EBI Consulting
environmental | engineering | due diligence

21 B Street
Burlington, MA 01803
Tel: (781) 273-2500
Fax: (781) 273-3311
www.ebiconsulting.com

Ms. Kimberly Tisa
PCB Coordinator
Environmental Protection Agency - Region 1
Post Office Square, Suite 100
Boston, MA 02109-3912

Subject: Self Implementing Plan
1071 Main Street, Woburn, Massachusetts

Dear Ms. Tisa

EBI Consulting (EBI) is submitting the enclosed Release Abatement Measure (RAM) / Self Implementing Plan (SIP) on behalf of 1071 Village, LLC to remediate PCB impacted soil identified at 1071 Main Street, Woburn, Massachusetts (the Site). The activities identified in this SIP Plan will be conducted to reduce and mitigate adverse environmental conditions detected at the Site. The objective of the SIP is to remove PCB impacted soil to levels below USEPA and MassDEP standards (1 ppm). Assessment has been completed, and details regarding the delineation of the PCB impacts and are included herein.

Owner Certification:
I, Scott Seaver, as the manager and prospective future owner (pending closing date of February 2015) of the property described herein, have reviewed this document and have placed a copy for immediate access at the designated property.

If you have any questions or comments please do not hesitate to call us at 781-273-2500 or to email me at egiordano@ebiconsulting.com.

Sincerely,
EBI Consulting

Brian Kilcoyne
Senior Program Manager

Edward F. Giordano, PG, LSP
Project Manager

Scott Seaver
Site Manager
1071 Village LLC

Self Implementing Plan
(SIP) CFR 761.61

1071 Main Street
Woburn, Massachusetts
MassDEP Release Tracking Number: TBD

December 2014

Prepared for:

1071 Village LLC
215 Lexington Street
Woburn, MA 01801

Prepared by:

EBI Consulting
21 B Street
Burlington, MA 01803

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Self Implementing Plan (SIP)

In accordance with the Environmental Protection Agency (EPA) CFR 761.61, EBI Consulting (EBI) has prepared this Revised Self Implementing Plan (SIP) on behalf of 1071 Village LLC. The property is addressed as 1071 Main Street., Woburn, MA (hereinafter the Site). The content of this Plan has been structured to address the specific requirements set forth in CFR 761.61. This plan has been prepared in conjunction with a Release Abatement Measure (RAM) Plan that was submitted to the Massachusetts Department of Environmental Protection (MassDEP) and has been presumptively approved. The overall objective of this Plan is to reduce contaminants to below levels of significant risk. A comprehensive pre-excavation assessment has been completed at the Site and all laboratory analytical reports, tabulated data and Site figures are included and discussed herein.

The owner has signed the attached cover letter stating the purpose of this submission.

1.0 SITE HISTORY – NATURE OF CONTAMINATION

The site is located in Woburn, Massachusetts in a neighborhood of single-family residential homes. The site is improved with three one-story commercial buildings on a 5.03-acre lot. The buildings were reportedly constructed in 1the 1920's and include 17,928± square feet of net rentable space. It is located approximately 200-feet south of the intersection of Main Street and North Maple Street. The site is identified on the Town of Woburn Assessor's Office as Map 08, Block 07, Lot 18, and is located at an elevation of approximately 30 feet above mean sea level (msl). EBI completed an Environmental Site Assessment in 2004, at which time the property was occupied by Action Autobody, Allied Cartage, John's Automotive, Paul's Landscaping, and Old Outboard Motor Company. 1071 Village LLC currently leases the property. Review of DEP's Sites data base indicates that this is the first release reported on this site.

1071 Village LLC is in the process of purchasing the property. Woburn Hide and Leather conducted tannery operations at the parcel from approximately 1928 until 1957. Since the 1960s, the buildings have been either vacant, or occupied by various industrial tenants contained in different parts of the buildings. EBI conducted a 2004 Phase I Environmental Site Assessment (ESA), copies of which are included in the RAM Plan provided in **Appendix A**. According to the 2004 ESA, a previous tenant was a hydraulic lift business. The property is not listed on the MassDEP Searchable Sites database. The source of the PCB impacted soil appears to be related to fill material brought onsite in 1968 during site regarding activities.

A detailed discussion of previous investigations and the nature and extent of contamination identified is included in Section 2.0 of the RAM Plan, which is provided as **Appendix A** of this report.

2.0 STANDARD OPERATING PROCEDURES

The SIP and attached site specific Health and Safety Plan (see **Appendix C**) will be reviewed prior to any work being undertaken at the Site. The Plan has been prepared to ensure maximum protection to workers, visitors, and employees from PCB exposure while excavation activities to reduce impact to the subsurface are conducted. The procedures to be undertaken include but are not limited to:

- Controls and practices to minimize exposure of PCBs in the work area,
- Specifications for sufficient proper protective equipment (PPE) as required by OSHA regulations,
- Specification for decontamination of equipment and the Site,
- Mandatory and proper decontamination. Supervision by a competent person.
- Specifications for the handling, storage, transportation and disposal of all waste including PCB impacted material.
- Specifications regarding possible contingency plans,

All persons performing remedial actions at the Site have undergone and completed appropriate training as specified by OSHA.

3.0 EXTENT OF IMPACT (FIGURES)

EBI has completed a full survey of the Site and all sampling points so as to fully delineate PCB impacted soil. The figures are identified as:

Figure 3A – Sample Location Plan, is a scaled figure depicting surveyed soil sample points.
Figure 3B – PCB Excavation Area, depicts the areas where soil removal is proposed

4.0 LABORATORY REPORTS

At EBIs request Contest Laboratory utilized EPA soxhlet extraction 3540C and analysis 8082 to characterize PCB concentrations in soils. Subsequent to initial analysis of soil samples for disposal parameters and prior to EBI or the property owners knowledge of PCB's being present at the site, no alternative method of extraction was utilized. Soil analysis results are discussed in Section 2 of the RAM Plan included in **Appendix A**. Copies of all laboratory reports with QA/QC are included in Appendix C of the RAM Plan.

5.0 CLEANUP PLAN AND CONTINGENCY

EBI has collected 34 soil samples and has confirmed the extent of PCBs greater than 50 ppm and the extent of PCBs greater than 1 pm. EBI will complete additional sampling after removal of soil impacted with PCBs > 45 ppm to confirm removal of PCBs following the excavation work. In order to support the proposed future residential development of the property, the objective of the remediation is to remove all soils with PCB concentrations greater than 1 ppm.

In accordance with §761.283(2)(b)(1)(i), a square-based grid system will be used to overlay the entire area to be sampled. Sampling points will be laid out 1.5 meters apart and will proceed in every direction to the extent sufficient to result in a two-dimensional grid completely overlaying the sampling area. EBI will collect a sample from each point if the grid falls in the cleanup area. All samples will be analyzed as composites in accordance with §761.289(b)(1)(i).

The cleanup will not include a cap to restrict access to PCB impacted soil greater than 50 ppm, as these soils will be removed. Upon completion of excavation activities and confirmation of attainment of the 1ppm remediation goal, there will be no restrictions on the future use of the property.

6.0 WRITTEN CERTIFICATION

Written Certification by owner was included in the cover letter submitted concurrently with this report and stated: I Scott Seaver, as the lessee and prospective future owner (pending closing date of February 2015) of the property described herein, have reviewed this document and have placed a copy for immediate access at the designated property. The party conducting the cleanup is the current property owner. Access is fully granted by the property owner and no additional agreements are required for cleanup to be undertaken.

7.0 SUBPART Q ALTERNATIVE METHOD

No alternative extraction and/or analysis will be utilized. EBI will subcontract all PCB analysis to Contest Laboratory for extraction via EPA Methodology 3540C and analysis via EPA Method 8082A.

8.0 QUALITY ASSURANCE / QUALITY CONTROL

This plan was conducted utilizing a standard of good commercial and customary practice and is consistent with the principals and practices in the fields of environmental science and engineering. The scope-of-work for this assessment included an evaluation of the following:

- Physical characteristics of the Site through a review of referenced sources for topographic, geologic, soils and hydrologic data.
- Site history through a review of referenced sources such as land deeds, fire insurance maps, city directories, aerial photographs, prior reports, and interviews.
- Current Site conditions, including observations regarding the following: the presence or absence of hazardous substances or petroleum products; generation, treatment, storage, or disposal of hazardous or regulated waste equipment that utilizes oils which potentially contain PCBs.
- Collection and assessment of soil and groundwater culminating in laboratory analysis and a review of reported data.

The assessment was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession, and in accordance with generally accepted practices of other consultants currently practicing in the same locality under similar conditions. No other representation, expressed or implied, and no warranty or guarantee is included or intended. The report speaks only as of its date, in the absence of a specific written update of the report, signed and delivered by EBI.

Personnel employed in the supervision, excavation and assessment are competent and qualified by industry standards.

9.0 WORK SEQUENCE

Completion of assessment to define PCB at concentrations > 50 ppm and greater than 1 ppm- Complete

Coordination of all remedial waste and disposal facilities –

Soil impacted with PCBs > 45 ppm to Waste Management, Model City, NY – Under Review for Approval
Soil impacted with PCBs < 45 ppm to ESMI, Loudon, NH or other appropriate disposal facility– Under Review for Approval

Soil excavation will take place in two phases:

1. Excavation of PCB impacted soil >45 ppm
2. Excavation of impacted soil with PCB impacted soil <45 ppm and greater than 1 ppm

Pre-Excavation

- Isolation and protection
- Staging of dumpsters
- Staging of remedial wash center

Part 1 – Soil Excavation:

- Excavation of soil impacted with PCBs > 45 ppm
- Excavation of soil impacted with PCBs > 1 ppm
- Collection of confirmatory soil samples to be submitted to Contest Laboratory for EPA soxhlet extraction 3540C and analysis 8082.

Post-Excavation

- Review and tabulation of all soil data
- Review and confirmation of all soil disposal documentation
- Completion and submittal of SIP confirmation letter (Region 1 EPA)
- Completion and submittal of RAM completion letter (MassDEP)

10.0 USE OF CAP

The cleanup will not include a cap to restrict access to PCB impacted soil greater than 50 ppm. It is proposed that all PCB impacted soils with concentrations greater than 1 ppm will be removed, so neither the use of a cap nor an activity and use limitation (AUL) will be required to restrict access to impacted soils.

