end of the culvert pipe consisted of brown fine to medium sand with some organic material, while soils on the northern end consisted of dark brown/black fine to medium sand with some coal. Soil sample WC-EAST was collected on the east side of the tracks by compositing soils from the northern and southern sides of the culvert pipe and consisted of a dark brown fine to medium sand, with trace silt and organic material. No odors were observed in any samples. The soil samples were field screened with a photoionization detector (PID) and resulted in 0.0 parts per million (ppm).

The samples were submitted under proper chain of custody to Phoenix Environmental Laboratories, Inc. (Phoenix) of Manchester, Connecticut, a State of Connecticut Department of Public Health certified environmental testing laboratory.

3.2 Surface Water Sampling

A surface water sample, identified as SW-1, was collected from the western portion of the unnamed stream. The surface water was placed directly into pre-preserved sample containers provided by the laboratory and placed in a cooler with ice. The surface water sample was submitted to Phoenix under proper chain of custody control.

4.0 REGULATORY CRITERIA

The soil and sediment 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 also compared to the proposed 2008 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, subsequent to a transfer of an establishment under CGS Section 22a-134a, and to sites that are enrolled in a Voluntary Remediation Program under CGS Sections 22a-133x or 22a-133y.

Currently, the RSRs do not address sediment, and 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 the data regarding 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 and disposal requirements.

Based on discussions between ConnDOT and DEEP, the groundwater numeric criteria in the RSRs do not provide the best method for construction projects to determine whether treatment of surface water is necessary prior to discharge. In accordance with DEEP guidance, surface water analytical results were compared to the effluent limits established under both DEEP General Permits for the Discharge of Groundwater Remediation Wastewater (to Sanitary or Surface Water) for the purpose of surface water management.

The following sections provide a brief summary of the soil, sediment, and surface water criteria utilized to evaluate contaminants conditions during this Task 210 SSI.

4.1 RSR 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. In a "GA" groundwater classification area, the GA PMC apply to soil located from the ground surface to the depth of the seasonal low water table. As the project area is in a "GA" area, BL Companies compared the soil analytical results to the GA PMC.

4.2 Surface Water Criteria

Maximum Concentration Limits (MCLs) Established in DEEP General Permits for Discharge of Groundwater Remediation Wastewater Directly to Surface Water or Sanitary Sewer

The MCLs apply to groundwater remediation wastewater that is discharged to surface water or sanitary sewer. The potential exists for surface water diversion during reconstruction of the culvert. In order to evaluate whether surface water would require special management, BL Companies compared the surface water analytical results to the Surface Water Discharge MCLs that apply to discharge to a Class A surface water body and the Sanitary Sewer MCLs.

5.0 SUMMARY AND EVALUATION OF ANALYTICAL DATA

5.1 Soil and Sediment Sample Analytical Results

Soil and sediment analytical results are summarized in Table 2 along with the RSR numeric criteria. The laboratory analytical reports are included in Appendix C.

PAHs

All soil and sediment samples were analyzed for PAHs by EPA Method 8270. PAHs were detected in soil samples WC-EAST at concentrations above the RES DEC, I/C DEC, and/or GA PMC. PAHs were detected in WC-WEST at concentrations below the RSR criteria. PAHs were not detected in SED-1.

ETPH

All soil and sediment samples were analyzed for ETPH by CT ETPH Method. ETPH was not detected above the detection limit in soil sample WC-EAST; however, it was detected in its duplicate at a concentration of 92 mg/kg, which is below the RES DEC and GA PMC. ETPH was not detected above the detection limits in any other samples.

Metals

All soil and sediment samples were analyzed for total RCRA 8 metals. Arsenic was detected in soil sample WC-WEST at a concentration of 12.9 mg/kg, which exceeds the DEC of 10 mg/kg. Arsenic was detected in WC-EAST at a concentration below the RES DEC and I/C DEC. Barium, cadmium, chromium, mercury, and lead were detected in both soil samples at concentrations below the RES DEC and I/C DEC. Barium, cadmium, chromium, and lead were detected in SED-1 at concentrations below the RSR criteria.

The soil and sediment soil samples were additionally analyzed for leachable RCRA 8 metals by TCLP for comparison to the GA PMC and to evaluate whether the soil contained hazardous levels of metals. Leachable cadmium was detected in WC-WEST, WC-EAST, and SED-1 at concentrations above the GA PMC of 0.005 mg/l. Leachable lead was detected in soil sample WC-EAST at a concentration above the GA PMC of 0.015 mg/l. Leachable arsenic, barium, and/or chromium were detected in the samples at concentrations below the applicable GA PMC criteria.

VOCs, PCBs, and Pesticides

All soil and sediment samples were analyzed for VOCs by EPA Method 8260, PCBs by EPA Method 8082, and pesticides by EPA Method 8081. VOCs, PCBs and pesticides were not detected in any samples.

Reactivity, Ignitability, and Corrosivity

All soil and sediment samples were analyzed for reactive cyanide and sulfide, ignitability, and pH. Based on the laboratory results, the soil and sediment do not exhibit hazardous characteristics.

5.2 Surface Water Sample Analytical Results

One surface water sample, identified as SW-1, was submitted for laboratory analysis of VOCs, SVOCs, TPH, pesticides, PCBs, and total and dissolved RCRA 8 metals. Surface water analytical results are summarized in Table 3, along with the appropriate regulatory criteria. The surface water analytical laboratory report is included in Appendix C.

Total and dissolved barium and zinc were detected above the detection limits although below the MCLs established in the DEEP General Discharge Permits. No other constituents were detected above laboratory reporting limits.

5.3 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. Quality control samples consisting of trip blanks, field blanks, and duplicates were collected during the investigation per the DEEP Quality Assurance and Quality Control Guidance Document, dated May 2009, revised December 2010. BL Companies also thoroughly 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. All reportable detection limits were below RSR numeric criteria.

Soil

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

A duplicate soil sample was spilt from one soil sample to evaluate the accuracy of the laboratory analytical data, measured as Relative Percent Difference (RPD) as defined by the above referenced DEEP Guidance Document. The duplicate was obtained from WC-EAST and was analyzed for VOCs, SVOCs, ETPH, PCBs, pesticides, and total and TCLP RCRA 8 metals.

- ETPH was not detected in original sample; however, it was detected in the duplicate sample. A 40.52 RPD, which is below the 50 RPD acceptable limit for non-aqueous samples, was calculated using the ETPH reporting limit for the original sample and the duplicate sample result.
- SVOC concentrations resulted in a 55.19 average RPD and TCLP chromium resulted in a 61.22 RPD, which are slightly higher than the acceptable limit, indicating that this soil sample interval had a high degree of heterogeneity.
- Total metals results had the following RPDs: arsenic (14.19), barium (2.71), cadmium (4.3), chromium (10.75), and lead (15), which are acceptable levels of precision.

- TCLP metals results had the following RPDs: barium (12.24), chromium (61.22), and lead (8.45), which are acceptable levels of precision.
- Total mercury and TCLP cadmium and mercury were detected at the same concentrations in the original and duplicate samples.
- VOCs, PCBs, and pesticides were not detected above the laboratory detection limits in sample WC-EAST or its duplicate.

Surface Water

A trip blank sample was prepared at the laboratory and accompanied the sample containers from the laboratory, to the site, and back to the laboratory. The purpose of a trip blank sample is to evaluate the potential for VOC cross-contamination from the surrounding environment during sampling transport. VOCs were not detected in the sample, indicating that there was likely no cross-contamination of the samples during transport.

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. The identified preliminary soil AOEC includes the entire project area. A preliminary surface water AOEC was not identified. Groundwater is not anticipated to be encountered.

AOEC 1 – Contaminated Soil in the Vicinity of Samples WC-WEST and WC-EAST

PAHs and leachable lead and cadmium were detected at concentrations exceeding the RSR criteria in sample WC-EAST. Total arsenic and leachable cadmium were detected at concentrations exceeding the RSR criteria in WC-WEST. Low-level ETPH, arsenic, barium, chromium, mercury, and/or lead (at concentrations below the applicable RSR criteria) were also detected in the soil samples. Additionally, coal was observed in soil within AOEC 1.

Proposed work within AOEC 1 includes removal and replacement of the existing culvert. Therefore, any soil removed from AOEC 1 should be handled as controlled material. The source of the elevated levels of PAHs, arsenic, cadmium, and lead appears to be associated with railroad embankment fill material. Contaminants were likely released directly to soil over time. Potential receptors of the impacted soil include workers involved in the construction activities, particularly during removal activities.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the analytical data collected by BL Companies, one preliminary AOEC was identified within the project area, as summarized below:

- AOEC 1 soil contains PAHs, arsenic, lead, and cadmium at concentrations exceeding RSR numeric criteria, and therefore classified as contaminated material. This contaminated material must be managed and handled as controlled material per ConnDOT specifications.

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 disposal of contaminated materials (soil) that may be removed, handled, transported, or disposed during construction activities and for the establishment of appropriate worker health and safety protocols.

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.

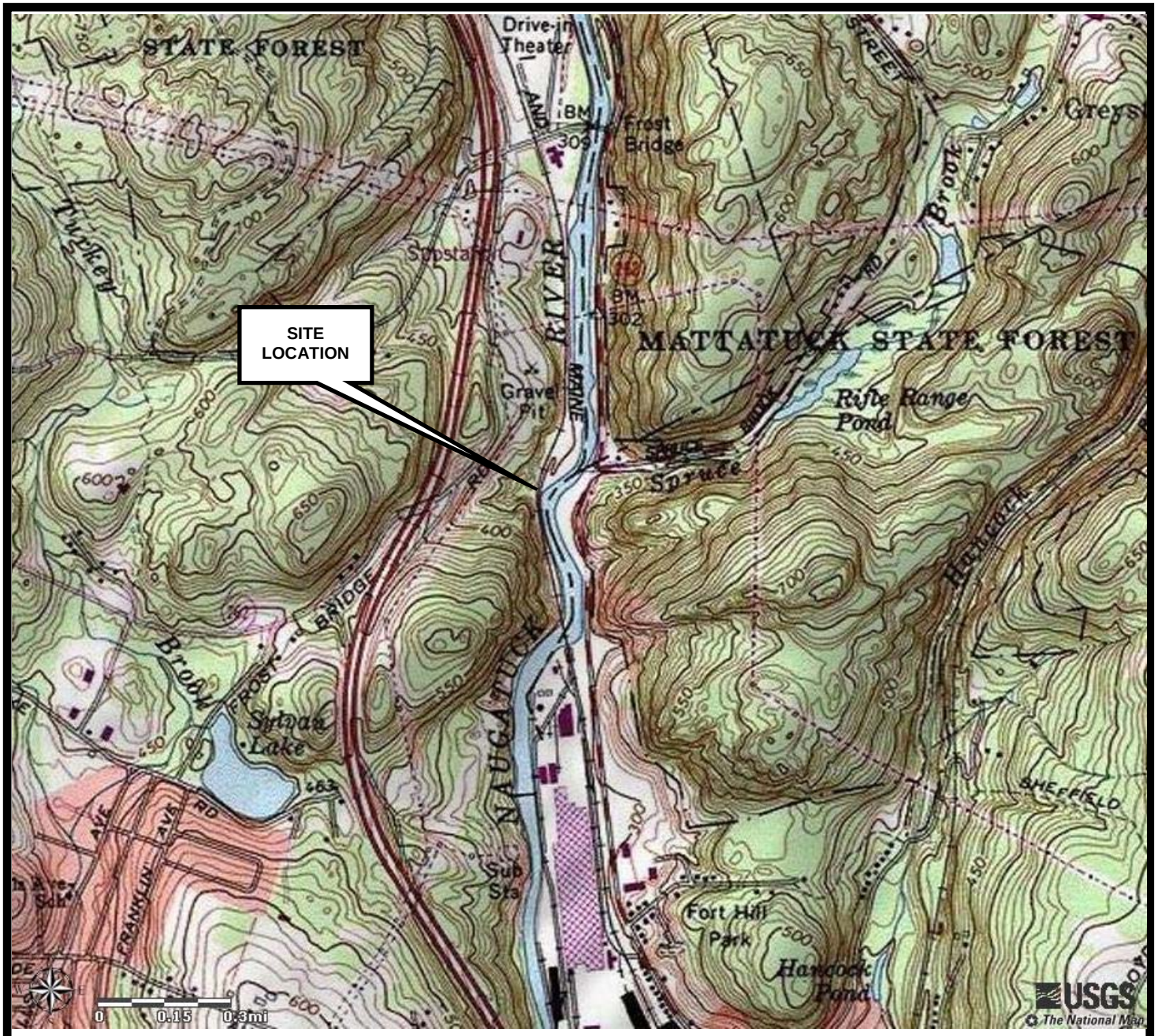
9.0 REFERENCES

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, "Laboratory Quality Assurance and Quality Control – Data Quality Assessment and Data Usability Evaluation", Guidance Document, dated May 2009, revised December 2010.
3. CTDEEP, "Water Quality Classifications Map of Watertown", August 2014.
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

Site Location Map
Sample Location Plan (EV-01)



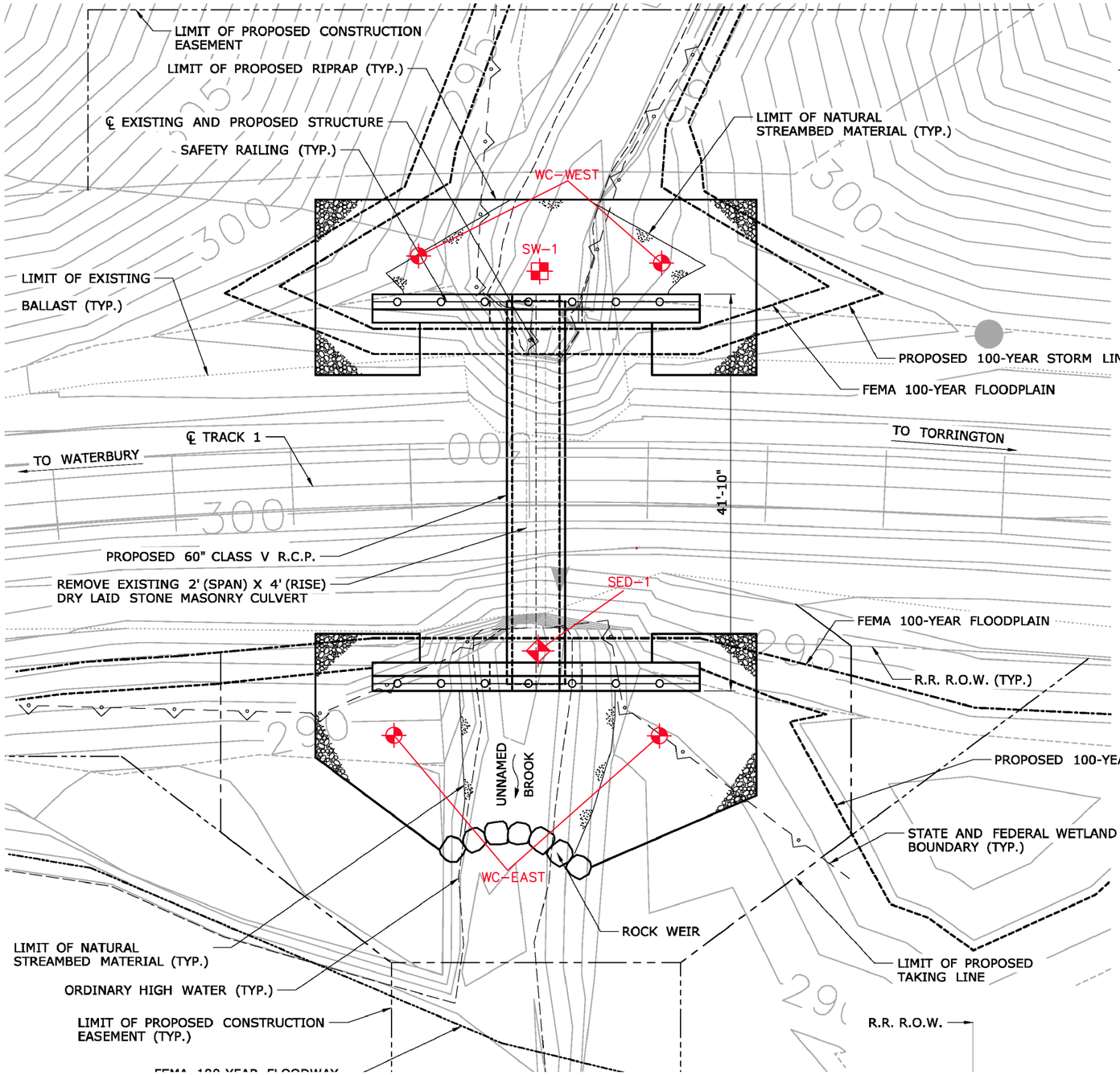
Base map is a reproduction of the U.S.G.S. 7.5 Minute
Litchfield Quadrangle – Map 48

SITE LOCATION MAP

Replacement of Culvert at MP 3.4 Naugatuck Railroad over
Unnamed Brook
Watertown, CT

Project No.
14EC0019

BL Companies



LEGEND:

WC-EAST	COMPOSITE SOIL SAMPLE LOCATION
SED-1	SEDIMENT SAMPLE LOCATION
SW-1	SURFACE WATER SAMPLE LOCATION

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REPLACEMENT OF CULVERT AT M.P. 3.4

NAUGATUCK RAILROAD OVER UNNAMED BROOK
WATERTOWN, CONNECTICUT

Designed	J.K.
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Checked	
Approved	
Scale	N.T.S.
Project No.	14EC0021
Date	6/09/2015
CAD File	EV14EC001901

EV-01

XREF(s): CT-17X11.DWG

APPENDIX B

TABLES

Table 1 – Sample Location Rationale and Selected Analyses
Table 2 – Soil Analytical Results
Table 3 – Surface Water Analytical Results

Table 1
Sample Location Rationale and Selected Analyses
Replacement of Culvert at M.P. 3.4
Naugatuck Railroad over Unnamed Brook
Watertown, Connecticut
ConnDOT Project No. 0170-3319

Sample Identification	Sample Interval	Location Rationale	VOCs (8260)	PAHs (8270)	ETPH	PCBs (8082)	Pesticides (8081)	Total RCRA 8 Metals	TCLP RCRA 8 Metals	Free Liquids, Ignitability, Reactivity, pH
WC-WEST	Composite	Railroad Right-of-Way; Western portion of proposed construction	X	X	X	X	X	X	X	X
WC-EAST	Composite	Railroad Right-of-Way; Eastern portion of proposed construction	X	X	X	X	X	X	X	X
	Duplicate		X	X	X	X	X	X	X	
SED-1	0-0.5'	Railroad Right-of-Way; Eastern side of existing culvert prior to discharge to Naugatuck River	X	X	X	X	X	X	X	X
Trip Blank	--	--	X							
Groundwater Sample	**Sample Collection Method**	**Location Rationale**	**VOCs (624)**	**SVOCs (625)**	**TPH**	**Total RCRA 8 Metals**	**Dissolved RCRA 8 Metals**	**Total Cu & Zn**	**Dissolved Cu & Zn**	**Pesticides/ PCBs (608)**
SW-1	Grab	Railroad Right-of-Way; Western side of existing culvert prior to discharge to Naugatuck River	X	X	X	X	X	X	X	X
Trip Blank	--	--	X							

Table 2
Soil Analytical Results
Replacement of Culvert at M.P. 3.4
Naugatuck Railroad over Unnamed Brook
Watertown, Connecticut
ConnDOT Project No. 0170-3319

Parameters	CTDEEP RSR Numeric Criteria			Concentration of Compound in Sample				
	RES DEC	IC DEC	GA PMC	WC-WEST 6/11/2015	WC-EAST 6/11/2015	WC-EAST (Duplicate) 6/11/2015	SED-1 6/11/2015	TRIP BLANK LL 6/11/2015
ETPH (mg/kg)	500	2,500	500	ND	ND	92	ND	NA
VOCs (mg/Kg)	various	various	various	ND	ND	ND	ND	ND
PAHs (mg/Kg)								
Benzo(a)anthracene	1	7.8	1	0.59	**2**	**1.2**	ND	NA
Benzo(a)pyrene	1	1	1	0.53	**1.8**	**1.1**	ND	NA
Benzo(b)fluoranthene	1	7.8	1	0.97	**2.7**	**1.7**	ND	NA
Benzo(g,h,i)perylene	1000*	2500*	4.2*	0.39	1.4	0.88	ND	NA
Benzo(k)fluoranthene	8.4	78	1	0.34	0.93	0.56	ND	NA
Chrysene	84*	780*	1*	0.85	**2.6**	**1.6**	ND	NA
Fluoranthene	1000	2500	5.6	1.4	3.8	2	ND	NA
Indeno(1,2,3-cd)pyrene	1*	7.8*	1*	0.47	**1.2**	0.76	ND	NA
Phenanthrene	1000	2500	4	0.59	2.1	0.67	ND	NA
Pyrene	1000	2500	4	1.1	3	1.7	ND	NA
RCRA 8 Metals (mg/Kg)								
Arsenic	10	10	--	**12.9**	8.3	7.2	ND	NA
Barium	4700	140000	--	65.8	54.5	56	39.6	NA
Cadmium	34	1,000	--	0.96	0.91	0.95	0.97	NA
Chromium, Total	100**	100**	--	22.5	85.3	76.6	5.65	NA
Mercury	20	610	--	0.1	0.13	0.13	ND	NA
Lead	400	1000	--	56.2	72.4	62.3	8.32	NA
TCLP RCRA 8 Metals (mg/L)								
Arsenic	--	--	0.05	0.01	ND	ND	ND	NA
Barium	--	--	1	0.24	0.23	0.26	0.44	NA
Cadmium	--	--	0.005	**0.007**	**0.008**	**0.008**	**0.021**	NA
Chromium	--	--	0.05	0.002	0.017	0.032	ND	NA
Lead	--	--	0.015	0.009	**0.034**	**0.037**	ND	NA
PCBs (mg/Kg)	1	10	--	ND	ND	ND	NA	NA
Pesticides (mg/Kg)	various	various	various	ND	ND	ND	NA	NA
Flash Point (degrees F)	--	--	--	>200	>200	NA	>200	NA
Ignitability (degrees F)	--	--	--	Passed	Passed	NA	Passed	NA
pH	--	--	--	6.51	6.23	NA	6.34	NA
Reactivity Cyanide (mg/kg)	--	--	--	ND	ND	NA	ND	NA
Reactivity Sulfide (mg/kg)	--	--	--	ND	ND	NA	ND	NA
Conductivity (umhos/cm)	--	--	--	26	19	NA	83	NA

CTDEEP = Connecticut Department of Energy and Environmental Protection
RSR = Remediation Standard Regulations
RES DEC = Residential Direct Exposure Criteria
IC DEC = Industrial-Commercial Direct Exposure Criteria
GA PMC = GA Pollutant Mobility Criteria
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
ND = Not detected above laboratory reporting limits
NA = Not Analyzed
* = 2008 proposed criteria for additional polluting substances
** = hexavalent chromium criteria
-- = criteria does not apply
Shade/Bold

Table 3
Surface Water Analytical Results
Replacement of Culvert at M.P. 3.4
Naugatuck Railroad over Unnamed Brook
Watertown, Connecticut
ConnDOT Project 0170-3319

Parameters	General Permit MCLs		Concentration of Compound in Sample	
	Surface Water	Sanitary Sewer	SW-1 6/11/2015	Trip Blank 6/11/2015
TPH (mg/L)	5	100	ND	NA
Total VOCs (µg/L)	10	500	ND	ND
Total SVOCs (µg/L)	5	500	ND	NA
Pesticides (µg/L)	*	*	ND	NA
PCBs (µg/L)	0.00017	1	ND	NA
Total Metals (mg/L)				
Barium	NE	5	0.052	NA
Zinc	0.322	1	0.052	NA
Dissolved Metals (mg/L)				
Barium	NE	5	0.063	NA
Zinc	0.322	1	0.063	NA

MCL = maximum concentration limits listed in the DEEP General Permit for Discharge of Groundwater
mg/L = milligrams per liter
µg/L = micrograms per liter
-- = criteria does not apply
ND = Not Detected above the Laboratory Reporting Limit
NE = None Established
Shade/Bold

APPENDIX C

LABORATORY ANALYTICAL REPORTS

PHOENIX
Environmental Laboratories, Inc.

Tuesday, June 23, 2015

Ms. Joy Kloss
BL Companies, Inc.
355 Research Parkway
Meriden, CT 06450

Project ID: NAUGATUCK RR-14EC0019
Sample ID#s: BJ30654 - BJ30658, BJ30667

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

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

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

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

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

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

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

Analysis Report

June 23, 2015

FOR: Ms. Joy Kloss
BL Companies, Inc.
355 Research Parkway
Meriden, CT 06450

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		06/11/15	10:30
Location Code:	BLCOMP-DAS	Received by:	LB	06/12/15	17:23
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBJ30654
Phoenix ID: BJ30654

Project ID: NAUGATUCK RR-14EC0019
Client ID: WC-WEST

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Silver	< 0.40	0.40	mg/Kg	1	06/18/15	LK	SW6010C	
Arsenic	12.9	0.8	mg/Kg	1	06/18/15	LK	SW6010C	
Barium	65.8	0.40	mg/Kg	1	06/18/15	LK	SW6010C	
Cadmium	0.96	0.40	mg/Kg	1	06/18/15	LK	SW6010C	
Chromium	22.5	0.40	mg/Kg	1	06/18/15	LK	SW6010C	
Mercury	0.10	0.04	mg/Kg	1	06/16/15	RS	SW7471B	
Lead	56.2	0.40	mg/Kg	1	06/18/15	LK	SW6010C	
Selenium	< 1.6	1.6	mg/Kg	1	06/18/15	LK	SW6010C	
TCLP Silver	< 0.010	0.010	mg/L	1	06/16/15	LK	SW6010C	
TCLP Arsenic	0.01	0.01	mg/L	1	06/16/15	LK	SW6010C	
TCLP Barium	0.24	0.01	mg/L	1	06/16/15	LK	SW6010C	B
TCLP Cadmium	0.007	0.005	mg/L	1	06/16/15	LK	SW6010C	
TCLP Chromium	0.002	0.010	mg/L	1	06/16/15	LK	SW6010C	
TCLP Mercury	< 0.0002	0.0002	mg/L	1	06/16/15	RS	SW7470A	
TCLP Lead	0.009	0.010	mg/L	1	06/16/15	LK	SW6010C	
TCLP Selenium	< 0.01	0.01	mg/L	1	06/16/15	LK	SW6010C	
TCLP Metals Digestion	Completed				06/15/15	I/I	SW3005A	
Percent Solid	84		%		06/12/15	i	SW846-%Solid	
Conductivity - Soil Matrix	26	5	umhos/cm	1	06/16/15	TC	SM2510B-97	
Flash Point	>200	200	Degree F	1	06/15/15	I	SW1010A	
Ignitability	Passed	140	degree F	1	06/15/15	I	SW846-Ignit	
pH - Soil	6.51	0.10	pH Units	1	06/12/15 21:00	DH/KDB	SW9045	
Reactivity Cyanide	< 6.0	6.0	mg/Kg	1	06/13/15	O/B/E	SW846-React	
Reactivity Sulfide	< 20	20	mg/Kg	1	06/15/15	EG	SW-7.3	
Reactivity	Negative		Pos/Neg	1	06/15/15	EG	SW846-React	
Soil Extraction for PCB	Completed				06/12/15	QB	SW3545A	
Soil Extraction for Pesticide	Completed				06/12/15	QB/H	SW3545A	
Soil Extraction SVOA PAH	Completed				06/12/15	JJ/VH	SW3545A	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction of CT ETPH	Completed				06/12/15	NC/V	SW3545A
Free Liquids	ND	2	mL		06/12/15	J	SW9095B
Mercury Digestion	Completed				06/15/15	I/I	SW7471B
TCLP Digestion Mercury	Completed				06/16/15	I/I	SW7470A
TCLP Extraction for Metals	Completed				06/12/15	I	SW1311
Total Metals Digest	Completed				06/15/15	N/AG	SW3050B
Field Extraction	Completed				06/11/15		SW5035A
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	59	mg/Kg	1	06/16/15	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	06/16/15	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	61		%	1	06/16/15	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1221	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1232	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1242	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1248	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1254	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1260	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1262	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1268	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
QA/QC Surrogates							
% DCBP	89		%	10	06/13/15	AW	30 - 150 %
% TCMX	93		%	10	06/13/15	AW	30 - 150 %
Pesticides							
4,4' -DDD	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
4,4' -DDE	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
4,4' -DDT	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
a-BHC	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
Alachlor	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
Aldrin	ND	3.9	ug/Kg	2	06/15/15	CE	SW8081B
b-BHC	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
Chlordane	ND	39	ug/Kg	2	06/15/15	CE	SW8081B
d-BHC	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
Dieldrin	ND	3.9	ug/Kg	2	06/15/15	CE	SW8081B
Endosulfan I	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
Endosulfan II	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
Endosulfan sulfate	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
Endrin	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
Endrin aldehyde	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
Endrin ketone	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
g-BHC	ND	1.6	ug/Kg	2	06/15/15	CE	SW8081B
Heptachlor	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
Heptachlor epoxide	ND	7.9	ug/Kg	2	06/15/15	CE	SW8081B
Methoxychlor	ND	39	ug/Kg	2	06/15/15	CE	SW8081B
Toxaphene	ND	160	ug/Kg	2	06/15/15	CE	SW8081B

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
QA/QC Surrogates							
% DCBP	76		%	2	06/15/15	CE	30 - 150 %
% TCMX	72		%	2	06/15/15	CE	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloroethene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloropropene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
1,2,3-Trichloropropane	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
1,2-Dibromoethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichlorobenzene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
1,2-Dichloroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichloropropane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
1,3-Dichlorobenzene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
1,3-Dichloropropane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,4-Dichlorobenzene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
2,2-Dichloropropane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
2-Chlorotoluene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
2-Hexanone	ND	25	ug/Kg	1	06/18/15	JLI	SW8260C
2-Isopropyltoluene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
4-Chlorotoluene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	ug/Kg	1	06/18/15	JLI	SW8260C
Acetone	ND	30	ug/Kg	1	06/18/15	JLI	SW8260C
Acrylonitrile	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Benzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Bromobenzene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
Bromochloromethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Bromodichloromethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Bromoform	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Bromomethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Carbon Disulfide	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Carbon tetrachloride	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Chlorobenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Chloroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Chloroform	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Chloromethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Dibromochloromethane	ND	3.0	ug/Kg	1	06/18/15	JLI	SW8260C
Dibromomethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Dichlorodifluoromethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Ethylbenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Hexachlorobutadiene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
Isopropylbenzene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
m&p-Xylene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Methyl Ethyl Ketone	ND	30	ug/Kg	1	06/18/15	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	1	06/18/15	JLI	SW8260C
Methylene chloride	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Naphthalene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
n-Butylbenzene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
n-Propylbenzene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
o-Xylene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
p-Isopropyltoluene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
sec-Butylbenzene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
Styrene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
tert-Butylbenzene	ND	300	ug/Kg	50	06/18/15	JLI	SW8260C
Tetrachloroethene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Tetrahydrofuran (THF)	ND	10	ug/Kg	1	06/18/15	JLI	SW8260C
Toluene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Total Xylenes	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	600	ug/Kg	50	06/18/15	JLI	SW8260C
Trichloroethene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Trichlorofluoromethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Vinyl chloride	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	50	06/18/15	JLI	70 - 130 %
% Bromofluorobenzene	96		%	50	06/18/15	JLI	70 - 130 %
% Dibromofluoromethane	98		%	1	06/18/15	JLI	70 - 130 %
% Toluene-d8	88		%	1	06/18/15	JLI	70 - 130 %

Polynuclear Aromatic HC

2-Methylnaphthalene	ND	280	ug/Kg	1	06/13/15	DD	SW8270D
Acenaphthene	ND	280	ug/Kg	1	06/13/15	DD	SW8270D
Acenaphthylene	ND	280	ug/Kg	1	06/13/15	DD	SW8270D
Anthracene	ND	280	ug/Kg	1	06/13/15	DD	SW8270D
Benz(a)anthracene	590	280	ug/Kg	1	06/13/15	DD	SW8270D
Benzo(a)pyrene	530	280	ug/Kg	1	06/13/15	DD	SW8270D
Benzo(b)fluoranthene	970	280	ug/Kg	1	06/13/15	DD	SW8270D
Benzo(ghi)perylene	390	280	ug/Kg	1	06/13/15	DD	SW8270D
Benzo(k)fluoranthene	340	280	ug/Kg	1	06/13/15	DD	SW8270D
Chrysene	850	280	ug/Kg	1	06/13/15	DD	SW8270D
Dibenz(a,h)anthracene	ND	280	ug/Kg	1	06/13/15	DD	SW8270D
Fluoranthene	1400	280	ug/Kg	1	06/13/15	DD	SW8270D
Fluorene	ND	280	ug/Kg	1	06/13/15	DD	SW8270D
Indeno(1,2,3-cd)pyrene	470	280	ug/Kg	1	06/13/15	DD	SW8270D
Naphthalene	ND	280	ug/Kg	1	06/13/15	DD	SW8270D
Phenanthrene	590	280	ug/Kg	1	06/13/15	DD	SW8270D
Pyrene	1100	280	ug/Kg	1	06/13/15	DD	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
QA/QC Surrogates							
% 2-Fluorobiphenyl	85		%	1	06/13/15	DD	30 - 130 %
% Nitrobenzene-d5	79		%	1	06/13/15	DD	30 - 130 %
% Terphenyl-d14	97		%	1	06/13/15	DD	30 - 130 %

B = Present in blank, no bias suspected.