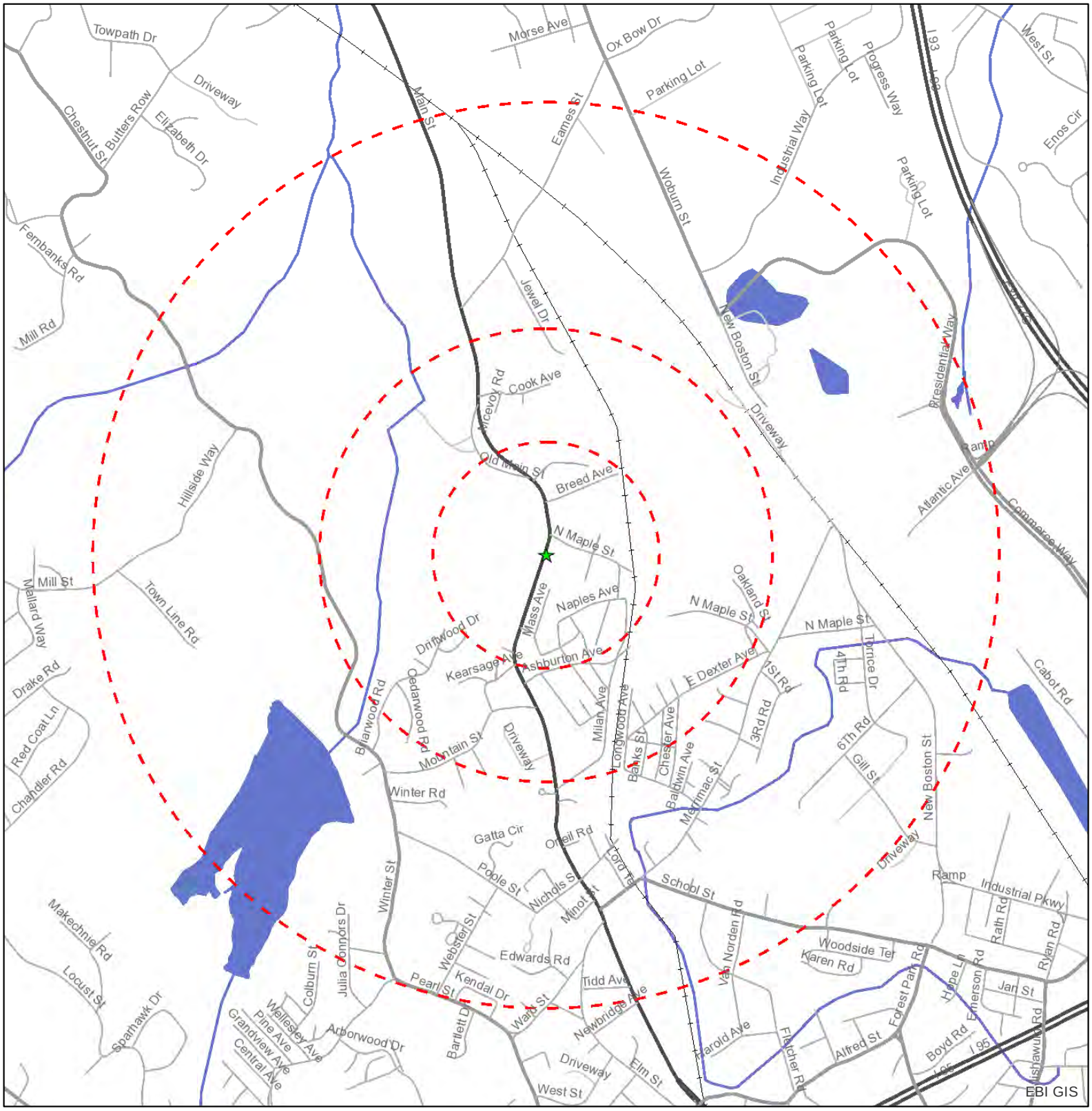
11.0 PERMITS

EBI has filed a copy of this report with the EPA Region One as part of the Self- Implementing Plan for the removal of PCBs. It is anticipated that the EPA will review and discuss the remedial action within 30 days. If additional information is requested, EBI will submit the information to the EPA and include this information in the following RAM completion or status report. No other permits are expected to be required to perform the activities outlined in this RAM - SIP Plan.

12.0 PUBLIC INVOLVEMENT

The implementation of a RAM Plan requires that the Chief Municipal Officer and the Board of Health be notified [310 CMR 40.1403(3)(d)]. A copy of the notice is included with the RAM Plan.

Figures



Source: Selected data from ESRI, EBI & USGS

Legend

- Project Site
- Site Radius at ¼, ½ and 1 mile

N

Date: 5/8/2014

Figure 1: Site Location Map

0 500 1,000 2,000 3,000 Feet

1071 MAIN STREET
1071 MAIN STREET
WOBURN, MA 01801

PN: 12140078

EBI Consulting
environmental | engineering | due diligence

Legend

★ Project Site

Site Radius at ¼, ½ and 1 mile

Source: Selected data from ESRI, EBI & USGS

N

USGS 24K Quad: Wilmington, MA 1980

Date: 5/8/2014

Figure 2 - Topographic Map

0 500 1,000 2,000 3,000 Feet

1071 MAIN STREET

1071 MAIN STREET

WOBURN, MA 01801

PN: 12140078

EBI Consulting
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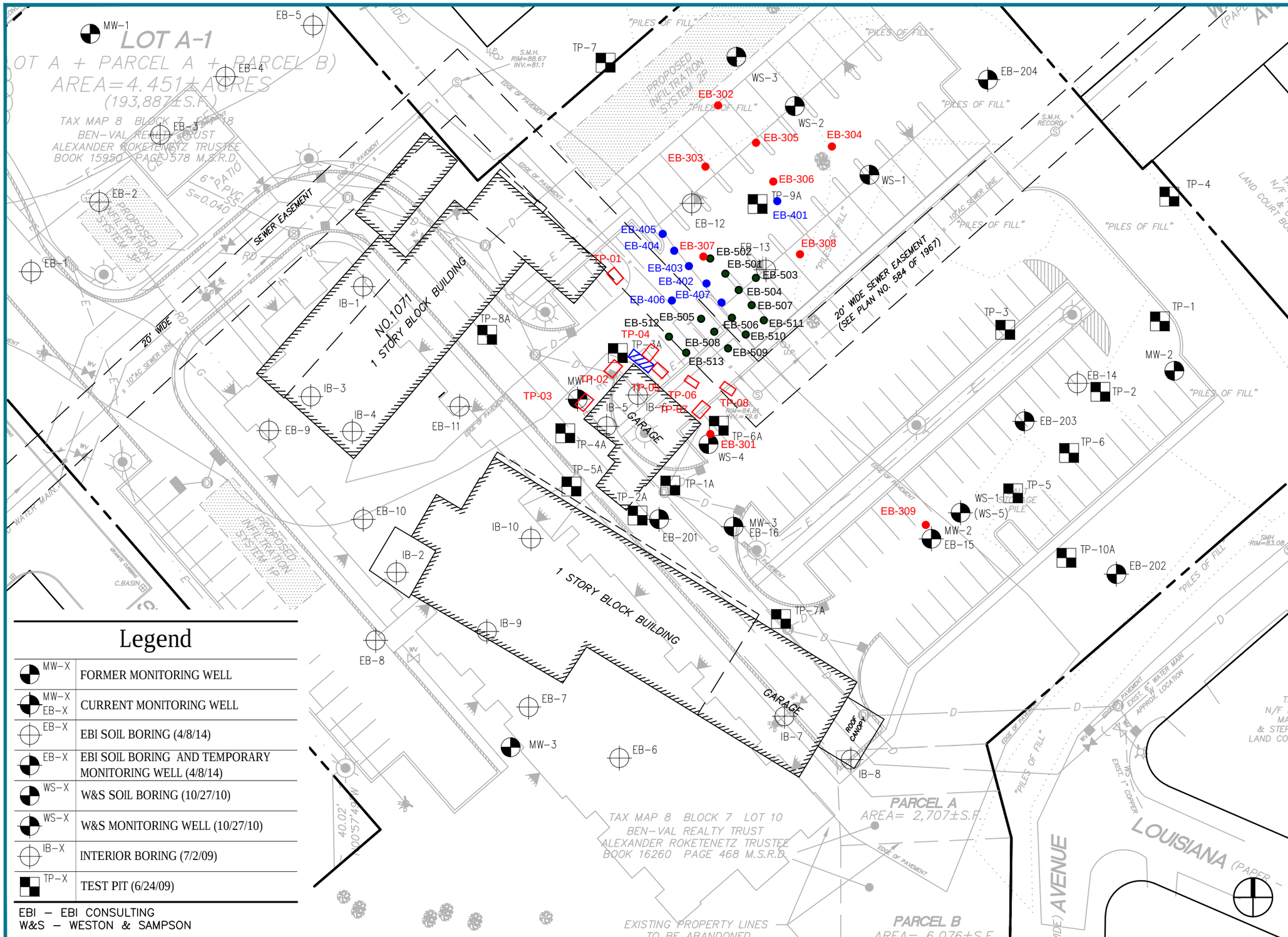

Legend

MW-X	FORMER MONITORING WELL
MW-X EB-X	CURRENT MONITORING WELL
EB-X	EBI SOIL BORING (4/8/14)
EB-X	EBI SOIL BORING AND TEMPORARY MONITORING WELL (4/8/14)
WS-X	W&S SOIL BORING (10/27/10)
WS-X	W&S MONITORING WELL (10/27/10)
IB-X	INTERIOR BORING (7/2/09)
TP-X	TEST PIT (6/24/09)

EBI – EBI CONSULTING
W&S – WESTON & SAMPSON

3A | SAMPLE LOCATION PLAN

APPLICANT/OWNER:
Seaver Construction
215 Lexington Street
Woburn, MA 01801

PREPARED BY:
EBI Consulting
environmental | engineering | due diligence
www.ebiconsulting.com

NOTES:

1. EXISTING AND PROPOSED CONDITIONS SHOWN ARE BASED ON A SITE PLAN ENTITLED "PROPOSED RESIDENTIAL DEVELOPMENT SITE CONSTRUCTION PLAN" DATED DECEMBER 8, 2013 PREPARED BY KEENAN SURVEY AND PREPARED FOR AND PROVIDED BY SEAVER CONSTRUCTION, INC.
2. LOCATIONS OF MONITORING WELLS, BORINGS AND TEST PITS ARE APPROXIMATE AND HAVE BEEN COMPILED BASED ON AVAILABLE INFORMATION.

- Soil Boring (08/29/14)
- Soil Boring (09/22/14)
- Soil Boring (10/20/14)
- Test Pit (11/06/14)
- UST Location

ENGINEER STAMP/SIGNATURE

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SUBMITTALS

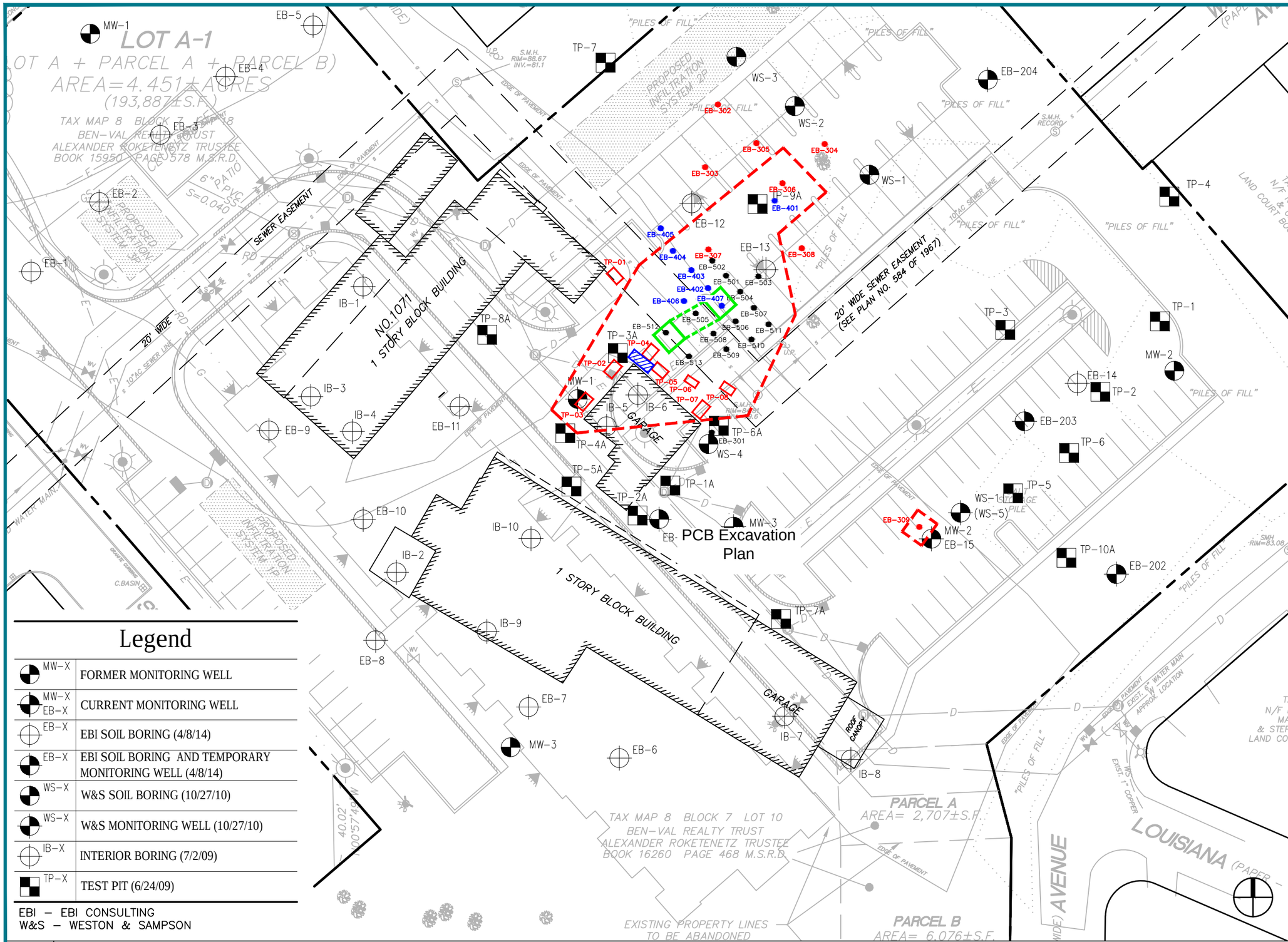
NO.	DATE	DESCRIPTION	BY

EBI JOB NO: 12140078

SITE INFO:
PROPOSED RESIDENTIAL DEVELOPMENT
1071 MAIN STREET
WOBURN, MA 01801
MIDDLESEX COUNTY

SHEET TITLE:
SAMPLE LOCATION PLAN

DRAWN BY: MVG
CHECKED BY: EFG
DATE: 12/18/14
SHEET NO: F-3A



Legend

MW-X	FORMER MONITORING WELL
MW-X EB-X	CURRENT MONITORING WELL
EB-X	EBI SOIL BORING (4/8/14)
EB-X	EBI SOIL BORING AND TEMPORARY MONITORING WELL (4/8/14)
WS-X	W&S SOIL BORING (10/27/10)
WS-X	W&S MONITORING WELL (10/27/10)
IB-X	INTERIOR BORING (7/2/09)
TP-X	TEST PIT (6/24/09)

EBI – EBI CONSULTING
W&S – WESTON & SAMPSON

3A | SAMPLE LOCATION PLAN

0 20 40 80

11x17 SCALE: 1' = 40'
22x34 SCALE: 1' = 20'

APPLICANT/OWNER:
Seaver Construction
215 Lexington Street
Woburn, MA 01801

PREPARED BY:
EBI Consulting
environmental | engineering | due diligence
www.ebiconsulting.com

NOTES:

1. EXISTING AND PROPOSED CONDITIONS SHOWN ARE BASED ON A SITE PLAN ENTITLED "PROPOSED RESIDENTIAL DEVELOPMENT SITE CONSTRUCTION PLAN" DATED DECEMBER 8, 2013 PREPARED BY KEENAN SURVEY AND PREPARED FOR AND PROVIDED BY SEAVER CONSTRUCTION, INC.
2. LOCATIONS OF MONITORING WELLS, BORINGS AND TEST PITS ARE APPROXIMATE AND HAVE BEEN COMPILED BASED ON AVAILABLE INFORMATION.

- SOIL BORING (08/29/14)
- SOIL BORING (09/22/14)
- SOIL BORING (10/20/14)
- TEST PIT (11/06/14)
- PCBs > 50mg/Kg
- PCBs > 1 mg/Kg
- UST Location

ENGINEER STAMP/SIGNATURE

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SUBMITTALS

NO.	DATE	DESCRIPTION	BY

EBI JOB NO: 12140078

SITE INFO:
PROPOSED RESIDENTIAL DEVELOPMENT
1071 MAIN STREET
WOBURN, MA 01801
MIDDLESEX COUNTY

SHEET TITLE:
PCB Excavation Plan

DRAWN BY: MVG
CHECKED BY: EFG
DATE: 12/18/14
SHEET NO: F-3B

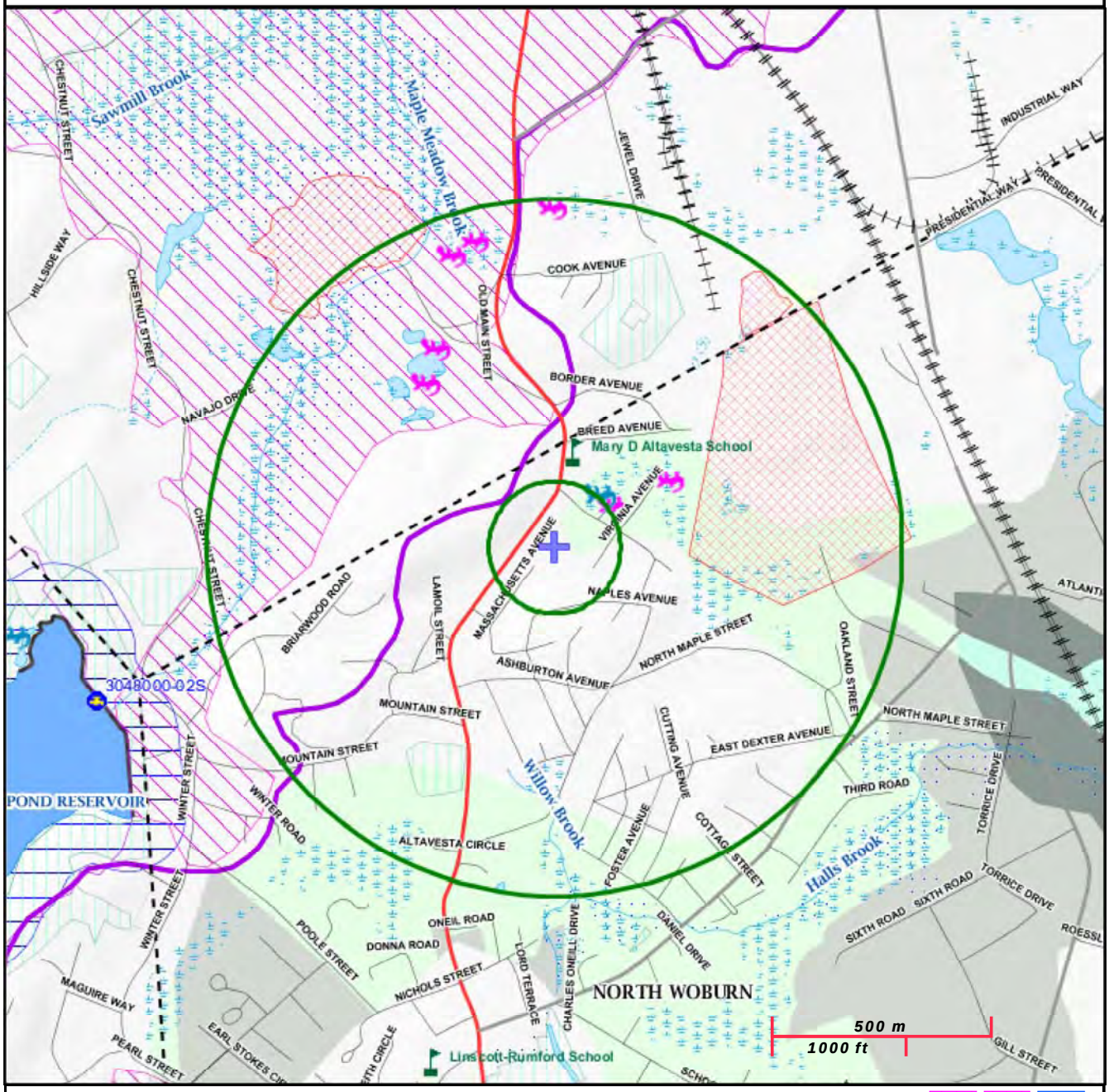
MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:
1071 MAIN STREET WOBURN, MA
NAD83 UTM Meters:
5238944mN , -7921313mE (Zone: 18)
December 17, 2014

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: http://www.mass.gov/mgis/.

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct
Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam
Aquifers: Medium Yield, High Yield, EPA Sole Source
Non Potential Drinking Water Source Area: Medium, High (Yield)
PWS Protection Areas: Zone II, IWPA, Zone A
Hydrography: Open Water, PWS Reservoir, Tidal Flat
Wetlands: Freshwater, Saltwater, Cranberry Bog
FEMA 100yr Floodplain; Protected Open Space; ACEC
Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential
Solid Waste Landfill; PWS: Com.GW,SW, Emerg.,Non-Com.

APPENDIX A

RAM Plan

EBI Consulting
environmental | engineering | due diligence

21 B Street
Burlington, MA 01803
Tel: (781) 273-2500
Fax: (781) 273-3311
www.ebiconsulting.com

RELEASE ABATEMENT MEASURE PLAN
(310 CMR 40.4444)

Project Name:
1071 Main Street
Woburn, Massachusetts 01801
RTN: TBD

EBI Project Number 51140027

Prepared for:
1017 Village LLC
215 Lexington Street
Woburn, MA 01801

Prepared By:
EBI Consulting, Inc.
21 B Street
Burlington, Massachusetts 01803

December 18, 2014

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Figure 4: MassDEP Environmental Receptors Map

Appendices

Appendix A: Soil and Groundwater Tables
Appendix B: Laboratory Analytical Reports
Appendix C: Soil Borings Logs
Appendix D: Public Notification Letter

Release Abatement Measure (RAM) Plan

In accordance with the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000, EBI Consulting (EBI) has prepared this Release Abatement Measure (RAM) Plan on behalf of 1071 Village, LLC. The project address is 1071 Village Street, Woburn, MA 01801 (hereinafter the Site). The content of this Plan has been structured to address the specific requirements set forth in 310 CMR 40.0444(1)(a) through (i) and more specifically the treatment of impacted soil. This plan is being submitted to the Massachusetts Department of Environmental Protection (MassDEP) to fulfill the obligations of a RAM. The overall objective of this Plan is to excavate and manage impacted soils.

1.0 Responsibility for Conducting RAM

The person undertaking the response actions and the assessment completed to date is the lessee. The lessee identified herein is currently planning to purchase the property in early 2015 but does not currently own the property.
The **lessee assuming responsibility** for the completion of the RAM:

Mr. Scott Seaver, Manager
1071 Village LLC
215 Lexington Street
Woburn, MA 01801
Telephone: (781) 935-0130

Current Property Owner
Mr. Stanley Rocetenetz, Trustee
Ben Val Realty Trust
1071 Main Street, Woburn, MA 01801
Phone- 781-935-6339

This information is also provided on the RAM Transmittal Form (BWSC-106) submitted via eDEP.

2.0 Description of Site and Assessment

2.1 Background

EBI completed multiple Environmental Site Assessment's for a potential buyer(s) from 2004 to present. 1071 Village LLC is a current lessee who is in the process of purchasing the property, and is scheduled to obtain ownership in 2015. The majority of these reports were prepared for this lessee who was not obligated to notify. EBI sat down with the lessee and shared this data with the property owner in November 2014.

The site is located in Woburn, Massachusetts in a neighborhood of single-family residential homes. The site is improved with three one-story commercial buildings on a 5.03-acre lot. The buildings were reportedly constructed in the 1920's and include 17,928± square feet of net rentable space. It is located approximately 200-feet south of the intersection of Main Street

and North Maple Street. The site is identified on the Town of Woburn Assessor's Office as Map 08, Block 07, Lot 18, and is located at an elevation of approximately 30 feet above mean sea level (msl). Figures depicting the Site, features, sample locations and other pertinent features are included in:

Figure 1: Site Locus
Figure 2: Topographic Map
Figure 3A: Sample Location Plan
Figure 3B: PCB Excavation Area
Figure 4: MassDEP Environmental Receptors Map

Woburn Hide and Leather conducted tannery operations at the parcel from approximately 1928 until 1957. Since the 1960s, the buildings have been either vacant, or occupied by various industrial tenants contained in different parts of the buildings. EBI conducted a 2004 Phase I Environmental Site Assessment (ESA), according to the 2004 ESA, a previous tenant was a hydraulic lift business. The property is not listed on the MassDEP Searchable Sites database.

2.2 Historical Assessment

February 2004 Assessment

EBI field personnel conducted, for a potential buyer, a Limited Subsurface Investigation on February 26 and 27, 2004. The assessment identified levels of chromium, antimony and petroleum hydrocarbons to soil above Reportable Concentrations for Soil (RCS-1). . The impacts appear to be the result of historic onsite tannery activities. The investigation included the advancement of seventeen exterior soil borings and excavation of seven test pits. Three soil borings were converted to permanent monitoring wells designated MW-1, MW-2 and MW-3. Soil and groundwater samples were analyzed for volatile organic compounds (VOCs), extractable petroleum hydrocarbons (EPH), dissolved PPM-13, phenols and total cyanide. Concentrations of chromium, antimony and C_{11}-C_{22} aromatic hydrocarbon fraction were detected in soil in excess of applicable RCS-1 standards. No concentrations of VOCs, EPH, PPM-13, phenols or total cyanide were detected in groundwater above applicable Reportable Concentrations for Groundwater Reporting (RCGW-2) standards.

EBI recommended that the property owner be apprised of the results however, the lessee was under no obligation to forward the results to the owner or to notify the Massachusetts Department of Environmental Protection (MassDEP). EBI also recommended that further delineation of the identified metals, and that subsequent site closure/remediation be conducted under the provisions of the Massachusetts Contingency Plan (MCP) prior to/in conjunction with the redevelopment of the parcel.