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

Comments:

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide.This method is no longer listed in the current version of SW-846.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Sulfide. This method is no longer listed in the current version of SW-846.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

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

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

Phyllis Shiller, Laboratory Director
June 23, 2015
Reviewed and Released by: Ethan Lee, Project Manager

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

Analysis Report

June 23, 2015

FOR: Ms. Joy Kloss
BL Companies, Inc.
355 Research Parkway
Meriden, CT 06450

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		06/11/15	11:00
Location Code:	BLCOMP-DAS	Received by:	LB	06/12/15	17:23
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBJ30654
Phoenix ID: BJ30655

Project ID: NAUGATUCK RR-14EC0019
Client ID: WC-EAST

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Silver	< 0.42	0.42	mg/Kg	1	06/15/15	LK	SW6010C	
Arsenic	8.3	0.8	mg/Kg	1	06/15/15	LK	SW6010C	
Barium	54.5	0.42	mg/Kg	1	06/15/15	LK	SW6010C	
Cadmium	0.91	0.42	mg/Kg	1	06/15/15	LK	SW6010C	
Chromium	85.3	0.42	mg/Kg	1	06/15/15	LK	SW6010C	
Mercury	0.13	0.04	mg/Kg	1	06/16/15	RS	SW7471B	
Lead	72.4	0.42	mg/Kg	1	06/15/15	LK	SW6010C	
Selenium	< 1.7	1.7	mg/Kg	1	06/15/15	LK	SW6010C	
TCLP Silver	< 0.010	0.010	mg/L	1	06/15/15	EK	SW6010C	
TCLP Arsenic	< 0.01	0.01	mg/L	1	06/15/15	EK	SW6010C	
TCLP Barium	0.23	0.01	mg/L	1	06/15/15	EK	SW6010C	B
TCLP Cadmium	0.008	0.005	mg/L	1	06/15/15	EK	SW6010C	
TCLP Chromium	0.017	0.010	mg/L	1	06/15/15	EK	SW6010C	
TCLP Mercury	< 0.0002	0.0002	mg/L	1	06/16/15	RS	SW7470A	
TCLP Lead	0.034	0.010	mg/L	1	06/15/15	LK	SW6010C	
TCLP Selenium	< 0.01	0.01	mg/L	1	06/15/15	EK	SW6010C	
TCLP Metals Digestion	Completed				06/15/15	I/I	SW3005A	
Percent Solid	81		%		06/12/15	i	SW846-%Solid	
Conductivity - Soil Matrix	19	5	umhos/cm	1	06/16/15	TC	SM2510B-97	
Flash Point	>200	200	Degree F	1	06/15/15	I	SW1010A	
Ignitability	Passed	140	degree F	1	06/15/15	I	SW846-Ignit	
pH - Soil	6.23	0.10	pH Units	1	06/12/15 21:00	DH/KDB	SW9045	
Reactivity Cyanide	< 6.0	6.0	mg/Kg	1	06/13/15	O/B/E	SW846-React	
Reactivity Sulfide	< 20	20	mg/Kg	1	06/15/15	EG	SW-7.3	
Reactivity	Negative		Pos/Neg	1	06/15/15	EG	SW846-React	
Soil Extraction for PCB	Completed				06/12/15	QB	SW3545A	
Soil Extraction for Pesticide	Completed				06/12/15	QB/H	SW3545A	
Soil Extraction SVOA PAH	Completed				06/12/15	JJ/VH	SW3545A	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction of CT ETPH	Completed				06/12/15	NC/V	SW3545A
Free Liquids	ND	2	mL		06/12/15	J	SW9095B
Mercury Digestion	Completed				06/15/15	I/I	SW7471B
TCLP Digestion Mercury	Completed				06/16/15	I/I	SW7470A
TCLP Extraction for Metals	Completed				06/12/15	I	SW1311
Total Metals Digest	Completed				06/12/15	CB/AG	SW3050B
Field Extraction	Completed				06/11/15		SW5035A
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	61	mg/Kg	1	06/16/15	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	06/16/15	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	69		%	1	06/16/15	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1221	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1232	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1242	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1248	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1254	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1260	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1262	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1268	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
QA/QC Surrogates							
% DCBP	111		%	10	06/13/15	AW	30 - 150 %
% TCMX	88		%	10	06/13/15	AW	30 - 150 %
Pesticides							
4,4' -DDD	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
4,4' -DDE	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
4,4' -DDT	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
a-BHC	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
Alachlor	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
Aldrin	ND	4.0	ug/Kg	2	06/15/15	CE	SW8081B
b-BHC	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
Chlordane	ND	40	ug/Kg	2	06/15/15	CE	SW8081B
d-BHC	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
Dieldrin	ND	4.0	ug/Kg	2	06/15/15	CE	SW8081B
Endosulfan I	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
Endosulfan II	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
Endosulfan sulfate	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
Endrin	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
Endrin aldehyde	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
Endrin ketone	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
g-BHC	ND	1.6	ug/Kg	2	06/15/15	CE	SW8081B
Heptachlor	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
Heptachlor epoxide	ND	8.0	ug/Kg	2	06/15/15	CE	SW8081B
Methoxychlor	ND	40	ug/Kg	2	06/15/15	CE	SW8081B
Toxaphene	ND	160	ug/Kg	2	06/15/15	CE	SW8081B

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
QA/QC Surrogates							
% DCBP	99		%	2	06/15/15	CE	30 - 150 %
% TCMX	73		%	2	06/15/15	CE	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.9	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloroethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloroethene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloropropene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dibromoethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichloroethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichloropropane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,3-Dichloropropane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
2,2-Dichloropropane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
2-Chlorotoluene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
2-Hexanone	ND	24	ug/Kg	1	06/18/15	JLI	SW8260C
2-Isopropyltoluene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
4-Chlorotoluene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
4-Methyl-2-pentanone	ND	24	ug/Kg	1	06/18/15	JLI	SW8260C
Acetone	ND	29	ug/Kg	1	06/18/15	JLI	SW8260C
Acrylonitrile	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Benzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Bromobenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Bromochloromethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Bromodichloromethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Bromoform	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Bromomethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Carbon Disulfide	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Carbon tetrachloride	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Chlorobenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Chloroethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Chloroform	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Chloromethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Dibromochloromethane	ND	2.9	ug/Kg	1	06/18/15	JLI	SW8260C
Dibromomethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Dichlorodifluoromethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Ethylbenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Hexachlorobutadiene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Isopropylbenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
m&p-Xylene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Methyl Ethyl Ketone	ND	29	ug/Kg	1	06/18/15	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.5	ug/Kg	1	06/18/15	JLI	SW8260C
Methylene chloride	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Naphthalene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
n-Butylbenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
n-Propylbenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
o-Xylene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
p-Isopropyltoluene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
sec-Butylbenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Styrene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
tert-Butylbenzene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Tetrachloroethene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.5	ug/Kg	1	06/18/15	JLI	SW8260C
Toluene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Total Xylenes	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.5	ug/Kg	1	06/18/15	JLI	SW8260C
Trichloroethene	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Trichlorofluoromethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
Vinyl chloride	ND	4.8	ug/Kg	1	06/18/15	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	1	06/18/15	JLI	70 - 130 %
% Bromofluorobenzene	86		%	1	06/18/15	JLI	70 - 130 %
% Dibromofluoromethane	98		%	1	06/18/15	JLI	70 - 130 %
% Toluene-d8	92		%	1	06/18/15	JLI	70 - 130 %

Polynuclear Aromatic HC

2-Methylnaphthalene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Acenaphthene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Acenaphthylene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Anthracene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Benz(a)anthracene	2000	560	ug/Kg	2	06/15/15	DD	SW8270D
Benzo(a)pyrene	1800	560	ug/Kg	2	06/15/15	DD	SW8270D
Benzo(b)fluoranthene	2700	560	ug/Kg	2	06/15/15	DD	SW8270D
Benzo(ghi)perylene	1400	560	ug/Kg	2	06/15/15	DD	SW8270D
Benzo(k)fluoranthene	930	560	ug/Kg	2	06/15/15	DD	SW8270D
Chrysene	2600	560	ug/Kg	2	06/15/15	DD	SW8270D
Dibenz(a,h)anthracene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Fluoranthene	3800	560	ug/Kg	2	06/15/15	DD	SW8270D
Fluorene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Indeno(1,2,3-cd)pyrene	1200	560	ug/Kg	2	06/15/15	DD	SW8270D
Naphthalene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Phenanthrene	2100	560	ug/Kg	2	06/15/15	DD	SW8270D
Pyrene	3000	560	ug/Kg	2	06/15/15	DD	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
QA/QC Surrogates							
% 2-Fluorobiphenyl	63		%	2	06/15/15	DD	30 - 130 %
% Nitrobenzene-d5	55		%	2	06/15/15	DD	30 - 130 %
% Terphenyl-d14	44		%	2	06/15/15	DD	30 - 130 %

B = Present in blank, no bias suspected.

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

Comments:

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

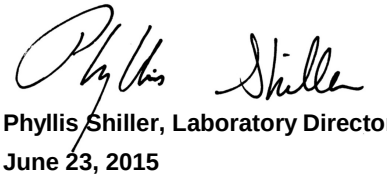
The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide.This method is no longer listed in the current version of SW-846.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Sulfide. This method is no longer listed in the current version of SW-846.

Semi-Volatile Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, a dilution was required resulting in an elevated RL for the semivolatile analysis.

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

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



Phyllis Shiller, Laboratory Director
June 23, 2015
Reviewed and Released by: Ethan Lee, Project Manager

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

Analysis Report

June 23, 2015

FOR: Ms. Joy Kloss
BL Companies, Inc.
355 Research Parkway
Meriden, CT 06450

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		06/11/15	11:05
Location Code:	BLCOMP-DAS	Received by:	LB	06/12/15	17:23
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBJ30654
Phoenix ID: BJ30656

Project ID: NAUGATUCK RR-14EC0019
Client ID: WC-EAST DUP

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Silver	< 0.43	0.43	mg/Kg	1	06/15/15	LK	SW6010C	
Arsenic	7.2	0.9	mg/Kg	1	06/15/15	LK	SW6010C	
Barium	56.0	0.43	mg/Kg	1	06/15/15	LK	SW6010C	
Cadmium	0.95	0.43	mg/Kg	1	06/15/15	LK	SW6010C	
Chromium	76.6	0.43	mg/Kg	1	06/15/15	LK	SW6010C	
Mercury	0.13	0.04	mg/Kg	1	06/16/15	RS	SW7471B	
Lead	62.3	0.43	mg/Kg	1	06/15/15	LK	SW6010C	
Selenium	< 1.7	1.7	mg/Kg	1	06/15/15	LK	SW6010C	
TCLP Silver	< 0.010	0.010	mg/L	1	06/15/15	EK	SW6010C	
TCLP Arsenic	< 0.01	0.01	mg/L	1	06/15/15	LK	SW6010C	
TCLP Barium	0.26	0.01	mg/L	1	06/15/15	EK	SW6010C	B
TCLP Cadmium	0.008	0.005	mg/L	1	06/15/15	EK	SW6010C	
TCLP Chromium	0.032	0.010	mg/L	1	06/15/15	EK	SW6010C	
TCLP Mercury	< 0.0002	0.0002	mg/L	1	06/16/15	RS	SW7470A	
TCLP Lead	0.037	0.010	mg/L	1	06/15/15	LK	SW6010C	
TCLP Selenium	< 0.01	0.01	mg/L	1	06/15/15	EK	SW6010C	
TCLP Metals Digestion	Completed				06/15/15	I/I	SW3005A	
Percent Solid	82		%		06/12/15	i	SW846-%Solid	
Soil Extraction for PCB	Completed				06/12/15	QB	SW3545A	
Soil Extraction for Pesticide	Completed				06/12/15	QB/H	SW3545A	
Soil Extraction SVOA PAH	Completed				06/12/15	JJ/VH	SW3545A	
Extraction of CT ETPH	Completed				06/12/15	NC/V	SW3545A	
Mercury Digestion	Completed				06/15/15	I/I	SW7471B	
TCLP Digestion Mercury	Completed				06/16/15	I/I	SW7470A	
TCLP Extraction for Metals	Completed				06/12/15	I	SW1311	
Total Metals Digest	Completed				06/12/15	CB/AG	SW3050B	
Field Extraction	Completed				06/11/15		SW5035A	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
TPH by GC (Extractable Products)							
Ext. Petroleum HC	92	60	mg/Kg	1	06/16/15	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	06/16/15	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	78		%	1	06/16/15	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1221	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1232	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1242	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1248	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1254	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1260	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1262	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1268	ND	400	ug/Kg	10	06/13/15	AW	SW8082A
QA/QC Surrogates							
% DCBP	99		%	10	06/13/15	AW	30 - 150 %
% TCMX	79		%	10	06/13/15	AW	30 - 150 %
Pesticides							
4,4' -DDD	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
4,4' -DDE	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
4,4' -DDT	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
a-BHC	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
Alachlor	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
Aldrin	ND	4.0	ug/Kg	2	06/16/15	CE	SW8081B
b-BHC	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
Chlordane	ND	40	ug/Kg	2	06/16/15	CE	SW8081B
d-BHC	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
Dieldrin	ND	4.0	ug/Kg	2	06/16/15	CE	SW8081B
Endosulfan I	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
Endosulfan II	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
Endosulfan sulfate	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
Endrin	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
Endrin aldehyde	ND	30	ug/Kg	2	06/16/15	CE	SW8081B
Endrin ketone	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
g-BHC	ND	5.5	ug/Kg	2	06/16/15	CE	SW8081B
Heptachlor	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
Heptachlor epoxide	ND	8.0	ug/Kg	2	06/16/15	CE	SW8081B
Methoxychlor	ND	40	ug/Kg	2	06/16/15	CE	SW8081B
Toxaphene	ND	160	ug/Kg	2	06/16/15	CE	SW8081B
QA/QC Surrogates							
% DCBP	87		%	2	06/16/15	CE	30 - 150 %
% TCMX	65		%	2	06/16/15	CE	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C

Project ID: NAUGATUCK RR-14EC0019
Client ID: WC-EAST DUP

Phoenix I.D.: BJ30656

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,1,2,2-Tetrachloroethane	ND	3.1	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloroethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloroethene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloropropene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dibromoethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichloroethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichloropropane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,3-Dichloropropane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
2,2-Dichloropropane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
2-Chlorotoluene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
2-Hexanone	ND	26	ug/Kg	1	06/18/15	JLI	SW8260C
2-Isopropyltoluene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
4-Chlorotoluene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	ug/Kg	1	06/18/15	JLI	SW8260C
Acetone	ND	31	ug/Kg	1	06/18/15	JLI	SW8260C
Acrylonitrile	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Benzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Bromobenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Bromochloromethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Bromodichloromethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Bromoform	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Bromomethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Carbon Disulfide	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Carbon tetrachloride	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Chlorobenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Chloroethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Chloroform	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Chloromethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Dibromochloromethane	ND	3.1	ug/Kg	1	06/18/15	JLI	SW8260C
Dibromomethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Dichlorodifluoromethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Ethylbenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Hexachlorobutadiene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Isopropylbenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
m&p-Xylene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Methyl Ethyl Ketone	ND	31	ug/Kg	1	06/18/15	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	1	06/18/15	JLI	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Methylene chloride	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Naphthalene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
n-Butylbenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
n-Propylbenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
o-Xylene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
p-Isopropyltoluene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
sec-Butylbenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Styrene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
tert-Butylbenzene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Tetrachloroethene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Tetrahydrofuran (THF)	ND	10	ug/Kg	1	06/18/15	JLI	SW8260C
Toluene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Total Xylenes	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	1	06/18/15	JLI	SW8260C
Trichloroethene	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Trichlorofluoromethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
Vinyl chloride	ND	5.2	ug/Kg	1	06/18/15	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	91		%	1	06/18/15	JLI	70 - 130 %
% Bromofluorobenzene	80		%	1	06/18/15	JLI	70 - 130 %
% Dibromofluoromethane	100		%	1	06/18/15	JLI	70 - 130 %
% Toluene-d8	89		%	1	06/18/15	JLI	70 - 130 %

Polynuclear Aromatic HC

2-Methylnaphthalene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Acenaphthene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Acenaphthylene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Anthracene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Benz(a)anthracene	1200	560	ug/Kg	2	06/15/15	DD	SW8270D
Benzo(a)pyrene	1100	560	ug/Kg	2	06/15/15	DD	SW8270D
Benzo(b)fluoranthene	1700	560	ug/Kg	2	06/15/15	DD	SW8270D
Benzo(ghi)perylene	880	560	ug/Kg	2	06/15/15	DD	SW8270D
Benzo(k)fluoranthene	560	560	ug/Kg	2	06/15/15	DD	SW8270D
Chrysene	1600	560	ug/Kg	2	06/15/15	DD	SW8270D
Dibenz(a,h)anthracene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Fluoranthene	2000	560	ug/Kg	2	06/15/15	DD	SW8270D
Fluorene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Indeno(1,2,3-cd)pyrene	760	560	ug/Kg	2	06/15/15	DD	SW8270D
Naphthalene	ND	560	ug/Kg	2	06/15/15	DD	SW8270D
Phenanthrene	670	560	ug/Kg	2	06/15/15	DD	SW8270D
Pyrene	1700	560	ug/Kg	2	06/15/15	DD	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	66		%	2	06/15/15	DD	30 - 130 %
% Nitrobenzene-d5	59		%	2	06/15/15	DD	30 - 130 %
% Terphenyl-d14	45		%	2	06/15/15	DD	30 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

B = Present in blank, no bias suspected.

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

Comments:

Pesticide Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported.

Semi-Volatile Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, a dilution was required resulting in an elevated RL for the semivolatile analysis.

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

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

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

Phyllis Shiller, Laboratory Director
June 23, 2015
Reviewed and Released by: Ethan Lee, Project Manager

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

Analysis Report

June 23, 2015

FOR: Ms. Joy Kloss
BL Companies, Inc.
355 Research Parkway
Meriden, CT 06450

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		06/11/15	12:00
Location Code:	BLCOMP-DAS	Received by:	LB	06/12/15	17:23
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBJ30654
Phoenix ID: BJ30657

Project ID: NAUGATUCK RR-14EC0019
Client ID: SED-1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Silver	< 0.40	0.40	mg/Kg	1	06/15/15	LK	SW6010C	
Arsenic	< 0.8	0.8	mg/Kg	1	06/15/15	LK	SW6010C	
Barium	39.6	0.40	mg/Kg	1	06/15/15	LK	SW6010C	
Cadmium	0.97	0.40	mg/Kg	1	06/15/15	LK	SW6010C	
Chromium	5.65	0.40	mg/Kg	1	06/15/15	LK	SW6010C	
Mercury	< 0.04	0.04	mg/Kg	1	06/16/15	RS	SW7471B	
Lead	8.32	0.40	mg/Kg	1	06/15/15	LK	SW6010C	
Selenium	< 1.6	1.6	mg/Kg	1	06/15/15	LK	SW6010C	
TCLP Silver	< 0.010	0.010	mg/L	1	06/15/15	EK	SW6010C	
TCLP Arsenic	< 0.01	0.01	mg/L	1	06/15/15	EK	SW6010C	
TCLP Barium	0.44	0.01	mg/L	1	06/15/15	EK	SW6010C	B
TCLP Cadmium	0.021	0.005	mg/L	1	06/15/15	EK	SW6010C	
TCLP Chromium	< 0.010	0.010	mg/L	1	06/15/15	EK	SW6010C	
TCLP Mercury	< 0.0002	0.0002	mg/L	1	06/16/15	RS	SW7470A	
TCLP Lead	< 0.010	0.010	mg/L	1	06/15/15	LK	SW6010C	
TCLP Selenium	< 0.01	0.01	mg/L	1	06/15/15	EK	SW6010C	
TCLP Metals Digestion	Completed				06/15/15	I/I	SW3005A	
Percent Solid	85		%		06/12/15	i	SW846-%Solid	
Conductivity - Soil Matrix	83	5	umhos/cm	1	06/16/15	TC	SM2510B-97	
Flash Point	>200	200	Degree F	1	06/16/15	M	SW1010A	
Ignitability	Passed	140	degree F	1	06/16/15	M	SW846-Ignit	
pH - Soil	6.34	0.10	pH Units	1	06/12/15 21:00	DH/KDB	SW9045	
Reactivity Cyanide	< 5.7	5.7	mg/Kg	1	06/13/15	O/B/E	SW846-React	
Reactivity Sulfide	< 20	20	mg/Kg	1	06/15/15	EG	SW-7.3	
Reactivity	Negative		Pos/Neg	1	06/15/15	EG	SW846-React	
Soil Extraction for PCB	Completed				06/12/15	QB	SW3545A	
Soil Extraction for Pesticide	Completed				06/12/15	QB/H	SW3545A	
Soil Extraction SVOA PAH	Completed				06/12/15	JJ/VH	SW3545A	

Project ID: NAUGATUCK RR-14EC0019
Client ID: SED-1

Phoenix I.D.: BJ30657

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction of CT ETPH	Completed				06/12/15	NC/V	SW3545A
Free Liquids	ND	2	mL		06/12/15	J	SW9095B
Mercury Digestion	Completed				06/15/15	I/I	SW7471B
TCLP Digestion Mercury	Completed				06/16/15	I/I	SW7470A
TCLP Extraction for Metals	Completed				06/12/15	I	SW1311
Total Metals Digest	Completed				06/12/15	CB/AG	SW3050B
Field Extraction	Completed				06/11/15		SW5035A
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	58	mg/Kg	1	06/15/15	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	06/15/15	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	68		%	1	06/15/15	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1221	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1232	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1242	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1248	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1254	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1260	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1262	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
PCB-1268	ND	390	ug/Kg	10	06/13/15	AW	SW8082A
QA/QC Surrogates							
% DCBP	106		%	10	06/13/15	AW	30 - 150 %
% TCMX	95		%	10	06/13/15	AW	30 - 150 %
Pesticides							
4,4' -DDD	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
4,4' -DDE	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
4,4' -DDT	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
a-BHC	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
Alachlor	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
Aldrin	ND	3.9	ug/Kg	2	06/15/15	CE	SW8081B
b-BHC	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
Chlordane	ND	39	ug/Kg	2	06/15/15	CE	SW8081B
d-BHC	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
Dieldrin	ND	3.9	ug/Kg	2	06/15/15	CE	SW8081B
Endosulfan I	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
Endosulfan II	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
Endosulfan sulfate	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
Endrin	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
Endrin aldehyde	ND	15	ug/Kg	2	06/15/15	CE	SW8081B
Endrin ketone	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
g-BHC	ND	1.5	ug/Kg	2	06/15/15	CE	SW8081B
Heptachlor	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
Heptachlor epoxide	ND	7.7	ug/Kg	2	06/15/15	CE	SW8081B
Methoxychlor	ND	39	ug/Kg	2	06/15/15	CE	SW8081B
Toxaphene	ND	150	ug/Kg	2	06/15/15	CE	SW8081B

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
QA/QC Surrogates							
% DCBP	101		%	2	06/15/15	CE	30 - 150 %
% TCMX	90		%	2	06/15/15	CE	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,1-Trichloroethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.2	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,2-Trichloroethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloroethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloroethene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloropropene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,3-Trichloropropane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dibromoethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichlorobenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichloroethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichloropropane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,3-Dichlorobenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,3-Dichloropropane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
1,4-Dichlorobenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
2,2-Dichloropropane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
2-Chlorotoluene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
2-Hexanone	ND	18	ug/Kg	1	06/18/15	JLI	SW8260C
2-Isopropyltoluene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
4-Chlorotoluene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
4-Methyl-2-pentanone	ND	18	ug/Kg	1	06/18/15	JLI	SW8260C
Acetone	ND	22	ug/Kg	1	06/18/15	JLI	SW8260C
Acrylonitrile	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Benzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Bromobenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Bromochloromethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Bromodichloromethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Bromoform	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Bromomethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Carbon Disulfide	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Carbon tetrachloride	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Chlorobenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Chloroethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Chloroform	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Chloromethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
cis-1,2-Dichloroethene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
cis-1,3-Dichloropropene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Dibromochloromethane	ND	2.2	ug/Kg	1	06/18/15	JLI	SW8260C
Dibromomethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Dichlorodifluoromethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Ethylbenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Hexachlorobutadiene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Isopropylbenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
m&p-Xylene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Methyl Ethyl Ketone	ND	22	ug/Kg	1	06/18/15	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	7.3	ug/Kg	1	06/18/15	JLI	SW8260C
Methylene chloride	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Naphthalene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
n-Butylbenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
n-Propylbenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
o-Xylene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
p-Isopropyltoluene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
sec-Butylbenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Styrene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
tert-Butylbenzene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Tetrachloroethene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Tetrahydrofuran (THF)	ND	7.3	ug/Kg	1	06/18/15	JLI	SW8260C
Toluene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Total Xylenes	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,2-Dichloroethene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,3-Dichloropropene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	7.3	ug/Kg	1	06/18/15	JLI	SW8260C
Trichloroethene	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Trichlorofluoromethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Trichlorotrifluoroethane	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
Vinyl chloride	ND	3.6	ug/Kg	1	06/18/15	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	95		%	1	06/18/15	JLI	70 - 130 %
% Bromofluorobenzene	95		%	1	06/18/15	JLI	70 - 130 %
% Dibromofluoromethane	95		%	1	06/18/15	JLI	70 - 130 %
% Toluene-d8	91		%	1	06/18/15	JLI	70 - 130 %

Polynuclear Aromatic HC

2-Methylnaphthalene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Acenaphthene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Acenaphthylene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Anthracene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Benz(a)anthracene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Benzo(a)pyrene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Benzo(b)fluoranthene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Benzo(ghi)perylene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Benzo(k)fluoranthene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Chrysene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Dibenz(a,h)anthracene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Fluoranthene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Fluorene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Indeno(1,2,3-cd)pyrene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Naphthalene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Phenanthrene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D
Pyrene	ND	550	ug/Kg	2	06/15/15	DD	SW8270D

Project ID: NAUGATUCK RR-14EC0019
Client ID: SED-1

Phoenix I.D.: BJ30657

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
QA/QC Surrogates							
% 2-Fluorobiphenyl	70		%	2	06/15/15	DD	30 - 130 %
% Nitrobenzene-d5	62		%	2	06/15/15	DD	30 - 130 %
% Terphenyl-d14	55		%	2	06/15/15	DD	30 - 130 %

B = Present in blank, no bias suspected.

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

Comments:

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide.This method is no longer listed in the current version of SW-846.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Sulfide. This method is no longer listed in the current version of SW-846.

Semi-Volatile Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, a dilution was required resulting in an elevated RL for the semivolatile analysis.

Pesticide Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported.

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

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

Phyllis Shiller, Laboratory Director
June 23, 2015
Reviewed and Released by: Ethan Lee, Project Manager

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

Analysis Report

June 23, 2015

FOR: Ms. Joy Kloss
BL Companies, Inc.
355 Research Parkway
Meriden, CT 06450

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		06/11/15	
Location Code:	BLCOMP-DAS	Received by:	LB	06/12/15	17:23
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBJ30654
Phoenix ID: BJ30658

Project ID: NAUGATUCK RR-14EC0019
Client ID: TRIP BLANK LOW

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed				06/11/15		SW5035A
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloroethene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,1-Dichloropropene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dibromoethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichloroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,2-Dichloropropane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,3-Dichloropropane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
2,2-Dichloropropane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
2-Chlorotoluene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
2-Hexanone	ND	25	ug/Kg	1	06/18/15	JLI	SW8260C
2-Isopropyltoluene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
4-Chlorotoluene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C

Project ID: NAUGATUCK RR-14EC0019
Client ID: TRIP BLANK LOW

Phoenix I.D.: BJ30658

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
4-Methyl-2-pentanone	ND	25	ug/Kg	1	06/18/15	JLI	SW8260C
Acetone	ND	30	ug/Kg	1	06/18/15	JLI	SW8260C
Acrylonitrile	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Benzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Bromobenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Bromochloromethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Bromodichloromethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Bromoform	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Bromomethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Carbon Disulfide	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Carbon tetrachloride	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Chlorobenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Chloroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Chloroform	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Chloromethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Dibromochloromethane	ND	3.0	ug/Kg	1	06/18/15	JLI	SW8260C
Dibromomethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Dichlorodifluoromethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Ethylbenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Hexachlorobutadiene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Isopropylbenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
m&p-Xylene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Methyl Ethyl Ketone	ND	30	ug/Kg	1	06/18/15	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	1	06/18/15	JLI	SW8260C
Methylene chloride	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Naphthalene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
n-Butylbenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
n-Propylbenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
o-Xylene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
p-Isopropyltoluene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
sec-Butylbenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Styrene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
tert-Butylbenzene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Tetrachloroethene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Tetrahydrofuran (THF)	ND	10	ug/Kg	1	06/18/15	JLI	SW8260C
Toluene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Total Xylenes	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	1	06/18/15	JLI	SW8260C
Trichloroethene	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Trichlorofluoromethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
Vinyl chloride	ND	5.0	ug/Kg	1	06/18/15	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	94		%	1	06/18/15	JLI	70 - 130 %
% Bromofluorobenzene	94		%	1	06/18/15	JLI	70 - 130 %

Project ID: NAUGATUCK RR-14EC0019
Client ID: TRIP BLANK LOW

Phoenix I.D.: BJ30658

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	98		%	1	06/18/15	JLI	70 - 130 %
% Toluene-d8	88		%	1	06/18/15	JLI	70 - 130 %

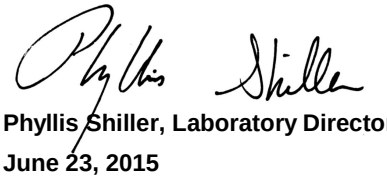
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.
Trip blank included

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

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



Phyllis Shiller, Laboratory Director
June 23, 2015
Reviewed and Released by: Ethan Lee, Project Manager

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

Analysis Report

June 23, 2015

FOR: Ms. Joy Kloss
BL Companies, Inc.
355 Research Parkway
Meriden, CT 06450

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		06/11/15	
Location Code:	BLCOMP-DAS	Received by:	LB	06/12/15	17:23
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBJ30654
Phoenix ID: BJ30667

Project ID: NAUGATUCK RR-14EC0019
Client ID: TRIP BLANK HIGH

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed				06/11/15		SW5035A
Volatiles							
1,1,1,2-Tetrachloroethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,1,1-Trichloroethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,1,2-Trichloroethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,1-Dichloroethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,1-Dichloroethene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,1-Dichloropropene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,2,3-Trichloropropane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,2-Dibromoethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,2-Dichlorobenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,2-Dichloroethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,2-Dichloropropane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,3-Dichlorobenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,3-Dichloropropane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
1,4-Dichlorobenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
2,2-Dichloropropane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
2-Chlorotoluene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
2-Hexanone	ND	1300	ug/Kg	50	06/18/15	JLI	SW8260C
2-Isopropyltoluene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
4-Chlorotoluene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C

Project ID: NAUGATUCK RR-14EC0019
Client ID: TRIP BLANK HIGH

Phoenix I.D.: BJ30667

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
4-Methyl-2-pentanone	ND	1300	ug/Kg	50	06/18/15	JLI	SW8260C
Acetone	ND	5000	ug/Kg	50	06/18/15	JLI	SW8260C
Acrylonitrile	ND	500	ug/Kg	50	06/18/15	JLI	SW8260C
Benzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Bromobenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Bromochloromethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Bromodichloromethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Bromoform	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Bromomethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Carbon Disulfide	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Carbon tetrachloride	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Chlorobenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Chloroethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Chloroform	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Chloromethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
cis-1,2-Dichloroethene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
cis-1,3-Dichloropropene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Dibromochloromethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Dibromomethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Dichlorodifluoromethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Ethylbenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Hexachlorobutadiene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Isopropylbenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
m&p-Xylene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Methyl Ethyl Ketone	ND	3000	ug/Kg	50	06/18/15	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Methylene chloride	ND	500	ug/Kg	50	06/18/15	JLI	SW8260C
Naphthalene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
n-Butylbenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
n-Propylbenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
o-Xylene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
p-Isopropyltoluene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
sec-Butylbenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Styrene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
tert-Butylbenzene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Tetrachloroethene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Tetrahydrofuran (THF)	ND	500	ug/Kg	50	06/18/15	JLI	SW8260C
Toluene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Total Xylenes	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
trans-1,2-Dichloroethene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
trans-1,3-Dichloropropene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	500	ug/Kg	50	06/18/15	JLI	SW8260C
Trichloroethene	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Trichlorofluoromethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Trichlorotrifluoroethane	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
Vinyl chloride	ND	250	ug/Kg	50	06/18/15	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	50	06/18/15	JLI	70 - 130 %
% Bromofluorobenzene	92		%	50	06/18/15	JLI	70 - 130 %

Project ID: NAUGATUCK RR-14EC0019
Client ID: TRIP BLANK HIGH

Phoenix I.D.: BJ30667

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	95		%	50	06/18/15	JLI	70 - 130 %
% Toluene-d8	91		%	50	06/18/15	JLI	70 - 130 %

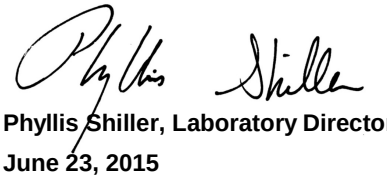
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.
Trip blank included

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

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



Phyllis Shiller, Laboratory Director
June 23, 2015
Reviewed and Released by: Ethan Lee, Project Manager

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

QA/QC Report

June 23, 2015

QA/QC Data

SDG I.D.: GBJ30654

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 310822 (mg/kg), QC Sample No: BJ30546 (BJ30654, BJ30655, BJ30656, BJ30657)														
Mercury - Soil	BRL	0.06	0.05	0.04	NC	102	96.1	6.0	95.8	87.8	8.7	70 - 130	30	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.														
QA/QC Batch 310881 (mg/kg), QC Sample No: BJ30637 (BJ30654)														
ICP Metals - Soil														
Arsenic	BRL	0.70	1.0	1.14	NC	97.9	100	2.1	99.3	95.1	4.3	75 - 125	30	
Barium	BRL	0.35	57.4	59.3	3.30	98.1	98.6	0.5	109	120	9.6	75 - 125	30	
Cadmium	BRL	0.35	<0.34	<0.37	NC	103	106	2.9	104	100	3.9	75 - 125	30	
Chromium	BRL	0.35	15.3	22.2	36.8	103	106	2.9	102	99.3	2.7	75 - 125	30	r
Lead	BRL	0.35	3.73	3.84	2.90	98.5	101	2.5	105	101	3.9	75 - 125	30	
Selenium	BRL	1.4	<1.4	<1.5	NC	88.8	92.9	4.5	91.3	88.3	3.3	75 - 125	30	
Silver	BRL	0.35	<0.34	<0.37	NC	94.7	96.3	1.7	99.2	94.9	4.4	75 - 125	30	
QA/QC Batch 310819 (mg/L), QC Sample No: BJ30654 (BJ30654, BJ30655, BJ30656, BJ30657)														
ICP Metals - TCLP Extraction														
Arsenic	BRL	0.01	0.01	0.01	NC	111	105	5.6	109	107	1.9	75 - 125	20	
Barium	0.02	0.01	0.24	0.25	4.10	99.9	97.2	2.7	98.1	98.0	0.1	75 - 125	20	
Cadmium	BRL	0.005	0.007	0.007	NC	109	104	4.7	107	106	0.9	75 - 125	20	
Chromium	BRL	0.010	0.002	0.003	NC	105	100	4.9	103	102	1.0	75 - 125	20	
Lead	BRL	0.010	0.009	0.009	NC	107	102	4.8	105	104	1.0	75 - 125	20	
Selenium	BRL	0.01	<0.01	<0.01	NC	115	108	6.3	111	110	0.9	75 - 125	20	
Silver	BRL	0.010	<0.010	<0.010	NC	110	105	4.7	108	108	0.0	75 - 125	20	
QA/QC Batch 310824 (mg/L), QC Sample No: BJ30655 (BJ30654, BJ30655, BJ30656, BJ30657)														
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	95.5	95.2	0.3	97.2	93.6	3.8	70 - 130	20	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.														
QA/QC Batch 310753 (mg/kg), QC Sample No: BJ30656 (BJ30655, BJ30656, BJ30657)														
ICP Metals - Soil														
Arsenic	BRL	0.71	7.2	6.09	16.7	95.8	99.5	3.8	93.3	90.9	2.6	75 - 125	30	
Barium	BRL	0.36	56.0	45.0	21.8	98.8	102	3.2	110	98.3	11.2	75 - 125	30	
Cadmium	BRL	0.36	0.95	0.81	NC	102	105	2.9	97.2	95.1	2.2	75 - 125	30	
Chromium	BRL	0.36	76.6	66.0	14.9	109	110	0.9	94.3	92.1	2.4	75 - 125	30	
Lead	BRL	0.36	62.3	57.5	8.00	94.8	96.5	1.8	96.8	92.5	4.5	75 - 125	30	
Selenium	BRL	1.4	<1.7	<1.4	NC	85.6	91.1	6.2	86.5	84.6	2.2	75 - 125	30	
Silver	BRL	0.36	<0.43	<0.36	NC	94.9	101	6.2	99.1	95.2	4.0	75 - 125	30	

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

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

QA/QC Report

June 23, 2015

QA/QC Data

SDG I.D.: GBJ30654

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 310832 (Degree F), QC Sample No: BJ30318 (BJ30654, BJ30655)													
Flash Point			>200	>200	NC	100						85 - 115	30
QA/QC Batch 310778 (PH), QC Sample No: BJ30603 (BJ30654, BJ30655, BJ30657)													
pH - Soil			6.26	6.04	3.60	99.5						85 - 115	20
QA/QC Batch 310776 (mg/Kg), QC Sample No: BJ30655 4.9X (BJ30654, BJ30655, BJ30657)													
Reactivity Cyanide	BRL	0.05	<6.0	<6.1	NC	93.8						85 - 115	30
QA/QC Batch 310945 (Degree F), QC Sample No: BJ30666 (BJ30657)													
Flash Point			>200	>200	NC	100						85 - 115	30
QA/QC Batch 311051 (umhos/cm), QC Sample No: BJ30686 (BJ30654, BJ30655, BJ30657)													
Conductivity - Soil Matrix	BRL	1	330	340	3.00	105						85 - 115	30