July 2009 Assessment

An additional investigation was conducted at the property in 2009 by EBI to assess the extent of antimony and chromium impacts to soil beneath the onsite buildings. The investigations included the advancement of ten interior soil borings designated IB-1 through IB-10. The

results of delineation activities revealed concentrations of chromium and antimony beneath the existing building slabs in excess of RCS-1 standards.

October 2010 Assessment

Weston & Sampson conducted an additional investigation to further delineate the extent of impacts to soil. The investigation included the advancement of five exterior soil borings designated WS-1 through WS-5. The results of delineation activities revealed concentrations of chromium and antimony on the northern and eastern portions of the site in excess of RCS-1 standards.

November 2010 Assessment

EBI conducted an investigation to further assess/delineate the extent of impacts to soil on November 1, 2010. The investigation included the advancement of 16 exterior soil borings designated EB-1 through EB-16. Laboratory analysis of the soils samples designated EB-1 through EB-16 did not include analysis for hexavalent chromium versus trivalent chromium. The results of delineation activities revealed concentrations of chromium and antimony in excess of RCS-1 standards. Relevant analytical results are included in **Appendix A – Soil and Groundwater Tables**. Laboratory analytical results are included in **Appendix B.**

April 2014 Assessment

On April 8, 2014, four (4) soil borings were advanced at the property to provide sampling information at locations not previously investigated during the 2004 through 2010 delineation activities. Two of the borings were converted into temporary monitoring wells for the purpose of obtaining grab groundwater samples. The borings were advanced using a direct push sampling rig operated by Harvey Associates.

Soil samples were collected using a four-foot long core sampler equipped with dedicated acetate liners. The physical characteristics of each soil sample were recorded on boring logs, and a portion of the sample was placed in clean plastic bags for soil vapor headspace screening. The vapor headspace of each soil sample was field-screened using a photoionization detector (PID). The PID provides a reading of total ionizable volatile organic compounds (VOCs). The PID was calibrated with an isobutylene standard and corrected to measure total VOCs as Methyl isobutyl ketone (MIBK) equivalents. This correction factor was utilized in order to attempt to more closely represent the heavier petroleum compounds detected during earlier rounds of sampling. The PID has a practical sensitivity of approximately one part per million by volume (ppmV). PID readings should not be considered as exact measurements, but as relative readings of VOCs between locations. PID readings above background were not detected in the soil samples collected.

EBI installed two temporary groundwater monitoring wells in the EB-202 and EB-204 boreholes. The wells were constructed of 1-inch slotted PVC well screen across the water table and completed to grade with solid 1-inch casing. Groundwater samples were collected from the two temporary wells along with two existing wells (MW-1 and MW-3) and analyzed for EPH by the MassDEP Method, antimony and chromium.

The groundwater analytical data obtained during the April 8, 2014 sampling event was compared to the Method 1 GW-2 / GW-3 standards. None of the concentrations of EPH, antimony or chromium detected exceeded applicable RCGW-2 standards.

Analytical results reported no concentrations of EPH or antimony exceeded RCS-1 standards in the soil samples collected. Soil analytical results reported concentrations of chromium (trivalent) exceeding the Massachusetts Method 1 S-1 GW-2 / GW-3 standards regulatory standard. Analytical results reported concentrations of chromium (trivalent) exceeding the Massachusetts Method 1 S-1 GW-2 / GW-3 standards regulatory standard. The highest concentration of hexavalent chromium (Cr(VI)) detected in soil at the property is 16 mg/kg. Based on the low concentrations of hexavalent chromium versus trivalent chromium, it is EBI's opinion that the soil samples not sampled for hexavalent chromium do not contain concentrations of hexavalent chromium above 30 mg/kg. EBI performed a linear regression analysis to further demonstrate the low concentrations of hexavalent chromium distributed across the sampling regimen. Relevant analytical results are included in **Appendix A – Soil and Groundwater Tables**. Laboratory analytical results are included in **Appendix B.**

August 2014 Assessment

On August 29, 2014 nine (9) soil borings, designated EB-301 through EB-309, were installed throughout the northern portion of the property. The boring locations, sampling intervals and laboratory analysis were selected to delineate chromium and antimony impacts previously identified in the northern portion of the property. Additionally, five (5) samples were collected for analysis of Comm-97 parameters for pre-disposal characterization. Total chromium was detected at a concentration of 5,300 mg/kg in the sample collected from EB-306 at a depth of 0 to 3 feet bgs, above the MassDEP RCS-1 standard of 1,000 mg/kg. Laboratory analysis indicated hexavalent chromium was detected at a concentration of 6.1 mg/kg, below the MADEP RCS-1 standard of 100 mg/kg. It is noted that the reportable concentrations and applicable standards of Cr(III) and Cr(IV) were modified in the June 2014 MCP revision.

Polychlorinated Byphenols (PCBs), specifically Aroclor 1254, were detected in three (3) of the five (5) soil samples collected for Comm-97 disposal analysis. The concentrations ranged from 1.21 to 39 mg/kg, above the MassDEP RCS-1 standard of 1 mg/kg. To further evaluate the extent of PCB concentrations in soil, EBI analyzed two (2) additional soil samples collected in the vicinity of the identified PCB impacted soil. Concentrations of PCBs were detected below 1 mg/kg (0.26 and 0.3 mg/kg) in the two additional soil samples analyzed. No shallow impacts, less than one-foot were identified. Relevant analytical results are included in **Appendix A – Soil and Groundwater Tables**. Laboratory analytical results are included in **Appendix B.**

September 2014 Assessment

EBI returned to the site on September 22, 2014, to collect additional samples for PCBs by EPA Method 8082 analysis. Borings EB-401through EB-407 were advanced in the vicinity of previously identified PCB impacted soil (EB-306 and EB-307). A deep sample (3-6 feet bgs) was collected below the previously identified PCB concentration (39 mg/kg) from 0 to 3 feet bgs. Seven (7) borings were advanced southwest of the of the suspected source area with selected samples analyzed for PCBs by EPA Method 8082 for lateral delineation. The concentrations detected in the second round of sampling ranged from 0.22 to 420 mg/kg. Relevant analytical

results are included in **Appendix A – Soil and Groundwater Tables**. Laboratory analytical results are included in **Appendix B.**

Shallow samples, not covered by pavement or concrete were not reported above 10 ppm. During assessment, a visual change in the soil was identified. The source of the PCB impacted soil appears to be related to fill material brought onsite in 1968 during site re-grading activities as stated by the current property owner. This fill layer is very discernible during drilling and test pit assessment.

October 2014 Assessment

EBI returned to the site on October 20, 2014, to collect additional samples for PCBs by EPA Method 8082 analysis. Borings EB-501 through EB-513 were advanced in a general grid pattern surrounding EB-407, where PCBs were previously detected at a concentration of 420 mg/kg at a depth of 0 to 4 feet bgs. Soil samples were collected at depths of 0 to 2 and 2 to 4 feet bgs from each location. The samples were tested for PCB content prior to laboratory analysis using Dexsil® Clor-N-Soil PCB Screening kits to determine PCB content < or > 50 parts per million. Based on the results of the screening, soil samples were submitted for laboratory analysis of PCBs by EPA Method 8082 plus Soxhlet extraction. The concentrations of PCBs in the soil samples analyzed ranged from 0.46 to 246 mg/kg. No shallow impacts, less than one-foot were identified. Relevant analytical results are included in **Appendix A – Soil and Groundwater Tables**. Laboratory analytical results are included in **Appendix B.**

November 2014 Assessment

EBI returned to the site on November 6, 2014 for the excavation of eight soil test pits to further evaluate subsurface soil conditions in the vicinity of the previously identified PCB impacted soils. Samples were collected at the digression of EBI field personnel for analysis of PCBs by EPA Method 8082 plus Soxhlet extraction. Soil stratigraphy was observed in each location and logged on Test Pit Logs included in **Appendix C**. Eleven shallow soil samples were collected from the test pits for PCB analysis. Concentrations of PCBs ranged from <0.11 to 38 mg/Kg. No shallow impacts, less than one-foot were identified. Additionally, the area of PCB impacts is isolated by asphalt and or a construction fence. The source of the PCB impacted soil appears to be related to fill material brought onsite in 1968 during site re-grading activities.

During the most recent assessment activities, EBI encountered a 3,000-gallon Underground Storage Tank (UST) containing approximately 600-gallons of No. 4/6 fuel oil in the location of TP-04.

The locations of the borings and test pits are shown on **Figure 3A – Sample Location Plan**. Relevant soil and groundwater analytical results are included in **Appendix A – Soil and Groundwater Tables**. Laboratory analytical results are included in **Appendix B**. Boring details are presented in the boring logs, included as **Appendix C**.

3.0 Objectives, Plans and Schedules for Conducting the RAM

3.1 Objective

The primary objective of the RAM is to excavate impacted soils with elevated metals and PCBs to allow for redevelopment of the property without any restrictions.

3.2 Soil Excavation Plan

The RAM Plan includes the following actions:

- Based on soil results obtained, EBI estimates that the volume of impacted soil to be approximately 1,300 tons. The excavation of contaminated soils will be included in conjunction with proposed redevelopment of the site prior to construction. Visual identification of the fill layer and sampling will be conducted during excavation of PCB related impacts.
- The overall Site Specific remedial action goal is to reduce PCB concentrations less than Method 1 Risk characterization standards or <1ppm. Areas of PCB impacted soil will be transported off site to appropriate pre-approved disposal facilities. EBI estimates that approximatly 100 tons of PCB impacted soil >50 mg/kg will be transported out of state to an approved RCRA Landfill located in Model City, New York. Approximatly 1,200 tons of PCB impacted soil <50 mg/kg will be transported out of state to an approved RCRA Landfill located in either Loudon, New Hampshire (ESMI) or Rochester, New Hampshire (Turnkey). Confirmatory analysis will be conducted in the areas to be excavated to supplement current laboratory data. Please refer to **Figure 3B** for the proposed excavation areas.
- Impacted soil concentrations greater than Method 1 Risk characterization standards from across the site will be excavated and placed on and covered with 6-mill polyethelyne sheeting. Soils will then be loaded onto roll off containers for offsite disposal.
- If groundwater is encountered, it will be pumped out to the area and allowed to infiltrate the ground at an upgradiant area of the site. Based upon laboratory data collected to data, the groundwater is not impacted at levels that exceed GW-2 / GW-3 standards and no treatment is required.
- File RAM Completion Report, if supported by investigation data and post RAM sampling.
- EBI is filling an Environmental Protection Agency (EPA) Self Implementing Plan (SIP) concurrent with the filing of this RAM.

3.3 Anticipated Schedule

The current schedule is as follows:

- Complete Release Notification Form – Completed / Submitted
- Obtain approval of impacted soil at suitable disposal facilities – Ongoing
- Submit Self-Implementing Plan (SIP) to EPA – Concurrent with RAM
- Excavate soil and conduct closure assessment – March 2015
- Complete and Submit Permanent Solution – June 2015

4.0 Management of Remediation Waste

Impacted soil will be stockpiled at the site prior to disposal. It will be stored and secured in accordance with 310 CMR 40.0031 *General Provisions for the Management of Remediation Waste.* The soils will be stored on a base of impermeable material and covered with minimum 6-mil thickness polyethylene sheeting. The stockpile cover will be properly secured to prevent tearing by the wind prior to removal. Impacted soils will be transported off-site under appropriate disposal documentation for disposal off-site at a licensed facility.

5.0 Environmental Monitoring Plan for Implementation

RAM activities will be conducted in accordance with a Site Specific Health and Safety Plan prepared by a safety professional and in accordance with OSHA regulations 29 CFR 1910.120. The Health and Safety Plan (HASP) will identify the potential chemical and physical hazards at the site, emergency phone numbers and routes to emergency medical care, and personal protection requirements.

It is anticipated that OSHA personal protection Level D and/or Modified Level D will be sufficient for all site work. All disposable protective equipment will be properly containerized and disposed. On site monitoring of air quality will be carried out using a screening instrument, a Photoionization Detector (PID). Samples will be screened using the PID to determine which samples are most appropriate for laboratory analysis. EBI will collect closure samples throughout the excavation areas to supplement current laboratory analytical data. Sampling data will be used to support site closure documentation.