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QA/QC Report

June 23, 2015

QA/QC Data

SDG I.D.: GBJ30654

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 310601 (ug/Kg), QC Sample No: BJ30218 2X (BJ30654, BJ30655, BJ30656, BJ30657)										
Pesticides - Soil										
4,4' -DDD	ND	1.7	107	110	2.8	102	109	6.6	40 - 140	30
4,4' -DDE	ND	1.7	86	94	8.9	84	90	6.9	40 - 140	30
4,4' -DDT	ND	1.7	92	100	8.3	90	99	9.5	40 - 140	30
a-BHC	ND	3.3	88	93	5.5	81	84	3.6	40 - 140	30
a-Chlordane	ND	3.3	85	94	10.1	83	88	5.8	40 - 140	30
Alachlor	ND	3.3	NA	NA	NC	NA	NA	NC	40 - 140	30
Aldrin	ND	1.0	88	93	5.5	81	88	8.3	40 - 140	30
b-BHC	ND	3.3	83	86	3.6	80	87	8.4	40 - 140	30
Chlordane	ND	33	87	95	8.8	86	89	3.4	40 - 140	30
d-BHC	ND	3.3	79	82	3.7	86	69	21.9	40 - 140	30
Dieldrin	ND	1.0	93	99	6.3	89	96	7.6	40 - 140	30
Endosulfan I	ND	3.3	87	93	6.7	84	88	4.7	40 - 140	30
Endosulfan II	ND	3.3	87	94	7.7	84	93	10.2	40 - 140	30
Endosulfan sulfate	ND	3.3	83	83	0.0	83	86	3.6	40 - 140	30
Endrin	ND	3.3	91	91	0.0	79	88	10.8	40 - 140	30
Endrin aldehyde	ND	3.3	77	81	5.1	87	90	3.4	40 - 140	30
Endrin ketone	ND	3.3	110	99	10.5	95	103	8.1	40 - 140	30
g-BHC	ND	1.0	85	91	6.8	79	82	3.7	40 - 140	30
g-Chlordane	ND	3.3	87	95	8.8	86	89	3.4	40 - 140	30
Heptachlor	ND	3.3	88	94	6.6	81	85	4.8	40 - 140	30
Heptachlor epoxide	ND	3.3	84	92	9.1	83	87	4.7	40 - 140	30
Methoxychlor	ND	3.3	96	103	7.0	101	102	1.0	40 - 140	30
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	94	%	94	94	0.0	94	104	10.1	30 - 150	30
% TCMX	71	%	86	91	5.6	79	85	7.3	30 - 150	30
QA/QC Batch 310739 (ug/Kg), QC Sample No: BJ30605 2X (BJ30654, BJ30655, BJ30656, BJ30657)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	33	78	92	16.5	89	92	3.3	40 - 140	30
PCB-1221	ND	33							40 - 140	30
PCB-1232	ND	33							40 - 140	30
PCB-1242	ND	33							40 - 140	30
PCB-1248	ND	33							40 - 140	30
PCB-1254	ND	33							40 - 140	30
PCB-1260	ND	33	83	88	5.8	86	87	1.2	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	89	%	100	104	3.9	111	112	0.9	30 - 150	30
% TCMX (Surrogate Rec)	84	%	93	99	6.3	99	103	4.0	30 - 150	30

QA/QC Data

SDG I.D.: GBJ30654

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 310744 (mg/Kg), QC Sample No: BJ30655 (BJ30654, BJ30655, BJ30656, BJ30657)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum HC	ND	50	78	70	10.8	54	73	29.9	60 - 120	30
% n-Pentacosane	84	%	95	84	12.3	71	82	14.4	50 - 150	30
QA/QC Batch 310742 (ug/kg), QC Sample No: BJ30787 (BJ30654, BJ30655, BJ30656, BJ30657)										
Polynuclear Aromatic HC - Soil										
2-Methylnaphthalene	ND	230	89	91	2.2	91	90	1.1	30 - 130	30
Acenaphthene	ND	230	93	93	0.0	91	90	1.1	30 - 130	30
Acenaphthylene	ND	230	88	88	0.0	86	85	1.2	30 - 130	30
Anthracene	ND	230	102	97	5.0	95	95	0.0	30 - 130	30
Benz(a)anthracene	ND	230	99	95	4.1	91	92	1.1	30 - 130	30
Benzo(a)pyrene	ND	230	102	99	3.0	93	94	1.1	30 - 130	30
Benzo(b)fluoranthene	ND	230	107	103	3.8	97	93	4.2	30 - 130	30
Benzo(ghi)perylene	ND	230	92	95	3.2	93	93	0.0	30 - 130	30
Benzo(k)fluoranthene	ND	230	109	97	11.7	91	99	8.4	30 - 130	30
Chrysene	ND	230	107	103	3.8	98	98	0.0	30 - 130	30
Dibenz(a,h)anthracene	ND	230	91	95	4.3	93	91	2.2	30 - 130	30
Fluoranthene	ND	230	105	91	14.3	93	95	2.1	30 - 130	30
Fluorene	ND	230	93	92	1.1	90	90	0.0	30 - 130	30
Indeno(1,2,3-cd)pyrene	ND	230	92	95	3.2	94	92	2.2	30 - 130	30
Naphthalene	ND	230	84	88	4.7	87	87	0.0	30 - 130	30
Phenanthrene	ND	230	102	97	5.0	95	95	0.0	30 - 130	30
Pyrene	ND	230	107	90	17.3	93	96	3.2	30 - 130	30
% 2-Fluorobiphenyl	77	%	86	87	1.2	84	83	1.2	30 - 130	30
% Nitrobenzene-d5	64	%	76	79	3.9	79	79	0.0	30 - 130	30
% Terphenyl-d14	79	%	102	84	19.4	87	89	2.3	30 - 130	30
Comment:										
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)										
QA/QC Batch 311261 (ug/kg), QC Sample No: BJ30788 (BJ30654 (1X, 50X) , BJ30655, BJ30656, BJ30657, BJ30658, BJ30667 (50X))										
Volatiles - Soil										
1,1,1,2-Tetrachloroethane	ND	5.0	118	117	0.9	115	119	3.4	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	114	118	3.4	116	122	5.0	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	119	113	5.2	112	112	0.0	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	115	113	1.8	114	117	2.6	70 - 130	30
1,1-Dichloroethane	ND	5.0	115	118	2.6	109	116	6.2	70 - 130	30
1,1-Dichloroethene	ND	5.0	129	129	0.0	113	121	6.8	70 - 130	30
1,1-Dichloropropene	ND	5.0	115	120	4.3	118	126	6.6	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	107	105	1.9	113	120	6.0	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	114	108	5.4	107	109	1.9	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	105	104	1.0	115	121	5.1	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	106	108	1.9	109	114	4.5	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	123	123	0.0	114	115	0.9	70 - 130	30
1,2-Dibromoethane	ND	5.0	121	118	2.5	117	120	2.5	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	113	114	0.9	115	120	4.3	70 - 130	30
1,2-Dichloroethane	ND	5.0	120	117	2.5	120	124	3.3	70 - 130	30
1,2-Dichloropropane	ND	5.0	117	117	0.0	110	117	6.2	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	107	109	1.9	110	115	4.4	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	109	110	0.9	113	118	4.3	70 - 130	30
1,3-Dichloropropane	ND	5.0	116	114	1.7	114	117	2.6	70 - 130	30

QA/QC Data

SDG I.D.: GBJ30654

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,4-Dichlorobenzene	ND	5.0	109	113	3.6	115	120	4.3	70 - 130	30	
2,2-Dichloropropane	ND	5.0	112	120	6.9	117	118	0.9	70 - 130	30	
2-Chlorotoluene	ND	5.0	113	113	0.0	113	118	4.3	70 - 130	30	
2-Hexanone	ND	25	109	105	3.7	95	98	3.1	70 - 130	30	
2-Isopropyltoluene	ND	5.0	113	116	2.6	116	122	5.0	70 - 130	30	
4-Chlorotoluene	ND	5.0	113	114	0.9	119	123	3.3	70 - 130	30	
4-Methyl-2-pentanone	ND	25	116	112	3.5	106	108	1.9	70 - 130	30	
Acetone	ND	10	94	89	5.5	80	76	5.1	70 - 130	30	
Acrylonitrile	ND	5.0	122	110	10.3	110	111	0.9	70 - 130	30	
Benzene	ND	1.0	115	117	1.7	113	119	5.2	70 - 130	30	
Bromobenzene	ND	5.0	118	119	0.8	119	125	4.9	70 - 130	30	
Bromochloromethane	ND	5.0	115	114	0.9	110	114	3.6	70 - 130	30	
Bromodichloromethane	ND	5.0	124	123	0.8	119	126	5.7	70 - 130	30	
Bromoform	ND	5.0	126	121	4.0	108	116	7.1	70 - 130	30	
Bromomethane	ND	5.0	119	117	1.7	102	114	11.1	70 - 130	30	
Carbon Disulfide	ND	5.0	134	136	1.5	120	124	3.3	70 - 130	30	l
Carbon tetrachloride	ND	5.0	121	125	3.3	118	124	5.0	70 - 130	30	
Chlorobenzene	ND	5.0	117	116	0.9	118	124	5.0	70 - 130	30	
Chloroethane	ND	5.0	119	122	2.5	35	35	0.0	70 - 130	30	m
Chloroform	ND	5.0	110	112	1.8	110	114	3.6	70 - 130	30	
Chloromethane	ND	5.0	105	105	0.0	101	103	2.0	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	111	121	8.6	112	119	6.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	126	124	1.6	120	127	5.7	70 - 130	30	
Dibromochloromethane	ND	3.0	135	129	4.5	124	132	6.3	70 - 130	30	l,m
Dibromomethane	ND	5.0	116	117	0.9	113	119	5.2	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	126	126	0.0	129	132	2.3	70 - 130	30	m
Ethylbenzene	ND	1.0	118	118	0.0	121	125	3.3	70 - 130	30	
Hexachlorobutadiene	ND	5.0	111	114	2.7	119	124	4.1	70 - 130	30	
Isopropylbenzene	ND	1.0	111	113	1.8	112	117	4.4	70 - 130	30	
m&p-Xylene	ND	2.0	111	112	0.9	115	119	3.4	70 - 130	30	
Methyl ethyl ketone	ND	5.0	106	104	1.9	99	99	0.0	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0	121	118	2.5	117	120	2.5	70 - 130	30	
Methylene chloride	ND	5.0	106	108	1.9	103	106	2.9	70 - 130	30	
Naphthalene	ND	5.0	115	111	3.5	114	118	3.4	70 - 130	30	
n-Butylbenzene	ND	1.0	109	111	1.8	116	120	3.4	70 - 130	30	
n-Propylbenzene	ND	1.0	105	106	0.9	110	112	1.8	70 - 130	30	
o-Xylene	ND	2.0	117	118	0.9	118	124	5.0	70 - 130	30	
p-Isopropyltoluene	ND	1.0	110	112	1.8	113	118	4.3	70 - 130	30	
sec-Butylbenzene	ND	1.0	110	112	1.8	113	115	1.8	70 - 130	30	
Styrene	ND	5.0	114	115	0.9	116	122	5.0	70 - 130	30	
tert-Butylbenzene	ND	1.0	113	114	0.9	115	118	2.6	70 - 130	30	
Tetrachloroethene	ND	5.0	124	124	0.0	126	131	3.9	70 - 130	30	m
Tetrahydrofuran (THF)	ND	5.0	109	103	5.7	103	98	5.0	70 - 130	30	
Toluene	ND	1.0	118	119	0.8	121	124	2.4	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	125	125	0.0	118	123	4.1	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	132	129	2.3	127	133	4.6	70 - 130	30	l,m
trans-1,4-dichloro-2-butene	ND	5.0	131	122	7.1	120	122	1.7	70 - 130	30	l
Trichloroethene	ND	5.0	119	118	0.8	117	121	3.4	70 - 130	30	
Trichlorofluoromethane	ND	5.0	120	123	2.5	27	28	3.6	70 - 130	30	m
Trichlorotrifluoroethane	ND	5.0	120	127	5.7	114	119	4.3	70 - 130	30	
Vinyl chloride	ND	5.0	128	129	0.8	131	134	2.3	70 - 130	30	m
% 1,2-dichlorobenzene-d4	93	%	100	99	1.0	102	101	1.0	70 - 130	30	
% Bromofluorobenzene	96	%	102	100	2.0	101	101	0.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBJ30654

Parameter	Blank	Blk RL		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% Dibromofluoromethane	104	%		96	97	1.0	95	97	2.1	70 - 130	30
% Toluene-d8	89	%		103	102	1.0	101	101	0.0	70 - 130	30

Comment:

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

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

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

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
June 23, 2015

Sample Criteria Exceedences Report

GBJ30654 - BLCOMP-DAS

Criteria: CT: GAM

State: CT

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BJ30654	TCLP-CD	TCLP Cadmium	CT / INORGANIC SUBSTANCES / GA/GAA PMC (mg/l)**	0.007	0.005	0.005	0.005	mg/L
BJ30655	$8100SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GA/GAA PMC (	2700	560	1000	1000	ug/Kg
BJ30655	$8100SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GA/GAA PMC (	1800	560	1000	1000	ug/Kg
BJ30655	$8100SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GA/GAA PMC (	2000	560	1000	1000	ug/Kg
BJ30655	TCLP-CD	TCLP Cadmium	CT / INORGANIC SUBSTANCES / GA/GAA PMC (mg/l)**	0.008	0.005	0.005	0.005	mg/L
BJ30655	TCLP-PBTRC	TCLP Lead	CT / INORGANIC SUBSTANCES / GA/GAA PMC (mg/l)**	0.034	0.010	0.015	0.015	mg/L
BJ30656	$8100SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GA/GAA PMC (	1700	560	1000	1000	ug/Kg
BJ30656	$8100SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GA/GAA PMC (	1100	560	1000	1000	ug/Kg
BJ30656	$8100SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GA/GAA PMC (	1200	560	1000	1000	ug/Kg
BJ30656	TCLP-CD	TCLP Cadmium	CT / INORGANIC SUBSTANCES / GA/GAA PMC (mg/l)**	0.008	0.005	0.005	0.005	mg/L
BJ30656	TCLP-PBTRC	TCLP Lead	CT / INORGANIC SUBSTANCES / GA/GAA PMC (mg/l)**	0.037	0.010	0.015	0.015	mg/L
BJ30657	TCLP-CD	TCLP Cadmium	CT / INORGANIC SUBSTANCES / GA/GAA PMC (mg/l)**	0.021	0.005	0.005	0.005	mg/L

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** BL Companies, Inc.

Project Location: NAUGATUCK RR-14EC0019 **Project Number:**

Laboratory Sample ID(s): BJ30654, BJ30655, BJ30656, BJ30657, BJ30658, BJ30667

Sampling Date(s): 6/11/2015

RCP Methods Used:

☑ 1311/1312	☑ 6010	☐ 7000	☐ 7196	☑ 7470/7471	☑ 8081	☐ EPH	☐ TO15
☑ 8082	☐ 8151	☑ 8260	☑ 8270	☑ ETPH	☐ 9010/9012	☐ VPH	

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 CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP 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 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: ICP Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☑ Yes ☐ No ☐ NA
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 ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☐ Yes ☑ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #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 the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Ethan Lee

Date: Tuesday, June 23, 2015

Printed Name: Ethan Lee

Position: Project Manager

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RCP Certification Report

June 23, 2015

SDG I.D.: GBJ30654

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

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

Cyanide Narration

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

Instrument: Lachat 06/15/15-1 (BJ30654, BJ30655, BJ30657)

The samples were distilled in accordance with the method.
The initial calibration met criteria.

The calibration check standards (ICV,CCV) were within 15% of true value and were analyzed at a frequencey of one per ten samples.
The continuing calibration blanks (ICB,CCB) had concentrations less than the reporting level.

The method blank, laboratory control sample (LCS), and matrix spike were distilled with the samples.

Printed Name Eric Geyer
Position: Chemist
Date: 6/15/2015

QC (Batch Specific)

---------- Sample No: BJ30655, QA/QC Batch: 310776 ----------

All LCS recoveries were within 85 - 115 with the following exceptions: None.

ETPH Narration

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

Instrument: Au-fid11 06/16/15-1 (BJ30655)

The initial calibration (ETPH609I) RSD for the compound list was less than 30% except for the following compounds: None.

As per section 7.2.3, a discrimination check standard was run (616A003_1) and contained the following outliers: None.

The continuing calibration %D for the compound list was less than 30% except for the following compounds: None.

Printed Name Jeff Bucko
Position: Chemist
Date: 6/16/2015

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RCP Certification Report

June 23, 2015

SDG I.D.: GBJ30654

Instrument: Au-fid84 06/16/15-1 (BJ30654, BJ30655, BJ30656)

Initial Calibration (FID84 - ETPH_413) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

The initial calibration (ETPH603I) RSD for the compound list was less than 30% except for the following compounds: None.

As per section 7.2.3, a discrimination check standard was run (616A003_1) and contained the following outliers: None.

The continuing calibration %D for the compound list was less than 30% except for the following compounds:
Samples: BJ30654, BJ30655, BJ30656
Preceding CC 616A003 - None.
Succeeding CC 616A013 - TOTAL ETPH AREA (39%L)

Printed Name Jeff Bucko
Position: Chemist
Date: 6/16/2015

Instrument: Aufid-d1 06/15/15-1 (BJ30657)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

As per section 7.2.3, a discrimination check standard was run (615B003_1) and contained the following outliers: None.

The continuing calibration %D for the compound list was less than 30% except for the following compounds: None.

Printed Name Jeff Bucko
Position: Chemist
Date: 6/15/2015

Instrument: Aufid-d1 06/15/15-2 (BJ30657)

The initial calibration (ET608BI) RSD for the compound list was less than 30% except for the following compounds: None.

As per section 7.2.3, a discrimination check standard was run (615B016_1) and contained the following outliers: None.

The continuing calibration %D for the compound list was less than 30% except for the following compounds: None.

Printed Name Jeff Bucko
Position: Chemist
Date: 6/15/2015

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June 23, 2015

SDG I.D.: GBJ30654

Instrument: Au-xl2 06/15/15-2 (BJ30654, BJ30655, BJ30656)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

The initial calibration (ETPH602I) RSD for the compound list was less than 30% except for the following compounds: None.