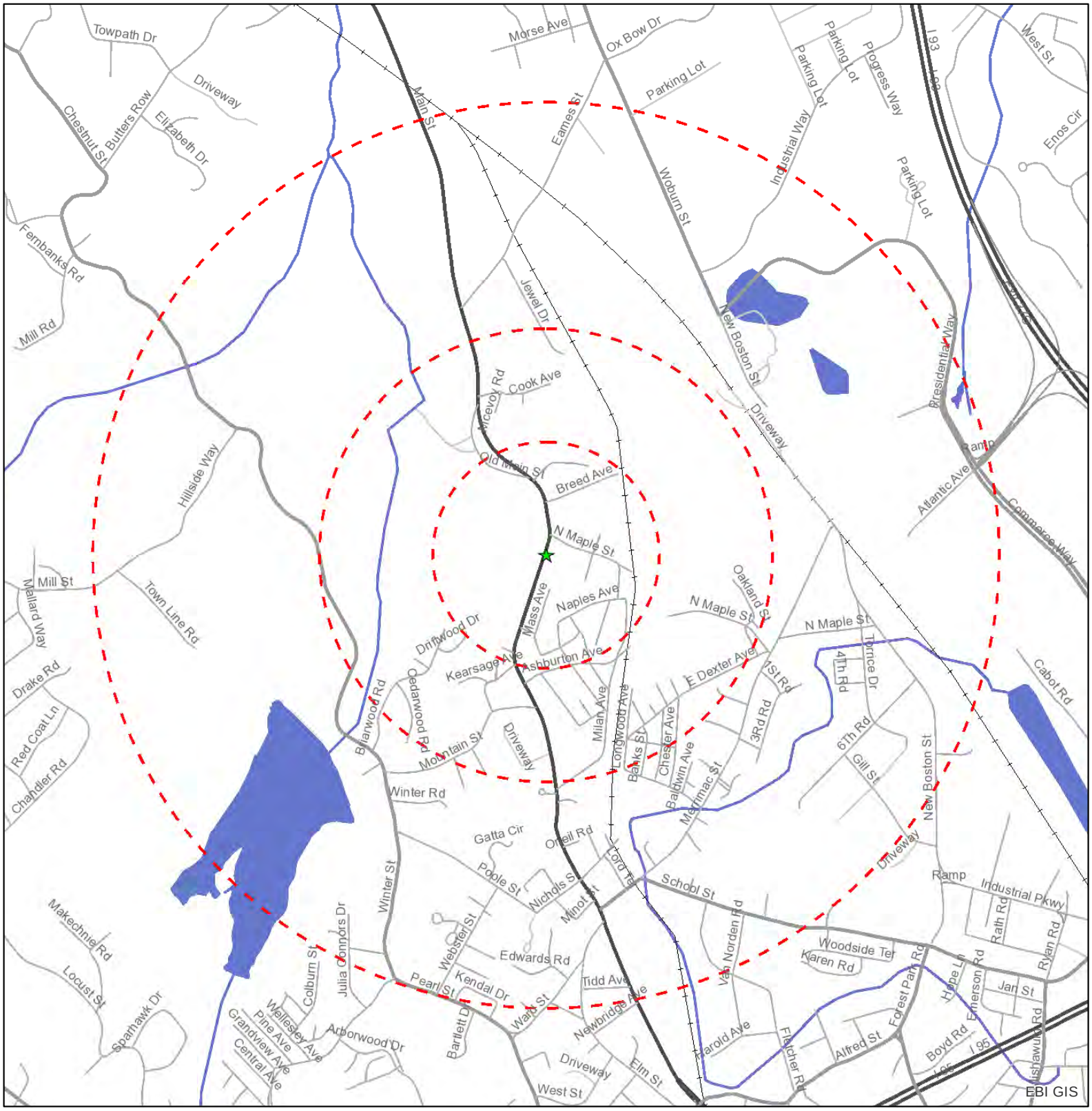
6.0 Additional Federal, State and Local

EBI will submit a Self Implementing Plan to the EPA Region 1 office for the management of PCB remediation waste at the site. Additionally, Digsafe will be notified.

7.0 Public Involvement

The implementation of a RAM Plan requires that the Chief Municipal Officer and the Board of Health be notified [310 CMR 40.1403(3)(d)]. A copy of the notice is included as **Appendix D**.

FIGURES



Source: Selected data from ESRI, EBI & USGS

Legend

- Project Site
- Site Radius at ¼, ½ and 1 mile

N

Date: 5/8/2014

Figure 1: Site Location Map

0 500 1,000 2,000 3,000 Feet

1071 MAIN STREET
1071 MAIN STREET
WOBURN, MA 01801

PN: 12140078

EBI Consulting
environmental | engineering | due diligence

Legend

★ Project Site

Site Radius at ¼, ½ and 1 mile

Source: Selected data from ESRI, EBI & USGS

N

USGS 24K Quad: Wilmington, MA 1980

Date: 5/8/2014

Figure 2 - Topographic Map

0 500 1,000 2,000 3,000 Feet

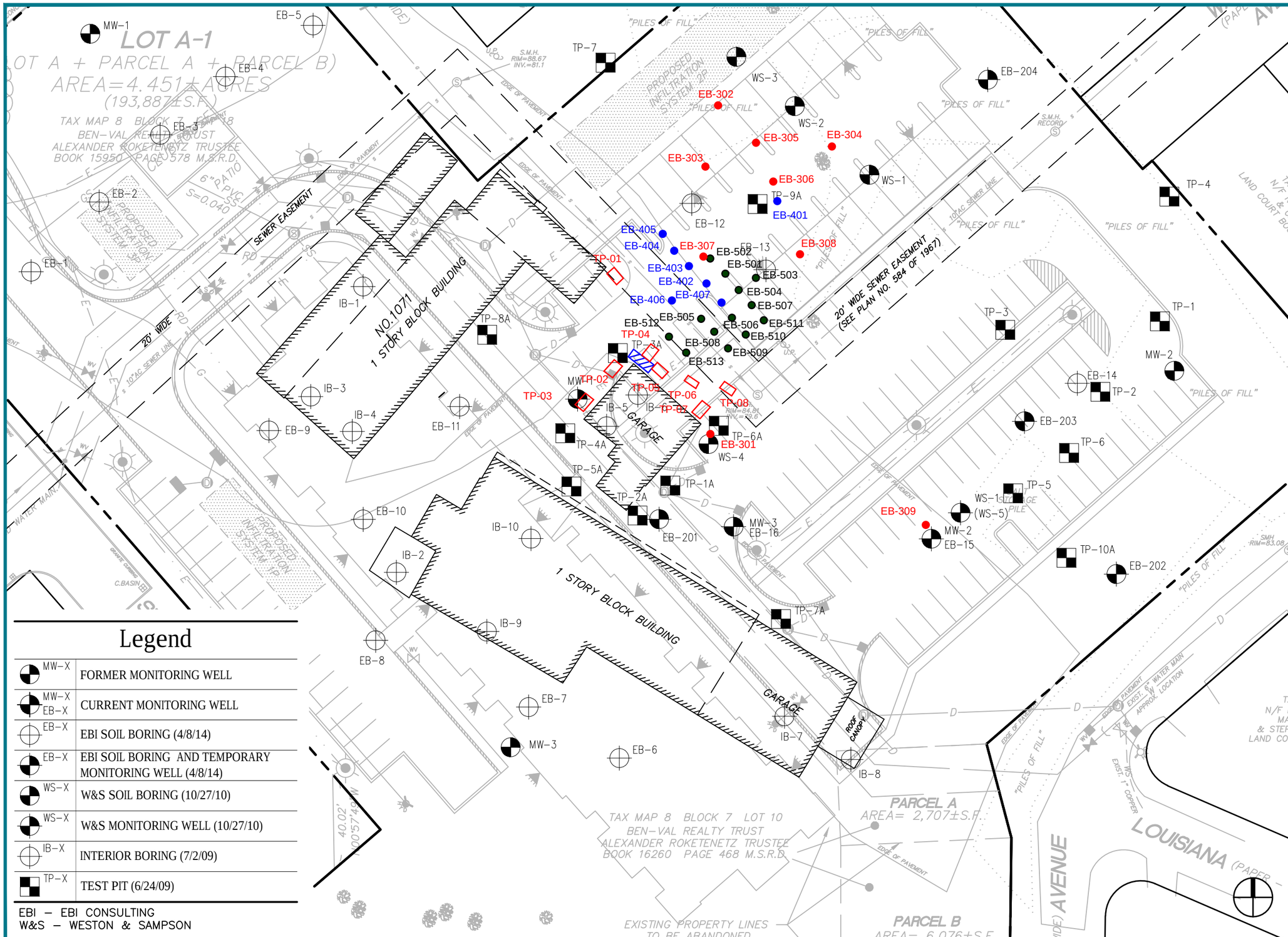
1071 MAIN STREET

1071 MAIN STREET

WOBURN, MA 01801

PN: 12140078

EBI Consulting
environmental | engineering | due diligence



Legend

MW-X	FORMER MONITORING WELL
MW-X EB-X	CURRENT MONITORING WELL
EB-X	EBI SOIL BORING (4/8/14)
EB-X	EBI SOIL BORING AND TEMPORARY MONITORING WELL (4/8/14)
WS-X	W&S SOIL BORING (10/27/10)
WS-X	W&S MONITORING WELL (10/27/10)
IB-X	INTERIOR BORING (7/2/09)
TP-X	TEST PIT (6/24/09)

EBI – EBI CONSULTING
W&S – WESTON & SAMPSON

3A | SAMPLE LOCATION PLAN

11x17 SCALE: 1' = 40'
22x34 SCALE: 1' = 20'

APPLICANT/OWNER:
Seaver Construction
215 Lexington Street
Woburn, MA 01801

PREPARED BY:
EBI Consulting
environmental | engineering | due diligence
www.ebiconsulting.com

NOTES:

1. EXISTING AND PROPOSED CONDITIONS SHOWN ARE BASED ON A SITE PLAN ENTITLED "PROPOSED RESIDENTIAL DEVELOPMENT SITE CONSTRUCTION PLAN" DATED DECEMBER 8, 2013 PREPARED BY KEENAN SURVEY AND PREPARED FOR AND PROVIDED BY SEAVER CONSTRUCTION, INC.
2. LOCATIONS OF MONITORING WELLS, BORINGS AND TEST PITS ARE APPROXIMATE AND HAVE BEEN COMPILED BASED ON AVAILABLE INFORMATION.

- Soil Boring (08/29/14)
- Soil Boring (09/22/14)
- Soil Boring (10/20/14)
- Test Pit (11/06/14)
- UST Location