As per section 7.2.3, a discrimination check standard was run (615A016_1) and contained the following outliers: None.

The continuing calibration %D for the compound list was less than 30% except for the following compounds: None.

Printed Name Jeff Bucko
Position: Chemist
Date: 6/15/2015

QC (Batch Specific)

---------- Sample No: BJ30655, QA/QC Batch: 310744 ----------

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

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

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

Mercury Narration

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

Instrument: Merlin 06/15/15-1 (BJ30654, BJ30655, BJ30656, BJ30657)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 6/15/2015

Instrument: Merlin 06/16/15-1 (BJ30654, BJ30655, BJ30656, BJ30657)

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

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June 23, 2015

SDG I.D.: GBJ30654

The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 6/16/2015

QC (Batch Specific)

---------- Sample No: BJ30546, QA/QC Batch: 310822 ----------

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

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

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

---------- Sample No: BJ30655, QA/QC Batch: 310824 ----------

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

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

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

ICP Narration

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

QC Batch 310819 (Samples: BJ30654, BJ30655, BJ30656, BJ30657): -----

A trace amount of an analyte was found in blank. Due to the concentration in the blank relative to the samples, no bias is suspected. (TCLP Extraction- Barium(BJ30654, BJ30655, BJ30656, BJ30657))

Instrument: Arcos 06/13/15-1 (BJ30655, BJ30656, BJ30657)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/13/2015

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SDG I.D.: GBJ30654

Instrument: Arcos 06/15/15-1 (BJ30655, BJ30656, BJ30657)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/15/2015

Instrument: Arcos 06/16/15-1 (BJ30654)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/16/2015

Instrument: Arcos 06/17/15-1 (BJ30654)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/17/2015

Instrument: Arcos 06/18/15-1 (BJ30654)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/18/2015

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RCP Certification Report

June 23, 2015

SDG I.D.: GBJ30654

QC (Batch Specific)

---------- Sample No: BJ30637, QA/QC Batch: 310881 ----------

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

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

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

---------- Sample No: BJ30654, QA/QC Batch: 310819 ----------

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

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

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BJ30656, QA/QC Batch: 310753 ----------

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

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

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

PAH Narration

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

Instrument: Chem05 06/12/15-2 (BJ30654)

Initial Calibration Verification (CHEM05/BN_0608):
100% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet a minimum response factor of 0.01: None.

Continuing Calibration Verification (CHEM05/0612_24-BN_0608):
100% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

Printed Name Damien Drobinski
Position: Chemist
Date: 6/12/2015

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June 23, 2015

SDG I.D.: GBJ30654

QC (Batch Specific)

---------- Sample No: BJ30787, QA/QC Batch: 310742 ----------

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

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

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

PCB Narration

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

Instrument: Au-ecd3 06/13/15-1 (BJ30655, BJ30656, BJ30657)

The initial calibration (PC609AI) RSD for the compound list was less than 20% except for the following compounds: None.

The initial calibration (PC609BI) RSD for the compound list was less than 20% except for the following compounds: None.

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

Printed Name Adam Werner
Position: Chemist
Date: 6/13/2015

Instrument: Au-ecd6 06/13/15-1 (BJ30654)

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

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

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

Printed Name Adam Werner
Position: Chemist
Date: 6/13/2015

QC (Batch Specific)

---------- Sample No: BJ30605, QA/QC Batch: 310739 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

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

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RCP Certification Report

June 23, 2015

SDG I.D.: GBJ30654

PEST Narration

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

Instrument: Au-ecd13 06/15/15-1 (BJ30654, BJ30655, BJ30656, BJ30657)

8081 Narration:
Endrin and DDT breakdown was evaluated and does not exceed 15%.

The initial calibration (PS608AI) RSD for the compound list was less than 20% except for the following compounds: None.

The initial calibration (PS608BI) RSD for the compound list was less than 20% except for the following compounds: None.

The continuing calibration %D for the compound list was less than 15% except for the following compounds:
Samples: BJ30654, BJ30655, BJ30656, BJ30657
Preceding CC 615A032 - % DCBP (18%H), Endrin aldehyde (25%L), Methoxychlor (27%H)
Succeeding CC 615A058 - Endrin aldehyde (24%L), Methoxychlor (16%H)
A low "1A" standard was run to demonstrate capability to detect these compounds at the indicated RL. All reported samples were ND for these compounds.

Printed Name Carol Eddy
Position: Chemist
Date: 6/15/2015

QC (Batch Specific)

---------- Sample No: BJ30218, QA/QC Batch: 310601 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

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

SVOA Narration

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

Instrument: Chem19 06/15/15-1 (BJ30655, BJ30656, BJ30657)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

Initial Calibration Verification (CHEM19/SV_0609):
97% of target compounds met criteria.
The following compounds had %RSDs >20%: 2,4-Dinitrophenol (29%), 4,6-Dinitro-2-methylphenol (31%), Pentachlorophenol (24%)
The following compounds did not meet a minimum response factor of 0.01: None.

Continuing Calibration Verification (CHEM19/0615_02-SV_0609):
99% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following

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RCP Certification Report

June 23, 2015

SDG I.D.: GBJ30654

compounds did not meet % deviation criteria: Benzidine (-32%)[30%]
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: 2-nitrophenol (.080)[0.1]
The following compounds did not meet minimum response factors: None.

Printed Name Damien Drobinski
Position: Chemist
Date: 6/15/2015

QC (Batch Specific)

---------- Sample No: BJ30787, QA/QC Batch: 310742 ----------

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

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

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

VOA Narration

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

QC Batch 311261 (Samples: BJ30654, BJ30655, BJ30656, BJ30657, BJ30658, BJ30667): -----

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Carbon Disulfide, trans-1,4-dichloro-2-butene)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Dibromochloromethane, trans-1,3-Dichloropropene)

Instrument: Chem18 06/17/15-2 (BJ30654, BJ30655, BJ30656, BJ30657, BJ30658, BJ30667)

Initial Calibration Verification (CHEM18/VT-M0615):
99% of target compounds met criteria.
The following compounds had %RSDs >20%: Acetone (33%)
The following compounds did not meet a minimum response factor of 0.01: None.

Continuing Calibration Verification (CHEM18/0617M35-VT-M0615):
99% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the continuing calibration. The following compounds did not meet % deviation criteria: tert-butyl alcohol (31%L)[30%]
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

Printed Name Jane Li
Position: Chemist
Date: 6/17/2015

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RCP Certification Report

June 23, 2015

SDG I.D.: GBJ30654

QC (Batch Specific)

---------- Sample No: BJ30788, QA/QC Batch: 311261 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(134%), Dibromochloromethane(135%), trans-1,3-Dichloropropene(132%), trans-1,4-dichloro-2-butene(131%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(136%)

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

Temperature Narration

The samples were received at 5C with cooling initiated.
(Note acceptance criteria is above freezing up to 6°C)

Cooler: Yes ☒ No ☐
Coolant: TPK ☐ ICE ☒ No ☐
Temp 7 °C Pg 1 of 2

CHAIN OF CUSTODY RECORD

PHOENIX *Environmental Laboratories, Inc.*

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Client Services (860) 645-8726

Contact Options:
☐ Fax:
☒ Phone: 203-630-1406
☒ Email: jkloss@blcompanies.com

Customer: BL Companies
Address: 355 Research Parkway
Meriden, CT

Project: Naugatuck RR - 14EC0019
Report to: Joy Kloss
Invoice to:

Project P.O:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: Dan B [illegible] Date: 6/11/15

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	~~time~~ Date Sampled	~~date~~ Time Sampled	VOCs 8260	PAHs 8270	CT ETPH	PCBs 8082	Pesticides 8081	total and TCLP RCRA 8 Metals	Free liquids	Ignitability	Reactivity	pH	conductivity	Soil VOA Vials [1] methanol [2] H2O	GL Soil container (8) oz	GL Soil container (4) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
30654	WC-west	S	1030	6/11/15	X	X	X	X	X	X	X	X	X	X	X	3	2	1							
30655	WC-East	S	1100	6/11/15	X	X	X	X	X	X	X	X	X	X	X	3	2	1							
30656	WC-East (Dup)	S	1105	6/11/15	X	X	X	X	X	X	X	X	X	X	DSM	3	2	1							
30657	SED-1	S	1200	6/11/15	X	X	X	X	X	X	X	X	X	X	X	3	2	1							
30658	Trip Blank				X											2	2	1							
30667	T.B. H.L																								

Relinquished by:	Accepted by:	Date:	Time:
[illegible]	Colt Sat	6/12/15	12:00
Colt Sat	[illegible]	6/12/15	1723

Comments, Special Requirements or Regulations:
DAS Contract / ISP form / No tax
*Bottles labeled 14EC0021 but should be 14EC0019

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ Standard
☒ Other 5 day
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☒ GW Protection
☒ SW Protection
☒ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☒ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☐ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Monday, June 22, 2015

Attn: Ms Joy Kloss
BL Companies, Inc.
355 Research Parkway
Meriden, CT 06450

Project ID: NAUGATUCK RR-14EC0019
Sample ID#s: BJ30659 - BJ30660

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

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

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

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

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

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

Analysis Report

June 22, 2015

FOR: Attn: Ms Joy Kloss
BL Companies, Inc.
355 Research Parkway
Meriden, CT 06450

Sample Information		Custody Information		Date	Time
Matrix:	SURFACE WATER	Collected by:		06/11/15	10:00
Location Code:	BLCOMPDOT	Received by:	SW	06/12/15	17:23
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	NEED POS				

Laboratory Data

SDG ID: GBJ30659
Phoenix ID: BJ30659

Project ID: NAUGATUCK RR-14EC0019
Client ID: SW-1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.001	0.001	mg/L	1	06/13/15	LK	SW6010C
Arsenic - LDL	< 0.001	0.001	mg/L	1	06/17/15	RS	SW3113B
Barium	0.052	0.002	mg/L	1	06/13/15	LK	SW6010C
Cadmium	< 0.001	0.001	mg/L	1	06/13/15	LK	SW6010C
Chromium	< 0.001	0.001	mg/L	1	06/13/15	LK	SW6010C
Copper	< 0.005	0.005	mg/L	1	06/13/15	LK	SW6010C
Silver (Dissolved)	< 0.001	0.001	mg/L	1	06/13/15	LK	SW6010C
Arsenic (Dissolved)	< 0.004	0.004	mg/L	1	06/13/15	LK	SW6010C
Barium (Dissolved)	0.063	0.002	mg/L	1	06/13/15	LK	SW6010C
Cadmium (Dissolved)	< 0.001	0.001	mg/L	1	06/13/15	LK	SW6010C
Chromium (Dissolved)	< 0.001	0.001	mg/L	1	06/13/15	LK	SW6010C
Copper (Dissolved)	< 0.005	0.005	mg/L	1	06/13/15	LK	SW6010C
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	1	06/16/15	RS	SW7470A
Lead (Dissolved)	< 0.002	0.002	mg/L	1	06/13/15	LK	SW6010C
Selenium (Dissolved)	< 0.002	0.002	mg/L	1	06/15/15	TH	E200.9/SM3113B-1
Zinc (Dissolved)	0.063	0.002	mg/L	1	06/13/15	LK	SW6010C
Mercury	< 0.0002	0.0002	mg/L	1	06/16/15	RS	SW7470A
Lead	< 0.002	0.002	mg/L	1	06/13/15	LK	SW6010C
Selenium	< 0.010	0.010	mg/L	1	06/13/15	LK	SW6010C
Zinc	0.052	0.002	mg/L	1	06/13/15	LK	SW6010C
O&G, Non-polar Material	< 1.4	1.4	mg/L	1	06/15/15	MSF	E1664A
Mercury Dissolved Digestion	Completed				06/15/15	I/I	SW7470A
Mercury Digestion	Completed				06/16/15	I/I	SW7470A
PCB Extraction (2 Liter)	Completed				06/12/15	L	SW3510C
Extraction for Pest (2 Liter)	Completed				06/12/15	L	SW3510C
Semi-Volatile Extraction	Completed				06/15/15	e/D/D	E625/SW3520C
Dissolved Metals Preparation	Completed				06/12/15	AG	SW3005A
Total Metals Digestion	Completed				06/12/15	AG	SW3050B

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Polychlorinated Biphenyls							
PCB-1016	ND	0.050	ug/L	1	06/13/15	AW	E608
PCB-1221	ND	0.050	ug/L	1	06/13/15	AW	E608
PCB-1232	ND	0.050	ug/L	1	06/13/15	AW	E608
PCB-1242	ND	0.050	ug/L	1	06/13/15	AW	E608
PCB-1248	ND	0.050	ug/L	1	06/13/15	AW	E608
PCB-1254	ND	0.050	ug/L	1	06/13/15	AW	E608
PCB-1260	ND	0.050	ug/L	1	06/13/15	AW	E608
QA/QC Surrogates							
% DCBP	61		%	1	06/13/15	AW	30 - 150 %
% TCMX	74		%	1	06/13/15	AW	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.010	ug/L	1	06/16/15	CE	E608
4,4' -DDE	ND	0.010	ug/L	1	06/16/15	CE	E608
4,4' -DDT	ND	0.010	ug/L	1	06/16/15	CE	E608
a-BHC	ND	0.010	ug/L	1	06/16/15	CE	E608
Aldrin	ND	0.002	ug/L	1	06/16/15	CE	E608
b-BHC	ND	0.010	ug/L	1	06/16/15	CE	E608
Chlordane	ND	0.050	ug/L	1	06/16/15	CE	E608
d-BHC	ND	0.010	ug/L	1	06/16/15	CE	E608
Dieldrin	ND	0.002	ug/L	1	06/16/15	CE	E608
Endosulfan I	ND	0.010	ug/L	1	06/16/15	CE	E608
Endosulfan II	ND	0.010	ug/L	1	06/16/15	CE	E608
Endosulfan sulfate	ND	0.010	ug/L	1	06/16/15	CE	E608
Endrin	ND	0.010	ug/L	1	06/16/15	CE	E608
Endrin aldehyde	ND	0.010	ug/L	1	06/16/15	CE	E608
g-BHC	ND	0.010	ug/L	1	06/16/15	CE	E608
Heptachlor	ND	0.010	ug/L	1	06/16/15	CE	E608
Heptachlor epoxide	ND	0.010	ug/L	1	06/16/15	CE	E608
Toxaphene	ND	0.20	ug/L	1	06/16/15	CE	E608
QA/QC Surrogates							
% DCBP	68		%	1	06/16/15	CE	E608
% TCMX	54		%	1	06/16/15	CE	E608
Volatiles							
1,1,1-Trichloroethane	ND	0.50	ug/L	1	06/13/15	RM	E624
1,1,2,2-tetrachloroethane	ND	0.50	ug/L	1	06/13/15	RM	E624
1,1,2-Trichloroethane	ND	0.50	ug/L	1	06/13/15	RM	E624
1,1-Dichloroethane	ND	0.50	ug/L	1	06/13/15	RM	E624
1,1-Dichloroethene	ND	0.50	ug/L	1	06/13/15	RM	E624
1,2-Dichlorobenzene	ND	0.50	ug/L	1	06/13/15	RM	E624
1,2-Dichloroethane	ND	0.50	ug/L	1	06/13/15	RM	E624
1,2-Dichloropropane	ND	0.50	ug/L	1	06/13/15	RM	E624
1,3-Dichlorobenzene	ND	0.50	ug/L	1	06/13/15	RM	E624
1,4-Dichlorobenzene	ND	0.50	ug/L	1	06/13/15	RM	E624
Benzene	ND	0.50	ug/L	1	06/13/15	RM	E624
Bromodichloromethane	ND	0.50	ug/L	1	06/13/15	RM	E624
Bromoform	ND	0.50	ug/L	1	06/13/15	RM	E624

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Bromomethane	ND	0.50	ug/L	1	06/13/15	RM	E624	
Carbon tetrachloride	ND	0.50	ug/L	1	06/13/15	RM	E624	
Chlorobenzene	ND	0.50	ug/L	1	06/13/15	RM	E624	
Chloroethane	ND	0.50	ug/L	1	06/13/15	RM	E624	
Chloroform	ND	0.50	ug/L	1	06/13/15	RM	E624	
Chloromethane	ND	0.50	ug/L	1	06/13/15	RM	E624	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1	06/13/15	RM	E624	
cis-1,3-Dichloropropene	ND	0.40	ug/L	1	06/13/15	RM	E624	
Dibromochloromethane	ND	0.50	ug/L	1	06/13/15	RM	E624	
Ethylbenzene	ND	0.50	ug/L	1	06/13/15	RM	E624	
m&p-Xylene	ND	0.50	ug/L	1	06/13/15	RM	E624	
Methyl tert-butyl ether (MTBE)	ND	1.0	ug/L	1	06/13/15	RM	E624	
Methylene chloride	ND	0.50	ug/L	1	06/13/15	RM	E624	
o-Xylene	ND	0.50	ug/L	1	06/13/15	RM	E624	
Tetrachloroethene	ND	0.50	ug/L	1	06/13/15	RM	E624	
Toluene	ND	0.50	ug/L	1	06/13/15	RM	E624	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1	06/13/15	RM	E624	
trans-1,3-Dichloropropene	ND	0.40	ug/L	1	06/13/15	RM	E624	
Trichloroethene	ND	0.50	ug/L	1	06/13/15	RM	E624	
Trichlorofluoromethane	ND	0.50	ug/L	1	06/13/15	RM	E624	
Vinyl chloride	ND	0.50	ug/L	1	06/13/15	RM	E624	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	98		%	1	06/13/15	RM	70 - 130 %	
% Bromofluorobenzene	101		%	1	06/13/15	RM	70 - 130 %	
% Dibromofluoromethane	96		%	1	06/13/15	RM	70 - 130 %	
% Toluene-d8	100		%	1	06/13/15	RM	70 - 130 %	

Semivolatiles by (SIM)