ENGINEER STAMP/SIGNATURE

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SUBMITTALS

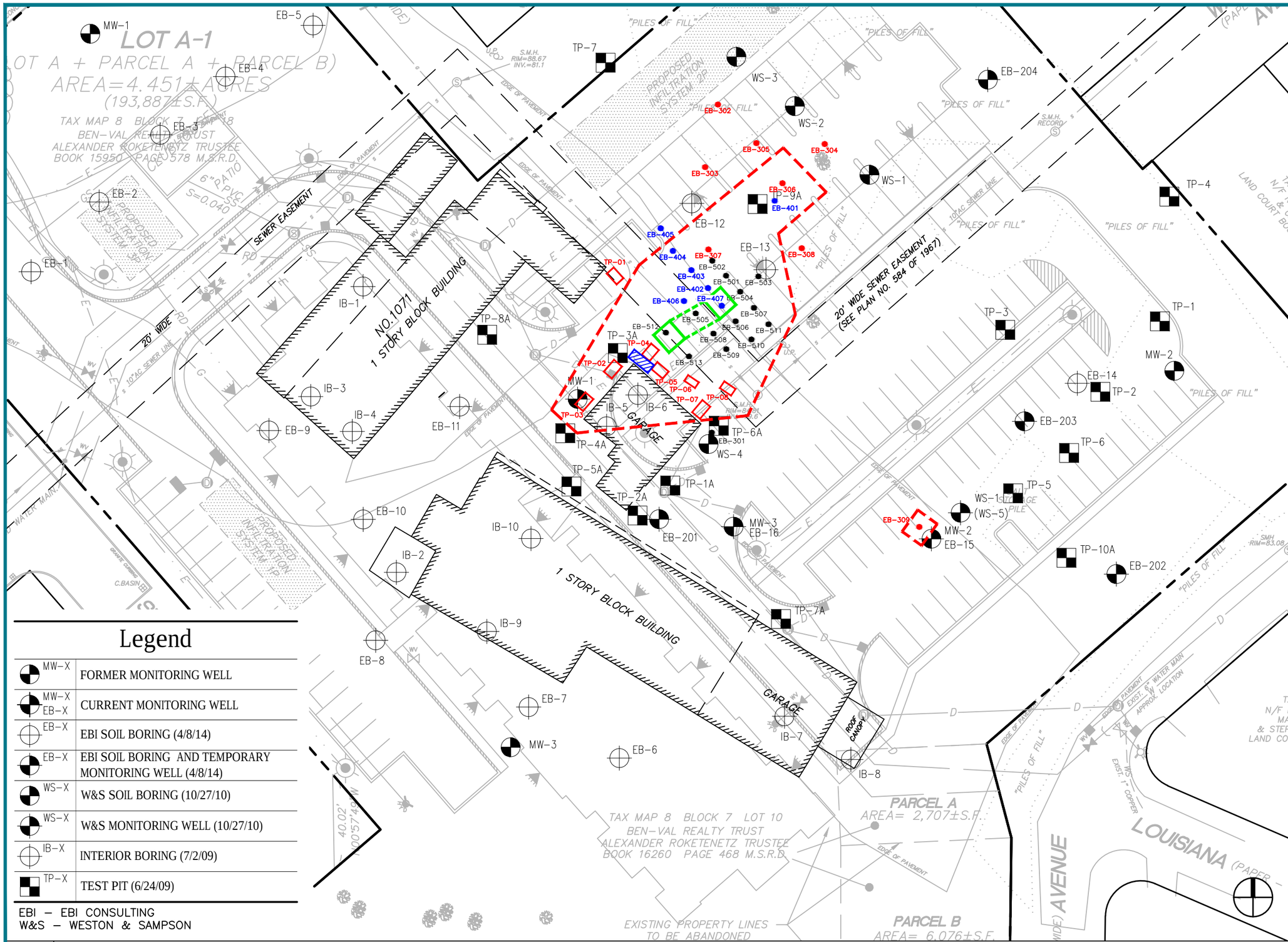
NO.	DATE	DESCRIPTION	BY

EBI JOB NO: 12140078

SITE INFO:
PROPOSED RESIDENTIAL DEVELOPMENT
1071 MAIN STREET
WOBURN, MA 01801
MIDDLESEX COUNTY

SHEET TITLE:
SAMPLE LOCATION PLAN

DRAWN BY: MVG
CHECKED BY: EFG
DATE: 12/18/14
SHEET NO: F-3A



Legend

MW-X	FORMER MONITORING WELL
MW-X EB-X	CURRENT MONITORING WELL
EB-X	EBI SOIL BORING (4/8/14)
EB-X	EBI SOIL BORING AND TEMPORARY MONITORING WELL (4/8/14)
WS-X	W&S SOIL BORING (10/27/10)
WS-X	W&S MONITORING WELL (10/27/10)
IB-X	INTERIOR BORING (7/2/09)
TP-X	TEST PIT (6/24/09)

EBI – EBI CONSULTING
W&S – WESTON & SAMPSON

3A SAMPLE LOCATION PLAN

11x17 SCALE: 1' = 40'
22x34 SCALE: 1' = 20'

APPLICANT/OWNER:
Seaver Construction
215 Lexington Street
Woburn, MA 01801

PREPARED BY:
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NOTES:

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2. LOCATIONS OF MONITORING WELLS, BORINGS AND TEST PITS ARE APPROXIMATE AND HAVE BEEN COMPILED BASED ON AVAILABLE INFORMATION.

- SOIL BORING (08/29/14)
- SOIL BORING (09/22/14)
- SOIL BORING (10/20/14)
- TEST PIT (11/06/14)
- PCBs > 50mg/Kg
- PCBs > 1 mg/Kg
- UST Location

ENGINEER STAMP/SIGNATURE

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SUBMITTALS

NO.	DATE	DESCRIPTION	BY

EBI JOB NO: 12140078

SITE INFO:
PROPOSED RESIDENTIAL DEVELOPMENT
1071 MAIN STREET
WOBURN, MA 01801
MIDDLESEX COUNTY

SHEET TITLE:
PCB Excavation Area

DRAWN BY: MVG
CHECKED BY: EFG
DATE: 12/18/14
SHEET NO: F-3B

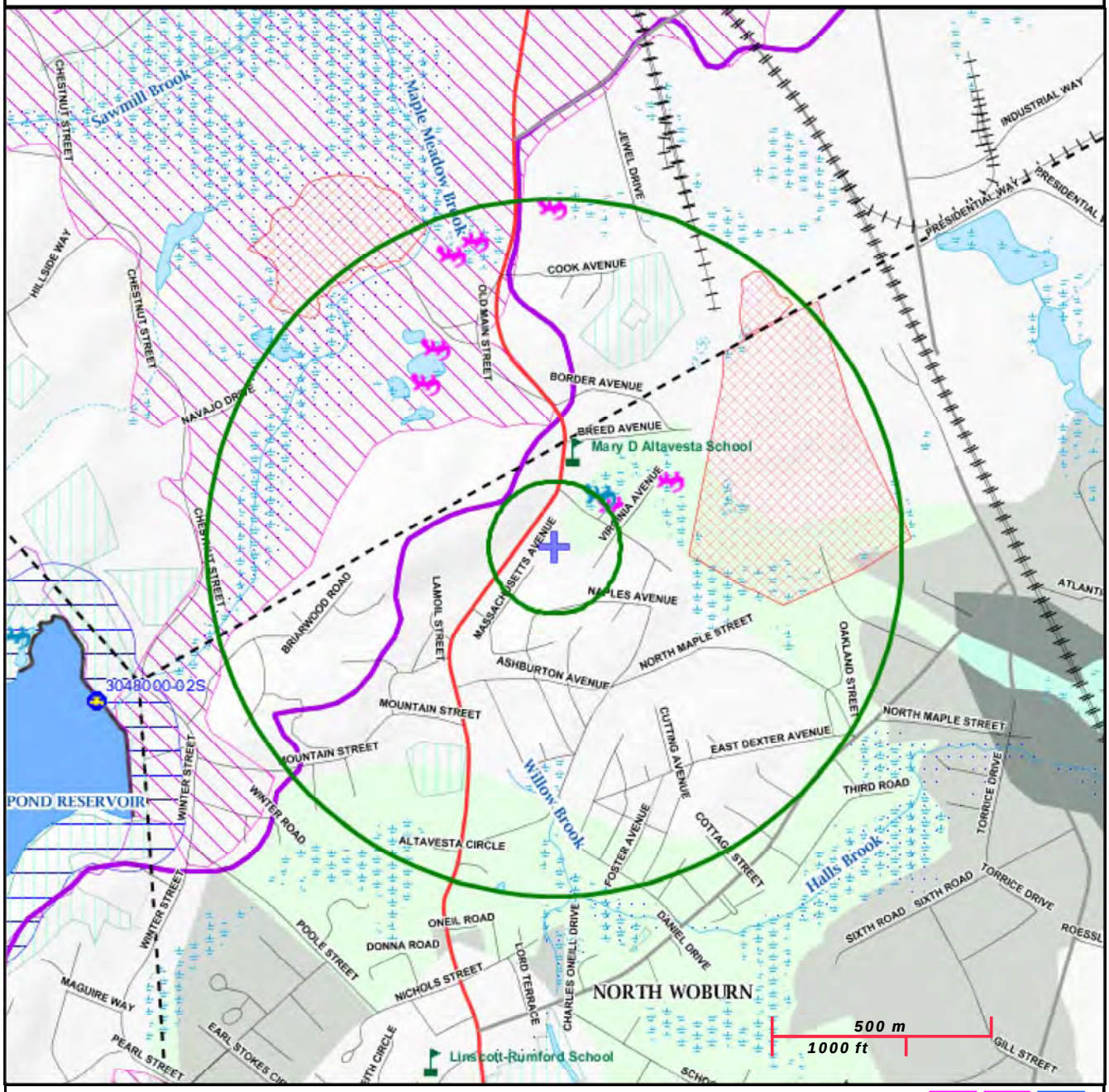
MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:
1071 MAIN STREET WOBURN, MA
NAD83 UTM Meters:
5238944mN , -7921313mE (Zone: 18)
December 17, 2014

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: http://www.mass.gov/mgis/.

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct
Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam
Aquifers: Medium Yield, High Yield, EPA Sole Source
Non Potential Drinking Water Source Area: Medium, High (Yield)
PWS Protection Areas: Zone II, IWPA, Zone A
Hydrography: Open Water, PWS Reservoir, Tidal Flat
Wetlands: Freshwater, Saltwater, Cranberry Bog
FEMA 100yr Floodplain; Protected Open Space; ACEC
Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential
Solid Waste Landfill; PWS: Com.GW,SW, Emerg.,Non-Com.

APPENDIX A

Soil and Groundwater Tables

Table 1
June 24, 2009 - Chromium & Antimony Concentrations
1071 Main Street, Woburn, Massachusetts

Parameter	Method 1 Standards		SAMPLING LOCATION											
	S-1 / GW-2	S-1 / GW-3	TP-1A	TP-2A	TP-3A	TP-4A	TP-5A	TP-6A	TP-7A	TP-8A	TP-9A	TP-9A	TP-10A	TP-10A
Sampling Date			6/24/2009	6/24/2009	6/24/2009	6/24/2009	6/24/2009	6/24/2009	6/24/2009	6/24/2009	6/24/2009	6/24/2009	6/24/2009	6/24/2009
Sample Depth			3-6 Feet	3-6 Feet	3-6 Feet	3-6 Feet	3-6 Feet	3-6 Feet	3-6 Feet	3-6 Feet	0-3 Feet	3-6 Feet	3-6 Feet	6-9 Feet
Metals (mg/Kg)														
Antimony	20	20	4.3	4.7	2.1	2.3	2.3	**50**	2.3	2.3	19	2.5	2.5	4.7
Trivalent Chromium	1000	1000	989.15	99.1	6.2	603.7	389.52	**14999**	39.54	15	**9199**	79.4	399.5	329.09
Hexavalent Chromium	100	100	0.85	0.9	ND	6.3	0.48	0.55	0.46	ND	0.6	0.6	0.5	0.95

Exceeds Method 1 Standard

mg/Kg = milligrams per kilogram

Table 2
July 2, 2009 - Chromium & Antimony Concentrations
1071 Main Street, Woburn, Massachusetts

Parameter	Method 1 Standards		SAMPLING LOCATION									
	S-1 / GW-2	S-1 / GW-3	IB-1	IB-2	IB-3	IB-4	IB-5	IB-6	IB-7	IB-8	IB-9	IB-10
Sampling Date			7/2/2009	7/2/2009	7/2/2009	7/2/2009	7/2/2009	7/2/2009	7/2/2009	7/2/2009	7/2/2009	7/2/2009
Sample Depth			0-3 Feet	0-3 Feet	0-3 Feet	0-3 Feet	0-3 Feet	0-3 Feet	0-3 Feet	0-3 Feet	0-3 Feet	0-3 Feet
Metals (mg/Kg)												
Antimony	20	20	2	2.2	2.1	2.1	2.2	2.4	2.1	2.1	2.1	2.2
Trivalent Chromium	1000	1000	16	30.55	12	19	240	569.52	35	29.2	10	20
Hexavalent Chromium	100	100	ND	0.45	ND	ND	10	0.48	7	3.8	ND	ND

Exceeds MADEP RCS-1 Standard

mg/Kg = milligrams per kilogram

Table 3
October 27, 2010 - Chromium & Antimony Concentrations
1071 Main Street, Woburn, Massachusetts

Parameter	Method 1 Standards		SAMPLING LOCATION										
	S-1 / GW-2	S-1 / GW-3	DUP-1	WS-1 (0-3)	WS-1 (3-6)	WS-2 (0-3)	WS-2 (3-6)	WS-3 (0-3')	WS-3 (3-6')	WS-4 (0-3)	WS-4 (3-6)	WS-5 (0-3)	WS-5 (3-6)
Sampling Date			10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010
Sample Depth			0- Feet	0-3 Feet	3-6 Feet	0-3 Feet	3-6 Feet	0-3 Feet	3-6 Feet	0-3 Feet	3-6 Feet	0- Feet	3-6 Feet
Metals (mg/Kg)													
Antimony	20	20	ND (2.7)	ND (2.8)	ND (2.8)	ND (3.3)	ND (3.0)	ND (2.7)	ND (2.7)	ND (3.0)	ND (2.7)	ND (2.5)	ND (2.6)
Trivalent Chromium	1000	1000	NT	**4798.5**	**1297**	**5184**	**3190**	103	NT	377	62	32.32	42.1
Hexavalent Chromium	100	100	NT	1.5	3.0	16	10	7.0	NT	3.0	ND (0.35)	0.68	0.90

Exceeds MADEP RCS-1 Standard

mg/Kg = milligrams per kilogram

Table 4
November 11, 2010 - Chromium & Antimony Concentrations
1071 Main Street, Woburn, Massachusetts

Parameter	Method 1 Standards		SAMPLING LOCATION														
	S-1 / GW-2	S-1 / GW-3	EB-1	EB-2	EB-2	EB-3	EB-3	EB-4	EB-4	EB-5	EB-6	EB-6	EB-7	EB-7	EB-8	EB-9	EB-9
Sampling Date			11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010
Sample Depth			0-3 Feet	0-3 Feet	3-6 Feet	0-3 Feet	3-6 Feet	0-3 Feet	3-6 Feet	0-3 Feet	0-3 Feet	3-6 Feet	0-3 Feet	3-6 Feet	0-2 Feet	0-3 Feet	3-6 Feet
Metals (mg/Kg)																	
Antimony	20	20	0.52	9.3	6.83	ND (<0.36)	5.33	0.77	ND (<0.34)	0.35	0.73	0.92	**88**	8.86	0.38	ND (<0.37)	ND (<0.36)
Chromium*	100	100	**104***	**576***	**421***	27	**369***	58	15	33	72	25	**301***	35	14	25	8.67

Parameter	Method 1 Standards		SAMPLING LOCATION														
	S-1 / GW-2	S-1 / GW-3	EB-10	EB-10	EB-11	EB-11	EB-12	EB-12	EB-13	EB-13	EB-14	EB-14	EB-15	EB-15	EB-15	EB-16	EB-16
Sampling Date			11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010
Sample Depth			0-3 Feet	3-6 Feet	0-3 Feet	3-6 Feet	0-3 Feet	3-6 Feet	0-3 Feet	3-6 Feet	0-3 Feet	3-6 Feet	0-3 Feet	4.5-6 Feet	7-9 Feet	3-6Feet	11-12 Feet
Metals (mg/Kg)																	
Antimony	20	20	ND (<0.38)	ND (<0.36)	1.88	0.52	**21**	3.06	**22**	ND (<0.35)	1.05	2.69	1	**30**	0.94	ND (<0.38)	4.39
Chromium*	100	100	25	12	66	35	**1280***	**217***	**1330***	33	99	**182***	64	**1760***	9.47	12	**377***
C11-C22 Aromatic Hydrocarbons	1000	1000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	285	NT	NT	NT

Exceeds MADEP RCS-1 Standard

mg/Kg = milligrams per kilogram

* Statistical analysis demonstrates total chromium levels attributable to predominantly trivalent chromium species

`

Table 5
April 8, 2014- Chromium and Antimony Concentrations
1071 Main Street, Woburn, Massachusetts

Parameter	Method 1 Standards		SAMPLING LOCATION							
	S-1 / GW-2	S-1 / GW-3	EB-201 (6-8)	EB-201 (8-9.5)	EB-202 (10-12)	EB-202 (5-7)	EB-203 (10-12)	EB-203 (1-3)	EB-204 (10-12)	EB-204 (1-4)
Sampling Date			4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014
Sample Depth			6-8 Feet	8-9.5 Feet	10-12 Feet	5-7 Feet	10-12 Feet	1-3 Feet	10-12 Feet	1-4 Feet
Metals (mg/Kg)										
Antimony	20	20	ND (3.0)	ND (3.0)	ND (3.2)	ND (2.9)	ND (2.8)	ND (4.0)	ND (3.0)	ND (2.8)
Trivalent Crhomium	1000	1000	140	NT	NT	NT	NT	950	NT	130
Hexavalent Chromium	100	100	ND	NT	NT	NT	NT	ND	NT	ND

Exceeds MADEP RCS-1 Standard

mg/Kg = milligrams per kilogram

Table 6
August 29, 2014- Chromium and Antimony Concentrations
1071 Main Street, Woburn, Massachusetts

Parameter	Method 1 Standards		SAMPLING LOCATION			
	S-1 / GW-2	S-1 / GW-3	EB-302 (2-5)	EB-303 (1-4)	EB-305 (2-5)	EB-308 (2-5)
Sampling Date			8/29/2014	8/29/2014	8/29/2014	8/29/2014
Sample Depth			2-5 Feet	1-4 Feet	2-5 Feet	2-5 Feet
Metals (mg/Kg)						
Antimony	20	20	ND (2.6)	ND (2.6)	ND (2.5)	ND (2.7)
Trivalent Chromium	1000	1000	5.6	18	37	**1100**
Hexavalent Chromium	100	100	ND (0.83)	ND (0.83)	ND (0.82)	2.7
TCLP Hex Chromium			NT	NT	NT	0.36

Exceeds MADEP RCS-1 Standard

mg/Kg = milligrams per kilogram

Table 7
August 29, 2014- Soil Disposal Table
1071 Main Street, Woburn, Massachusetts

Parameter	Massachusetts Landfill Acceptance Criteria		SAMPLING LOCATION				
	Lined	Unlined	EB-301 (4-10)	EB-304 (5-10)	EB-306 (0-3)	EB-307 (2-6)	EB-309 (4-8)
Sampling Date			8/29/2014	8/29/2014	8/29/2014	8/29/2014	8/29/2014
Sample Depth			4-10 Feet	5-10 Feet	0-3 Feet	2-6 Feet	4-8 Feet
SM 2540G (% Wt)							
% Solids			85.4	89.2	80.1	71.0	79.2
SM18-20 2510B (µmhos/cm)							
SPECIFIC CONDUCTANCE			16	180	210	19	150
SW-846 1030 (present/absent)							
IGNITABILITY			Absent	Absent	Absent	Absent	Absent
SW-846 6010C (mg/Kg dry) Metals Digestion							
ARSENIC	40	40	3.4	8.8	ND (2.9)	6.0	ND (3.1)
BARIUM			13	14	380	20	16
CADMIUM	80	30	ND (0.29)	0.48	1.4	0.46	ND (0.31)
CHROMIUM	1000	1000	7.9	9.6	**5300**	47	15
TCLP Chromium	5	5	NT	NT	0.26	NT	NT
Hex Chromium			NT	NT	6.1	NT	NT
LEAD			2.9	3.5	82	7.7	3.4
SELENIUM			ND (5.8)	ND (5.7)	ND (5.8)	ND (6.8)	ND (6.1)
SILVER			ND (0.58)	ND (0.57)	ND (0.58)	ND (0.68)	ND (0.61)
SW-846 7471B (mg/Kg dry) Metals Digestion							
MERCURY	10	10	ND (0.028)	ND (0.027)	0.094	0.037	ND (0.031)
SW-846 8082A (mg/Kg dry)							
PCB 1016			ND (0.11)	ND (0.11)	ND (6.1) *	ND (1.4) *	ND (0.13)
PCB 1221			ND (0.11)	ND (0.11)	ND (6.1) *	ND (1.4) *	ND (0.13)
PCB 1232			ND (0.11)	ND (0.11)	ND (6.1) *	ND (1.4) *	ND (0.13)
PCB 1242			ND (0.11)	ND (0.11)	ND (6.1) *	ND (1.4) *	ND (0.13)
PCB 1248			ND (0.11)	ND (0.11)	ND (6.1) *	ND (1.4) *	0.50
PCB 1254			ND (0.11)	ND (0.11)	39	8.8	0.71
PCB 1260			ND (0.11)	ND (0.11)	ND (6.1) *	ND (1.4) *	ND (0.13)
PCB 1262			ND (0.11)	ND (0.11)	ND (6.1) *	ND (1.4) *	ND (0.13)
PCB 1268			ND (0.11)	ND (0.11)	ND (6.1) *	ND (1.4) *	ND (0.13)
Total PCBs			ND	ND	**39**	**8.8**	**1.21**
SW-846 8100 Modified (mg/Kg dry)							
TPH			ND (9.7)	ND (9.2)	850	64	30
SW-846 8260C (mg/Kg wet)			**EB-301 (6')**	**EB-304 (7')**	**EB-306 (2')**	**EB-307 (3')**	**EB-309 (6')**
Total VOCs	10	4	ND	ND	ND	ND	ND
SW-846 8270D (mg/Kg dry)							
FLUORANTHENE			ND (0.20)	ND (0.19)	0.25	ND (0.24)	ND (0.21)
PYRENE			ND (0.20)	ND (0.19)	0.22	ND (0.24)	ND (0.21)
Total SVOCs	100	100	ND	ND	**0.47**	ND	ND
SW-846 9014 (mg/Kg)							
REACTIVE CYANIDE			ND (3.9)	ND (3.9)	ND (3.9)	ND (4.0)	ND (3.9)
SW-846 9030A (mg/Kg)							
REACTIVE SULFIDE			ND (19)	ND (20)	ND (20)	ND (20)	ND (20)
SW-846 9045C (pH Units)							
PH			7.7	5.5	6.8	6.9	8.0

NOTES:
ND = Not detected above the lab reporting limits shown in parenthesis.
NT = Not tested

Table 7
August 29, 2014- Soil Disposal Table
1071 Main Street, Woburn, Massachusetts

Parameter	Reportable Concentrations (RCs)		SAMPLING LOCATION				
	RCS-1	RCS-2	TP-01 (4-5ft)	TP-03 (0.5-3ft)	TP-05 (0.5-3ft)	TP-06 (0.5-3ft)	TP-08 (0.5-4ft)
Sampling Date			11/6/2014	11/6/2014	11/6/2014	11/6/2014	11/6/2014
Sample Depth			4-5 Feet	0.5-3 Feet	0.5-3 Feet	0.5-3 Feet	0.5-4 Feet
SW-846 8081B (mg/Kg dry)							
ALDRIN	0.08	0.5	ND (0.0052)	ND (0.54)	ND (0.11)	ND (0.53)	ND (1.1)
ALPHA-BHC	50	500	ND (0.0052)	ND (0.54)	ND (0.11)	ND (0.53)	ND (1.1)
BETA-BHC	10	100	ND (0.0052)	ND (0.54)	ND (0.11)	ND (0.53)	ND (1.1)
DELTA-BHC	10	100	ND (0.0052)	ND (0.54)	ND (0.11)	ND (0.53)	ND (1.1)
GAMMA-BHC (LINDANE)	0.003	0.5	ND (0.0021)	ND (0.22)	ND (0.044)	ND (0.21)	ND (0.44)
CHLORDANE	5	30	ND (0.021)	ND (2.2)	ND (0.44)	ND (2.1)	ND (4.4)
4,4'-DDD	8	40	ND (0.0041)	ND (0.43)	ND (0.088)	ND (0.43)	ND (0.88)
4,4'-DDE	6	30	ND (0.0041)	ND (0.43)	ND (0.088)	ND (0.43)	ND (0.88)
4,4'-DDT	6	30	ND (0.0041)	ND (0.43)	ND (0.088)	ND (0.43)	ND (0.88)
DIELDRIN	0.08	0.5	ND (0.0041)	ND (0.43)	ND (0.088)	ND (0.43)	ND (0.88)
ENDOSULFAN I	0.5	1	ND (0.0052)	ND (0.54)	ND (0.11)	ND (0.53)	ND (1.1)
ENDOSULFAN II	0.5	1	ND (0.0083)	ND (0.87)	ND (0.18)	ND (0.85)	ND (1.8)
ENDOSULFAN SULFATE	~	~	ND (0.0083)	ND (0.87)	ND (0.18)	ND (0.85)	ND (1.8)
ENDRIN	10	20	ND (0.0083)	ND (0.87)	ND (0.18)	ND (0.85)	ND (1.8)
ENDRIN KETONE	~	~	ND (0.0083)	ND (0.87)	ND (0.18)	ND (0.85)	ND (1.8)
HEPTACHLOR	0.3	2	ND (0.0052)	ND (0.54)	ND (0.11)	ND (0.53)	ND (1.1)
HEPTACHLOR EPOXIDE	0.1	0.9	ND (0.0052)	ND (0.54)	ND (0.11)	ND (0.53)	ND (1.1)
HEXACHLOROBENZENE	0.7	0.8	ND (0.0062)	ND (0.65)	ND (0.13)	ND (0.64)	ND (1.3)
METHOXYCHLOR	200	400	ND (0.052)	ND (5.4)	ND (1.1)	ND (5.3)	ND (11)
SW-846 8151A (µg/kg dry)							
2,4-D	100000	1000000	ND (26)	ND (27)	ND (27)	ND (27)	ND (27)
2,4-DB	100000	1000000	ND (26)	ND (27)	ND (27)	ND (27)	ND (27)
2,4,5-TP (SILVEX)	100000	1000000	ND (2.6)	ND (2.7)	ND (2.7)	ND (2.7)	ND (2.7)
2,4,5-T	100000	1000000	ND (2.6)	ND (2.7)	ND (2.7)	ND (2.7)	ND (2.7)
DALAPON	~	~	ND (66)	ND (68)	ND (68)	ND (68)	ND (68)
DICAMBA	500000	5000000	ND (2.6)	ND (2.7)	ND (2.7)	ND (2.7)	ND (2.7)
DICHLOROPROP	~	~	ND (26)	ND (27)	ND (27)	ND (27)	ND (27)
DINOSEB	500000	5000000	ND (13)	ND (14)	ND (14)	ND (14)	ND (14)
MCPA	100000	1000000	ND (2600)	ND (2700)	ND (2700)	ND (2700)	ND (2700)
MCPP	~	~	ND (2600)	ND (2700)	ND (2700)	ND (2700)	ND (2700)