Acenaphthene	ND	0.05	ug/L	1	06/17/15	DD	E625/E625 SIM	
Acenaphthylene	ND	0.05	ug/L	1	06/17/15	DD	E625/E625 SIM	
Benzo(a)anthracene	ND	0.04	ug/L	1	06/17/15	DD	E625/E625 SIM	
Benzo(a)pyrene	ND	0.05	ug/L	1	06/17/15	DD	E625/E625 SIM	
Benzo(b)fluoranthene	ND	0.05	ug/L	1	06/17/15	DD	E625/E625 SIM	
Benzo(g,h,i)perylene	ND	3.0	ug/L	1	06/17/15	DD	E625/E625 SIM	
Benzo(k)fluoranthene	ND	0.05	ug/L	1	06/17/15	DD	E625/E625 SIM	
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	1	06/17/15	DD	E625/E625 SIM	B
Chrysene	ND	0.05	ug/L	1	06/17/15	DD	E625/E625 SIM	
Dibenz(a,h)anthracene	ND	0.01	ug/L	1	06/17/15	DD	E625/E625 SIM	
Hexachlorobenzene	ND	0.06	ug/L	1	06/17/15	DD	E625/E625 SIM	
Hexachlorobutadiene	ND	0.60	ug/L	1	06/17/15	DD	E625/E625 SIM	
Hexachloroethane	ND	2.4	ug/L	1	06/17/15	DD	E625/E625 SIM	
Indeno(1,2,3-c,d)pyrene	ND	0.05	ug/L	1	06/17/15	DD	E625/E625 SIM	
Pentachlorophenol	ND	0.80	ug/L	1	06/17/15	DD	E625/E625 SIM	
Phenanthrene	ND	0.05	ug/L	1	06/17/15	DD	E625/E625 SIM	
Pyridine	ND	0.50	ug/L	1	06/17/15	DD	E625/E625 SIM	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	96		%	1	06/17/15	DD	15 - 110 %	
% 2-Fluorobiphenyl	72		%	1	06/17/15	DD	30 - 130 %	
% 2-Fluorophenol	59		%	1	06/17/15	DD	15 - 110 %	
% Nitrobenzene-d5	64		%	1	06/17/15	DD	30 - 130 %	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Phenol-d5	59		%	1	06/17/15	DD	15 - 110 %
% Terphenyl-d14	97		%	1	06/17/15	DD	30 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
1,2-Dichlorobenzene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
1,2-Diphenylhydrazine	ND	10	ug/L	1	06/18/15	DD	E625/E625 SIM
1,3-Dichlorobenzene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
1,4-Dichlorobenzene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
2,4,5-Trichlorophenol	ND	10	ug/L	1	06/18/15	DD	E625/E625 SIM
2,4,6-Trichlorophenol	ND	10	ug/L	1	06/18/15	DD	E625/E625 SIM
2,4-Dichlorophenol	ND	10	ug/L	1	06/18/15	DD	E625/E625 SIM
2,4-Dimethylphenol	ND	10	ug/L	1	06/18/15	DD	E625/E625 SIM
2,4-Dinitrophenol	ND	50	ug/L	1	06/18/15	DD	E625/E625 SIM
2,4-Dinitrotoluene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
2,6-Dichlorophenol	ND	10	ug/L	1	06/18/15	DD	E625/E625 SIM
2,6-Dinitrotoluene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
2-Chloronaphthalene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
2-Chlorophenol	ND	10	ug/L	1	06/18/15	DD	E625/E625 SIM
2-Methylnaphthalene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
2-Methylphenol (o-cresol)	ND	10	ug/L	1	06/18/15	DD	E625/E625 SIM
2-Nitroaniline	ND	50	ug/L	1	06/18/15	DD	E625/E625 SIM
2-Nitrophenol	ND	10	ug/L	1	06/18/15	DD	E625/E625 SIM
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	1	06/18/15	DD	E625/E625 SIM
3,3'-Dichlorobenzidine	ND	50	ug/L	1	06/18/15	DD	E625/E625 SIM
3-Nitroaniline	ND	50	ug/L	1	06/18/15	DD	E625/E625 SIM
4,6-Dinitro-2-methylphenol	ND	50	ug/L	1	06/18/15	DD	E625/E625 SIM
4-Bromophenyl phenyl ether	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
4-Chloro-3-methylphenol	ND	20	ug/L	1	06/18/15	DD	E625/E625 SIM
4-Chloroaniline	ND	20	ug/L	1	06/18/15	DD	E625/E625 SIM
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
4-Nitroaniline	ND	20	ug/L	1	06/18/15	DD	E625/E625 SIM
4-Nitrophenol	ND	50	ug/L	1	06/18/15	DD	E625/E625 SIM
Anthracene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
Benzidine	ND	50	ug/L	1	06/18/15	DD	E625/E625 SIM
Benzoic acid	ND	50	ug/L	1	06/18/15	DD	E625/E625 SIM
Benzyl alcohol	ND	20	ug/L	1	06/18/15	DD	E625/E625 SIM
Benzyl butyl phthalate	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
Bis(2-chloroethyl)ether	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
Dibenzofuran	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
Diethyl phthalate	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
Dimethylphthalate	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
Di-n-butylphthalate	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
Di-n-octylphthalate	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
Fluoranthene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
Fluorene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
Hexachlorocyclopentadiene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM
Isophorone	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM

Project ID: NAUGATUCK RR-14EC0019
Client ID: SW-1

Phoenix I.D.: BJ30659

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Naphthalene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM	
Nitrobenzene	ND	10	ug/L	1	06/18/15	DD	E625/E625 SIM	
N-Nitrosodimethylamine	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM	
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM	
N-Nitrosodiphenylamine	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM	
Phenol	ND	10	ug/L	1	06/18/15	DD	E625/E625 SIM	
Pyrene	ND	5.0	ug/L	1	06/18/15	DD	E625/E625 SIM	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	115		%	1	06/18/15	DD	15 - 110 %	3
% 2-Fluorobiphenyl	67		%	1	06/18/15	DD	30 - 130 %	
% 2-Fluorophenol	44		%	1	06/18/15	DD	15 - 110 %	
% Nitrobenzene-d5	72		%	1	06/18/15	DD	30 - 130 %	
% Phenol-d5	60		%	1	06/18/15	DD	15 - 110 %	
% Terphenyl-d14	70		%	1	06/18/15	DD	30 - 130 %	

3 = This parameter exceeds laboratory specified limits.
B = Present in blank, no bias suspected.

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

Comments:

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

624 Analyses:
Acrylonitrile, 2-Chloroethyl vinyl ether and Acrolein could not be analyzed due to HCL preserved vial, these compounds can only be analyzed on an AS IS vial.

Oil and Grease:
This sample was received with a pH>=2; pH was NOT adjusted (EPA requires preservation at time of sampling to a pH of <2.) A sample bias can not be ruled out.

Semi-Volatile Comment:
One of the surrogate recoveries was above the upper range due to sample matrix interference. The other surrogates associated with this sample were within QA/QC criteria. No significant bias is suspected.

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

Phyllis Shiller, Laboratory Director
June 22, 2015
Reviewed and Released by: Maryam Taylor, Project Manager

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

Analysis Report

June 22, 2015

FOR: Attn: Ms Joy Kloss
BL Companies, Inc.
355 Research Parkway
Meriden, CT 06450

Sample Information		Custody Information		Date	Time
Matrix:	SURFACE WATER	Collected by:		06/11/15	
Location Code:	BLCOMPDOT	Received by:	SW	06/12/15	17:23
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	NEED POS				

Laboratory Data

SDG ID: GBJ30659
Phoenix ID: BJ30660

Project ID: NAUGATUCK RR-14EC0019
Client ID: TRIP BLANK

Parameter	Result		RL/ PQL	Units	Dilution	Date/Time	By	Reference
Volatiles								
1,1,1-Trichloroethane	ND		0.50	ug/L	1	06/13/15	RM	E624
1,1,2,2-tetrachloroethane	ND		0.50	ug/L	1	06/13/15	RM	E624
1,1,2-Trichloroethane	ND		0.50	ug/L	1	06/13/15	RM	E624
1,1-Dichloroethane	ND		0.50	ug/L	1	06/13/15	RM	E624
1,1-Dichloroethene	ND		0.50	ug/L	1	06/13/15	RM	E624
1,2-Dichlorobenzene	ND		0.50	ug/L	1	06/13/15	RM	E624
1,2-Dichloroethane	ND		0.50	ug/L	1	06/13/15	RM	E624
1,2-Dichloropropane	ND		0.50	ug/L	1	06/13/15	RM	E624
1,3-Dichlorobenzene	ND		0.50	ug/L	1	06/13/15	RM	E624
1,4-Dichlorobenzene	ND		0.50	ug/L	1	06/13/15	RM	E624
Benzene	ND		0.50	ug/L	1	06/13/15	RM	E624
Bromodichloromethane	ND		0.50	ug/L	1	06/13/15	RM	E624
Bromoform	ND		0.50	ug/L	1	06/13/15	RM	E624
Bromomethane	ND		0.50	ug/L	1	06/13/15	RM	E624
Carbon tetrachloride	ND		0.50	ug/L	1	06/13/15	RM	E624
Chlorobenzene	ND		0.50	ug/L	1	06/13/15	RM	E624
Chloroethane	ND		0.50	ug/L	1	06/13/15	RM	E624
Chloroform	ND		0.50	ug/L	1	06/13/15	RM	E624
Chloromethane	ND		0.50	ug/L	1	06/13/15	RM	E624
cis-1,2-Dichloroethene	ND		0.50	ug/L	1	06/13/15	RM	E624
cis-1,3-Dichloropropene	ND		0.40	ug/L	1	06/13/15	RM	E624
Dibromochloromethane	ND		0.50	ug/L	1	06/13/15	RM	E624
Ethylbenzene	ND		0.50	ug/L	1	06/13/15	RM	E624
m&p-Xylene	ND		0.50	ug/L	1	06/13/15	RM	E624
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L	1	06/13/15	RM	E624
Methylene chloride	0.32	JS	0.50	ug/L	1	06/13/15	RM	E624

Project ID: NAUGATUCK RR-14EC0019 Phoenix I.D.: BJ30660

Client ID: TRIP BLANK

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
o-Xylene	ND	0.50	ug/L	1	06/13/15	RM	E624
Tetrachloroethene	ND	0.50	ug/L	1	06/13/15	RM	E624
Toluene	ND	0.50	ug/L	1	06/13/15	RM	E624
trans-1,2-Dichloroethene	ND	0.50	ug/L	1	06/13/15	RM	E624
trans-1,3-Dichloropropene	ND	0.40	ug/L	1	06/13/15	RM	E624
Trichloroethene	ND	0.50	ug/L	1	06/13/15	RM	E624
Trichlorofluoromethane	ND	0.50	ug/L	1	06/13/15	RM	E624
Vinyl chloride	ND	0.50	ug/L	1	06/13/15	RM	E624
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	1	06/13/15	RM	70 - 130 %
% Bromofluorobenzene	102		%	1	06/13/15	RM	70 - 130 %
% Dibromofluoromethane	99		%	1	06/13/15	RM	70 - 130 %
% Toluene-d8	100		%	1	06/13/15	RM	70 - 130 %

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

Comments:

TRIP BLANK INCLUDED.

624 Analyses:
Acrylonitrile, 2-Chloroethyl vinyl ether and Acrolein could not be analyzed due to HCL preserved vial, these compounds can only be analyzed on an AS IS vial.

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

Phyllis Shiller, Laboratory Director

June 22, 2015

Reviewed and Released by: Maryam Taylor, Project Manager

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

QA/QC Report

June 22, 2015

QA/QC Data

SDG I.D.: GBJ30659

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 310423 (mg/L), QC Sample No: BJ29298 (BJ30659)													
Arsenic - LDL - Water	BRL	0.002	<0.002	<0.002	NC	105	107	1.9	114	108	5.4	75 - 125	20
QA/QC Batch 310613 (mg/L), QC Sample No: BJ29843 (BJ30659)													
Selenium (Dissolved)	BRL	0.002	<0.002	<0.002	NC	110	114	3.6	81.7	83.1	1.7	75 - 125	20
QA/QC Batch 310612 (mg/L), QC Sample No: BJ29868 (BJ30659)													
ICP Metals - Dissolved													
Arsenic	BRL	0.004	<0.004	<0.004	NC	92.9	93.8	1.0	88.4	86.9	1.7	75 - 125	20
Barium	BRL	0.002	0.015	0.015	0	97.0	98.5	1.5	92.0	91.0	1.1	75 - 125	20
Cadmium	BRL	0.001	<0.001	<0.001	NC	93.9	95.7	1.9	89.7	89.4	0.3	75 - 125	20
Chromium	BRL	0.001	<0.001	<0.001	NC	96.1	98.2	2.2	93.0	91.7	1.4	75 - 125	20
Copper	BRL	0.005	<0.005	<0.005	NC	96.4	97.8	1.4	93.9	92.9	1.1	75 - 125	20
Lead	BRL	0.002	<0.002	<0.002	NC	92.4	93.1	0.8	87.3	86.6	0.8	75 - 125	20
Silver	BRL	0.001	<0.001	<0.001	NC	93.5	94.4	1.0	90.0	89.7	0.3	75 - 125	20
Zinc	BRL	0.002	0.003	0.003	NC	93.0	94.7	1.8	89.7	88.9	0.9	75 - 125	20
QA/QC Batch 310824 (mg/L), QC Sample No: BJ30655 (BJ30659)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	95.5	95.2	0.3	97.2	93.6	3.8	70 - 130	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 310764 (mg/L), QC Sample No: BJ30659 (BJ30659)													
ICP Metals - Aqueous													
Barium	BRL	0.002	0.052	0.056	7.40	97.0	94.7	2.4	102	94.3	7.8	75 - 125	20
Cadmium	BRL	0.001	<0.001	<0.001	NC	95.5	93.0	2.7	100	93.6	6.6	75 - 125	20
Chromium	BRL	0.001	<0.001	<0.001	NC	96.5	93.9	2.7	101	95.5	5.6	75 - 125	20
Copper	BRL	0.005	<0.005	<0.005	NC	96.5	93.9	2.7	105	98.8	6.1	75 - 125	20
Lead	BRL	0.002	<0.002	<0.002	NC	92.6	91.3	1.4	98.1	93.5	4.8	75 - 125	20
Selenium	BRL	0.010	<0.010	<0.010	NC	91.3	90.9	0.4	99.3	94.9	4.5	75 - 125	20
Silver	BRL	0.001	<0.001	<0.001	NC	93.5	90.8	2.9	100	94.3	5.9	75 - 125	20
Zinc	BRL	0.002	0.052	0.054	3.80	94.1	91.8	2.5	101	95.0	6.1	75 - 125	20
QA/QC Batch 310766 (mg/L), QC Sample No: BJ30659 (BJ30659)													
Selenium (Dissolved)	BRL	0.002	<0.002	<0.002	NC	115	115	0.0	103	104	1.0	75 - 125	20

Environmental Laboratories, Inc.
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QA/QC Report

June 22, 2015

QA/QC Data

SDG I.D.: GBJ30659

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 310838 (mg/L), QC Sample No: BJ30353 (BJ30659)													
Oil and Grease by EPA 1664	BRL	1.4				98.0						85 - 115	20

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QA/QC Report

June 22, 2015

QA/QC Data

SDG I.D.: GBJ30659

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 310745 (ug/L), QC Sample No: BJ29720 (BJ30659)										
Pesticides - Surface Water										
4,4' -DDD	ND	0.003	124	138	10.7				40 - 140	20
4,4' -DDE	ND	0.003	97	107	9.8				40 - 140	20
4,4' -DDT	ND	0.003	116	129	10.6				40 - 140	20
a-BHC	ND	0.005	89	99	10.6				40 - 140	20
a-Chlordane	ND	0.005	96	107	10.8				40 - 140	20
Aldrin	ND	0.002	67	81	18.9				40 - 140	20
b-BHC	ND	0.005	99	110	10.5				40 - 140	20
Chlordane	ND	0.050	94	104	10.1				40 - 140	20
d-BHC	ND	0.005	80	89	10.7				40 - 140	20
Dieldrin	ND	0.002	108	118	8.8				40 - 140	20
Endosulfan I	ND	0.005	99	110	10.5				40 - 140	20
Endosulfan II	ND	0.005	107	118	9.8				40 - 140	20
Endosulfan sulfate	ND	0.005	117	124	5.8				40 - 140	20
Endrin	ND	0.005	104	116	10.9				40 - 140	20
Endrin aldehyde	ND	0.005	127	117	8.2				40 - 140	20
g-BHC	ND	0.002	91	101	10.4				40 - 140	20
g-Chlordane	ND	0.005	94	104	10.1				40 - 140	20
Heptachlor	ND	0.005	87	100	13.9				40 - 140	20
Heptachlor epoxide	ND	0.005	97	107	9.8				40 - 140	20
Toxaphene	ND	0.20	NA	NA	NC				40 - 140	20
% DCBP	100	%	93	87	6.7				40 - 140	20
% TCMX	68	%	67	67	0.0				40 - 140	20
QA/QC Batch 310586 (), QC Sample No: BJ29868 (BJ30659)										
Polychlorinated Biphenyls										
PCB-1016			95	90	5.4	96	98	2.1	40 - 140	30
PCB-1221									40 - 140	30
PCB-1232									40 - 140	30
PCB-1242									40 - 140	30
PCB-1248									40 - 140	30
PCB-1254									40 - 140	30
PCB-1260			103	104	1.0	92	94	2.2	40 - 140	30
% DCBP (Surrogate Rec)			70	63	10.5	71	70	1.4	30 - 150	30
% TCMX (Surrogate Rec)			68	63	7.6	69	72	4.3	30 - 150	30
Comment:										
Blank could not be reported for this batch.										
QA/QC Batch 310716 (ug/L), QC Sample No: BJ30011 1000X (BJ30659)										
Semivolatiles - Surface Water										
1,2,4-Trichlorobenzene	ND	3.5	83	81	2.4				30 - 130	20
1,2-Dichlorobenzene	ND	1.0	73	73	0.0				30 - 130	20
1,2-Diphenylhydrazine	ND	1.6	94	92	2.2				30 - 130	20