NOTES:
ND = Not detected above the lab reporting limits shown in parenthesis.
mg/kg = millgrams per kilograms
µg/kg = micrograms per kilogram

Table 8
PCB Data August -November 2014
1071 Main Street, Woburn, Massachusetts

Parameter	Method 1 GW-2		SAMPLING LOCATION												
			EB-301 (4-10)	EB-304 (5-10)	EB-306 (0-3)	EB-307 (2-6)	EB-309 (4-8)	EB-303 (1-4)	EB-308 (2-5)	EB-401 (3-6)	EB-403 (0-4)	EB-404 (0-4)	EB-406 (0-4)	EB-407 (0-4)	EB-407 (4-8)
Sampling Date	S-1 / GW-2	S-2 / GW-3	8/29/2014	8/29/2014	8/29/2014	8/29/2014	8/29/2014	8/29/2014	8/29/2015	9/22/2014	9/22/2014	9/22/2014	9/22/2014	9/22/2014	9/22/2014
Sample Depth			4-10 Feet	5-10 Feet	0-3 Feet	2-6 Feet	4-8 Feet	1-4 Feet	2-5 Feet	3-6 Feet	0-4 Feet	0-4 Feet	0-4 Feet	0-4 Feet	4-8 Feet
Cover Material			Aspahlt	Soil	Soil	Soil	Asphalt	Soil	Soil	Soil	Asphalt	Asphalt	Asphalt	Asphalt	Asphalt
SW-846 8082A (mg/Kg dry)															
PCB 1016	1	1	ND (0.11)	ND (0.11)	ND (6.1)	ND (1.4)	ND (0.13)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.14)	ND (0.24)	ND (0.11)	ND (58)	ND (0.10)
PCB 1221	1	1	ND (0.11)	ND (0.11)	ND (6.1)	ND (1.4)	ND (0.13)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.14)	ND (0.24)	ND (0.11)	ND (58)	ND (0.10)
PCB 1232	1	1	ND (0.11)	ND (0.11)	ND (6.1)	ND (1.4)	ND (0.13)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.14)	ND (0.24)	ND (0.11)	ND (58)	ND (0.10)
PCB 1242	1	1	ND (0.11)	ND (0.11)	ND (6.1)	ND (1.4)	ND (0.13)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.14)	ND (0.24)	ND (0.11)	ND (58)	ND (0.10)
PCB 1248	1	1	ND (0.11)	ND (0.11)	ND (6.1)	ND (1.4)	0.50	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.14)	ND (0.24)	ND (0.11)	ND (58)	ND (0.10)
PCB 1254	1	1	ND (0.11)	ND (0.11)	**39**	**8.8**	0.71	0.26	0.3	0.22	**1.6**	**1.2**	ND (0.11)	**420**	0.13
PCB 1260	1	1	ND (0.11)	ND (0.11)	ND (6.1)	ND (1.4)	ND (0.13)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.14)	ND (0.24)	ND (0.11)	ND (58)	ND (0.10)
PCB 1262	1	1	ND (0.11)	ND (0.11)	ND (6.1)	ND (1.4)	ND (0.13)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.14)	ND (0.24)	ND (0.11)	ND (58)	ND (0.10)
PCB 1268	1	1	ND (0.11)	ND (0.11)	ND (6.1)	ND (1.4)	ND (0.13)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.14)	ND (0.24)	ND (0.11)	ND (58)	ND (0.10)
Total PCBs			ND (0.11)	ND (0.11)	**39**	**8.8**	**1.21**	0.26	0.3	0.22	**1.6**	**1.2**	ND (0.11)	**420**	0.13

Parameter	Method 1 GW-2		SAMPLING LOCATION									
			EB-502 (2-4)	EB-503 (0-2)	EB-505 (2-4)	EB-506 (0-2)	EB-508 (2-4)	EB-509 (0-2)	EB-510 (0-2)	EB-512 (0-2)	EB-512 (2-4)	EB-513 (0-2)
Sampling Date	S-1 / GW-2	S-2 / GW-3	10/20/2014	10/20/2014	10/20/2014	10/20/2014	10/20/2014	10/20/2014	10/20/2014	10/20/2014	10/20/2014	10/20/2014
Sample Depth			2-4 Feet	0-2 Feet	2-4 Feet	0-2 Feet	2-4 Feet	0-2 Feet	0-2 Feet	0-2 Feet	2-4 Feet	0-2 Feet
Cover Material			Soil	Soil	Asphalt	Asphalt	Asphalt	Asphalt	Soil	Asphalt	Asphalt	Asphalt
SW-846 8082A (mg/Kg dry)												
Soxhlet Extraction												
PCB 1016	1	1	ND (0.52)	ND (0.11)	ND (0.23)	ND (2.1)	ND (0.11)	ND (2.2)	ND (1.0)	ND (21)	ND (0.11)	ND (1.1)
PCB 1221	1	1	ND (0.52)	ND (0.11)	ND (0.23)	ND (2.1)	ND (0.11)	ND (2.2)	ND (1.0)	ND (21)	ND (0.11)	ND (1.1)
PCB 1232	1	1	ND (0.52)	ND (0.11)	ND (0.23)	ND (2.1)	ND (0.11)	ND (2.2)	ND (1.0)	ND (21)	ND (0.11)	ND (1.1)
PCB 1242	1	1	ND (0.52)	ND (0.11)	ND (0.23)	ND (2.1)	ND (0.11)	ND (2.2)	ND (1.0)	ND (21)	ND (0.11)	ND (1.1)
PCB 1248	1	1	ND (0.52)	ND (0.11)	ND (0.23)	ND (2.1)	ND (0.11)	ND (2.2)	ND (1.0)	ND (21)	ND (0.11)	ND (1.1)
PCB 1254	1	1	**3.8**	**1**	**2.1**	**13**	0.46	**17**	**8.9**	**220**	ND (0.11)	**9.6**
PCB 1260	1	1	ND (0.52)	0.17	ND (0.23)	ND (2.1)	ND (0.11)	**3.6**	**1.9**	**26**	ND (0.11)	**1.3**
PCB 1262	1	1	ND (0.52)	ND (0.11)	ND (0.23)	ND (2.1)	ND (0.11)	ND (2.2)	ND (1.0)	ND (21)	ND (0.11)	ND (1.1)
PCB 1268	1	1	ND (0.52)	ND (0.11)	ND (0.23)	ND (2.1)	ND (0.11)	ND (2.2)	ND (1.0)	ND (21)	ND (0.11)	ND (1.1)
Total PCBs			**3.8**	**1.2**	**2.1**	**13.0**	0.46	**20.6**	**10.8**	**246.0**	ND(0.11)	**10.9**

Parameter	Method 1 GW-2		SAMPLING LOCATION										
			TP-01-ash-(1ft)	TP-01-Brown-(3ft)	TP-01-Light Brown-(2ft)	TP-01 (4-5ft)	TP-02 (1-3ft)	TP-03 (0.5-3ft)	TP-04 (0.5-3ft)	TP-05 (0.5-3ft)	TP-06 (0.5-3ft)	TP-07 (0.5-3ft)	TP-08 (0.5-4ft)
Sampling Date	S-1 / GW-2	S-2 / GW-3	11/6/2014	11/6/2014	11/6/2014	11/6/2014	11/6/2014	11/6/2014	11/6/2014	11/6/2014	11/6/2014	11/6/2014	11/6/2014
Sample Depth			1- Foot	3- Feet	2- Feet	4-5 Feet	1-3 Feet	0.5-3 Feet	0.5-3 Feet	0.5-3 Feet	0.5-3 Feet	0.5-3 Feet	0.5-4 Feet
Cover Material			Asphalt	Asphalt	Asphalt	Asphalt	Soil	Soil	Aspahlt	Aspahlt	Aspahlt	Aspahlt	Aspahlt
SW-846 8082A (mg/Kg dry)													
PCB 1016	1	1	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.11)	ND (4.5)	ND (0.55)	ND (5.4)	ND (0.11)	ND (1.1)	ND (0.11)	ND (4.3)
PCB 1221	1	1	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.11)	ND (4.5)	ND (0.55)	ND (5.4)	ND (0.11)	ND (1.1)	ND (0.11)	ND (4.3)
PCB 1232	1	1	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.11)	ND (4.5)	ND (0.55)	ND (5.4)	ND (0.11)	ND (1.1)	ND (0.11)	ND (4.3)
PCB 1242	1	1	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.11)	ND (4.5)	ND (0.55)	ND (5.4)	ND (0.11)	ND (1.1)	ND (0.11)	ND (4.3)
PCB 1248	1	1	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.11)	ND (4.5)	ND (0.55)	ND (5.4)	ND (0.11)	ND (1.1)	ND (0.11)	**11**
PCB 1254	1	1	0.75	0.87	ND (0.11)	ND (0.11)	**21**	**3.2**	**38**	0.41	**6.7**	0.18	**25**
PCB 1260	1	1	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.11)	ND (4.5)	ND (0.55)	ND (5.4)	ND (0.11)	ND (1.1)	ND (0.11)	ND (4.3)
PCB 1262	1	1	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.11)	ND (4.5)	ND (0.55)	ND (5.4)	ND (0.11)	ND (1.1)	ND (0.11)	ND (4.3)
PCB 1268	1	1	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.11)	ND (4.5)	ND (0.55)	ND (5.4)	ND (0.11)	ND (1.1)	ND (0.11)	ND (4.3)
Total PCBs			0.75	0.87	ND (0.11)	ND (0.11)	**21**	**3.2**	**38**	0.41	**6.7**	0.18	**36**

MADEP Method 1 S-1/ GW-2 and S-1 / GW-3 Standards
mg/kg = milligrams per kilogram
PCBs = Polychlorinated biphenyls by EPA Method 8082

Table 9
1071 Main Street, Woburn, Massachusetts
PCB Field Sampling Kits

	SAMPLING LOCATION												
Sample ID	**EB-501 (0-2')**	**EB-502 (0-2')**	**EB-503 (0-2')**	**EB-504 (0-2')**	**EB-505 (0-2')**	**EB-506 (0-2')**	**EB-507 (0-2')**	**EB-508 (0-2')**	**EB-509 (0-2')**	**EB-510 (0-2')**	**EB-511 (0-2'**	**EB-512 (0-2')**	**EB-513 (0-2')**
Results (> or < 50 ppm)	**>50**	**>50**	**<50**	**>50**	**>50**	**<50**	<50	**>50**	**<50**	**<50**	NT	**>50**	**<50**
Sample ID	**EB-501 (2-4')**	**EB-502 (2-4')**	**EB-503 (2-4')**	**EB-504 (2-4')**	**