QA/QC Data

SDG I.D.: GBJ30659

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
1,3-Dichlorobenzene	ND	1.0	71	71	0.0				30 - 130	20
1,4-Dichlorobenzene	ND	1.0	73	75	2.7				30 - 130	20
2,4,5-Trichlorophenol	ND	1.0	92	90	2.2				30 - 130	20
2,4,6-Trichlorophenol	ND	1.0	90	90	0.0				30 - 130	20
2,4-Dichlorophenol	ND	1.0	89	89	0.0				30 - 130	20
2,4-Dimethylphenol	ND	1.0	91	92	1.1				30 - 130	20
2,4-Dinitrophenol	ND	1.0	120	124	3.3				30 - 130	20
2,4-Dinitrotoluene	ND	3.5	89	88	1.1				30 - 130	20
2,6-Dinitrotoluene	ND	3.5	84	82	2.4				30 - 130	20
2-Chloronaphthalene	ND	3.5	91	90	1.1				30 - 130	20
2-Chlorophenol	ND	1.0	74	74	0.0				30 - 130	20
2-Methylnaphthalene	ND	0.05	92	92	0.0				30 - 130	20
2-Methylphenol (o-cresol)	ND	1.0	82	84	2.4				30 - 130	20
2-Nitroaniline	ND	3.5	99	95	4.1				30 - 130	20
2-Nitrophenol	ND	1.0	111	114	2.7				30 - 130	20
3&4-Methylphenol (m&p-cresol)	ND	1.0	88	91	3.4				30 - 130	20
3,3'-Dichlorobenzidine	ND	5.0	39	39	0.0				30 - 130	20
3-Nitroaniline	ND	5.0	66	65	1.5				30 - 130	20
4,6-Dinitro-2-methylphenol	ND	1.0	93	93	0.0				30 - 130	20
4-Bromophenyl phenyl ether	ND	3.5	98	100	2.0				30 - 130	20
4-Chloro-3-methylphenol	ND	1.0	101	102	1.0				30 - 130	20
4-Chloroaniline	ND	3.5	60	63	4.9				30 - 130	20
4-Chlorophenyl phenyl ether	ND	1.0	85	83	2.4				30 - 130	20
4-Nitroaniline	ND	5.0	96	96	0.0				30 - 130	20
4-Nitrophenol	ND	1.0	100	99	1.0				30 - 130	20
Acenaphthene	ND	0.05	88	86	2.3				30 - 130	20
Acenaphthylene	ND	0.02	81	80	1.2				30 - 130	20
Anthracene	ND	0.02	91	91	0.0				30 - 130	20
Benz(a)anthracene	ND	0.02	91	91	0.0				30 - 130	20
Benzidine	ND	4.5	<10	<10	NC				30 - 130	20
Benzo(a)pyrene	ND	0.02	85	84	1.2				30 - 130	20
Benzo(b)fluoranthene	ND	0.02	96	93	3.2				30 - 130	20
Benzo(ghi)perylene	ND	0.02	85	86	1.2				30 - 130	20
Benzo(k)fluoranthene	ND	0.02	93	86	7.8				30 - 130	20
Benzoic acid	ND	10	79	80	1.3				30 - 130	20
Benzyl butyl phthalate	ND	3.5	91	92	1.1				30 - 130	20
Bis(2-chloroethoxy)methane	ND	3.5	89	89	0.0				30 - 130	20
Bis(2-chloroethyl)ether	ND	1.0	65	66	1.5				30 - 130	20
Bis(2-chloroisopropyl)ether	ND	1.0	87	89	2.3				30 - 130	20
Bis(2-ethylhexyl)phthalate	0.60	0.05	88	88	0.0				30 - 130	20
Chrysene	ND	0.02	92	93	1.1				30 - 130	20
Dibenz(a,h)anthracene	ND	0.01	86	88	2.3				30 - 130	20
Dibenzofuran	ND	3.5	90	88	2.2				30 - 130	20
Diethyl phthalate	ND	3.5	89	89	0.0				30 - 130	20
Dimethylphthalate	ND	3.5	89	88	1.1				30 - 130	20
Di-n-butylphthalate	ND	3.5	97	98	1.0				30 - 130	20
Di-n-octylphthalate	ND	3.5	91	91	0.0				30 - 130	20
Fluoranthene	ND	0.04	95	95	0.0				30 - 130	20
Fluorene	ND	0.05	89	88	1.1				30 - 130	20
Hexachlorobenzene	ND	0.02	104	105	1.0				30 - 130	20
Hexachlorobutadiene	ND	0.05	89	89	0.0				30 - 130	20
Hexachlorocyclopentadiene	ND	3.5	55	54	1.8				30 - 130	20
Hexachloroethane	ND	0.05	77	77	0.0				30 - 130	20

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Indeno(1,2,3-cd)pyrene	ND	0.02	86	89	3.4				30 - 130	20
Isophorone	ND	3.5	88	88	0.0				30 - 130	20
Naphthalene	ND	0.05	87	85	2.3				30 - 130	20
Nitrobenzene	ND	0.05	90	92	2.2				30 - 130	20
N-Nitrosodimethylamine	ND	0.05	62	62	0.0				30 - 130	20
N-Nitrosodi-n-propylamine	ND	3.5	91	95	4.3				30 - 130	20
N-Nitrosodiphenylamine	ND	3.5	73	73	0.0				30 - 130	20
Pentachlorophenol	ND	0.30	111	114	2.7				30 - 130	20
Phenanthrene	ND	0.05	94	95	1.1				30 - 130	20
Phenol	ND	1.0	72	74	2.7				30 - 130	20
Pyrene	ND	0.02	96	96	0.0				30 - 130	20
Pyridine	ND	0.50	32	31	3.2				30 - 130	20
% 2,4,6-Tribromophenol	95	%	113	115	1.8				30 - 130	20
% 2-Fluorobiphenyl	77	%	82	80	2.5				30 - 130	20
% 2-Fluorophenol	60	%	62	63	1.6				30 - 130	20
% Nitrobenzene-d5	85	%	87	89	2.3				30 - 130	20
% Phenol-d5	77	%	77	78	1.3				30 - 130	20
% Terphenyl-d14	78	%	100	99	1.0				30 - 130	20

Comment:

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

QA/QC Batch 310845 (ug/L), QC Sample No: BJ30660 (BJ30659, BJ30660)

Volatiles - Surface Water

1,1,1-Trichloroethane	ND	1.0	95	96	1.0	98	94	4.2	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	0.50	106	108	1.9	105	102	2.9	70 - 130	30
1,1,2-Trichloroethane	ND	1.0	95	96	1.0	100	98	2.0	70 - 130	30
1,1-Dichloroethane	ND	1.0	91	92	1.1	94	91	3.2	70 - 130	30
1,1-Dichloroethene	ND	1.0	94	95	1.1	97	91	6.4	70 - 130	30
1,2-Dichlorobenzene	ND	1.0	94	96	2.1	97	95	2.1	70 - 130	30
1,2-Dichloroethane	ND	1.0	93	95	2.1	97	94	3.1	70 - 130	30
1,2-Dichloropropane	ND	1.0	95	98	3.1	100	96	4.1	70 - 130	30
1,3-Dichlorobenzene	ND	1.0	96	100	4.1	101	98	3.0	70 - 130	30
1,4-Dichlorobenzene	ND	1.0	94	97	3.1	97	96	1.0	70 - 130	30
Benzene	ND	0.70	96	98	2.1	98	94	4.2	70 - 130	30
Bromodichloromethane	ND	0.50	96	99	3.1	96	93	3.2	70 - 130	30
Bromoform	ND	1.0	95	100	5.1	93	94	1.1	70 - 130	30
Bromomethane	ND	1.0	78	81	3.8	95	96	1.0	70 - 130	30
Carbon tetrachloride	ND	1.0	92	95	3.2	91	93	2.2	70 - 130	30
Chlorobenzene	ND	1.0	94	98	4.2	99	95	4.1	70 - 130	30
Chloroethane	ND	1.0	88	90	2.2	110	101	8.5	70 - 130	30
Chloroform	ND	1.0	95	96	1.0	98	95	3.1	70 - 130	30
Chloromethane	ND	1.0	71	73	2.8	97	95	2.1	70 - 130	30
cis-1,2-Dichloroethene	ND	1.0	95	98	3.1	97	94	3.1	70 - 130	30
cis-1,3-Dichloropropene	ND	0.40	102	105	2.9	101	99	2.0	70 - 130	30
Dibromochloromethane	ND	0.50	100	102	2.0	97	96	1.0	70 - 130	30
Ethylbenzene	ND	1.0	99	101	2.0	103	97	6.0	70 - 130	30
m&p-Xylene	ND	1.0	99	100	1.0	103	97	6.0	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	99	99	0.0	97	96	1.0	70 - 130	30
Methylene chloride	ND	1.0	82	83	1.2	81	79	2.5	70 - 130	30
o-Xylene	ND	1.0	100	102	2.0	104	97	7.0	70 - 130	30
Tetrachloroethene	ND	1.0	97	98	1.0	103	96	7.0	70 - 130	30
Toluene	ND	1.0	95	97	2.1	97	95	2.1	70 - 130	30

QA/QC Data

SDG I.D.: GBJ30659

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
trans-1,2-Dichloroethene	ND	1.0	95	97	2.1	95	91	4.3	70 - 130	30
trans-1,3-Dichloropropene	ND	0.40	107	111	3.7	103	104	1.0	70 - 130	30
Trichloroethene	ND	1.0	93	93	0.0	98	92	6.3	70 - 130	30
Trichlorofluoromethane	ND	1.0	80	82	2.5	96	93	3.2	70 - 130	30
Vinyl chloride	ND	1.0	82	84	2.4	98	95	3.1	70 - 130	30
% 1,2-dichlorobenzene-d4	99	%	99	100	1.0	99	99	0.0	70 - 130	30
% Bromofluorobenzene	100	%	101	102	1.0	101	100	1.0	70 - 130	30
% Dibromofluoromethane	97	%	99	100	1.0	98	98	0.0	70 - 130	30
% Toluene-d8	101	%	99	99	0.0	97	99	2.0	70 - 130	30

Comment:

A blank MS/MSD was analyzed with this batch.

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

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

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
June 22, 2015

Sample Criteria Exceedences Report

GBJ30659 - BLCOMPDOT

Criteria: CT: GWP, SWP

State: CT

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** BL Companies, Inc.

Project Location: NAUGATUCK RR-14EC0019 **Project Number:**

Laboratory Sample ID(s): BJ30659, BJ30660

Sampling Date(s): 6/11/2015

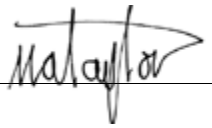
RCP Methods Used:

☐ 1311/1312	☑ 6010	☑ 7000	☐ 7196	☑ 7470/7471	☐ 8081	☐ EPH	☐ TO15
☐ 8082	☐ 8151	☐ 8260	☐ 8270	☐ ETPH	☐ 9010/9012	☐ VPH	

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 CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP 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 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Section: PAH Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☑ Yes ☐ No ☐ NA
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 ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #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 the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: 

Date: Monday, June 22, 2015

Printed Name: Maryam Taylor

Position: Project Manager

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 22, 2015

SDG I.D.: GBJ30659

Metals Analysis:
The client requested a shorter list of elements than the 6010 RCP list.

The client requested volatiles by 624. This method has a shorter list of compounds than the RCP volatile list.

Semi-volatile Organics:
In order to achieve the requested reporting levels for the target compounds, the sample was extracted and analyzed via 625 selective ion monitoring (SIM) as well as full scan.

Selenium Narration

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

Instrument: Zeeman 06/15/15-1 (BJ30659)

Printed Name Tina Hall
Position: Chemist
Date: 6/15/2015

QC (Batch Specific)

---------- Sample No: BJ29843, QA/QC Batch: 310613 ----------

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

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

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BJ30659, QA/QC Batch: 310766 ----------

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

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

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Mercury Narration

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

Instrument: Merlin 06/16/15-1 (BJ30659)

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The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 6/16/2015

QC (Batch Specific)

---------- Sample No: BJ30655, QA/QC Batch: 310824 ----------

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

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

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

ICP Narration

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

Instrument: Arcos 06/12/15-1 (BJ30659)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/12/2015

Instrument: Arcos 06/13/15-1 (BJ30659)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/13/2015

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RCP Certification Report

June 22, 2015

SDG I.D.: GBJ30659

QC (Batch Specific)

---------- Sample No: BJ29868, QA/QC Batch: 310612 ----------

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

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

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BJ30659, QA/QC Batch: 310764 ----------

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

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

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PCB Narration

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

Instrument: Au-ecd8 06/13/15-1 (BJ30659)

The initial calibration (PC603AI) RSD for the compound list was less than 20% except for the following compounds: None.

The initial calibration (PC603BI) RSD for the compound list was less than 20% except for the following compounds: None.

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

Printed Name Adam Werner
Position: Chemist
Date: 6/13/2015

QC Comments: QC Batch 310586 06/11/15 (BJ30659)

Blank could not be reported for this batch.

QC (Batch Specific)

---------- Sample No: BJ29868, QA/QC Batch: 310586 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

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

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RCP Certification Report

June 22, 2015

SDG I.D.: GBJ30659

PEST Narration

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

Instrument: Au-ecd13 06/15/15-1 (BJ30659)

8081 Narration:
Endrin and DDT breakdown was evaluated and does not exceed 15%.

The initial calibration (PS608AI) RSD for the compound list was less than 20% except for the following compounds: None.

The initial calibration (PS608BI) RSD for the compound list was less than 20% except for the following compounds: None.

The continuing calibration %D for the compound list was less than 15% except for the following compounds:
Samples: BJ30659
Preceding CC 615A032 - % DCBP (18%H), Endrin aldehyde (25%L), Methoxychlor (27%H)
Succeeding CC 615A058 - Endrin aldehyde (24%L), Methoxychlor (16%H)
A low "1A" standard was run to demonstrate capability to detect these compounds at the indicated RL. All reported samples were ND for these compounds.

Printed Name Carol Eddy
Position: Chemist
Date: 6/15/2015

SVOA Narration

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

Instrument: Chem06 06/18/15-1 (BJ30659)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

Initial Calibration Verification (CHEM06/SV_0610):
99% of target compounds met criteria.
The following compounds had %RSDs >20%: 2,4-Dinitrophenol (28%)
The following compounds did not meet a minimum response factor of 0.01: None.

Continuing Calibration Verification (CHEM06/0618_02-SV_0610):
99% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds did not meet % deviation criteria: 2-nitrophenol (45%L)[30%]
The following compounds did not meet maximum % deviations: 2-nitrophenol (45%L)[40%]
The following compounds did not meet recommended response factors: 2-nitrophenol (.087)[0.1]
The following compounds did not meet minimum response factors: None.

Printed Name Damien Drobinski
Position: Chemist
Date: 6/18/2015

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SDG I.D.: GBJ30659

QC (Batch Specific)

---------- Sample No: BJ30011, QA/QC Batch: 310716 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: Benzidine(<10%)

All LCSD recoveries were within 30 - 130 with the following exceptions: Benzidine(<10%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

SVOASIM Narration

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

Instrument: Chem07 06/17/15-1 (BJ30659)

Initial Calibration Verification (CHEM07/SIM_0609):
98% of target compounds met criteria.
The following compounds had %RSDs >20%: Pentachlorophenol (27%)
The following compounds did not meet a minimum response factor of 0.01: None.

Continuing Calibration Verification (CHEM07/0617_02-SIM_0609):
98% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds did not meet % deviation criteria: Pentachlorophenol (45%L)[30%]
The following compounds did not meet maximum % deviations: Pentachlorophenol (45%L)[40%]
The following compounds did not meet recommended response factors: 2-chlorophenol (.620)[0.8], Bis(2-chloroethyl)ether (.522)[0.7], Phenol (.736)[0.8]
The following compounds did not meet minimum response factors: None.

Printed Name Damien Drobinski
Position: Chemist
Date: 6/17/2015

QC (Batch Specific)

---------- Sample No: BJ30011, QA/QC Batch: 310716 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: Benzidine(<10%)

All LCSD recoveries were within 30 - 130 with the following exceptions: Benzidine(<10%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

VOA-624

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

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RCP Certification Report

June 22, 2015

SDG I.D.: GBJ30659

Instrument: Chem23 06/12/15-2 (BJ30659, BJ30660)

Initial Calibration Verification (CHEM23/voa624aac_0611):
100% of target compounds met criteria.
The following compounds had %RSDs >35%: None.
The following compounds did not meet a minimum response factor of 0.01: None.

Continuing Calibration Verification (CHEM23/0612L33-voa624aac_0611):
100% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the continuing calibration. The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

Printed Name Raman Makol
Position: Chemist
Date: 6/12/2015

QC (Batch Specific)

---------- Sample No: BJ30660, QA/QC Batch: 310845 ----------

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

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

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

Temperature Narration

The samples were received at 5C with cooling initiated.
(Note acceptance criteria is above freezing up to 6°C)

Cooler: Yes ☐ No ☐
Coolant: WPK ☐ ICE ☐ No ☐
Temp 0 °C Pg 2 of 2

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

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Client Services (860) 645-8726

Contact Options:
☐ Fax:
☒ Phone: 203-630-1406
☒ Email: jkloss@blcompanies.com

Customer: BL Companies
Address: 355 Research Parkway
Meriden, CT

Project: Naugatuck RR-14EC09 Project P.O:
Report to: Joy Kloss
Invoice to:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 6/11/15

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 624	SVOCs 625	TPH 1664	Pesticides/PCBs 608	Total RCRA 8 Metals	Total Cu, Zn	Dissolved RCRA 8 Metals	Dissolved Cu, Zn	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] HCl	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml [ ] 1000ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
30659	SW-1	SW	1000	6/11/15	X	X	X	X	X	X	X	X				3	5			2		
30660	Trip Blank	DI			X											2						

Relinquished by:	Accepted by:	Date:	Time:
[signature] James Cobb	[signature]	6/12/15	12:00
Cobb	[signature]	6/12/15	1723

Comments, Special Requirements or Regulations:
DAS contract/ISP form/
No tax
Dissolved metals field filtered with 0.45 micron filter

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ Standard
☒ Other 5 day
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☒ GW Protection
☒ SW Protection
☒ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☐ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☐ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES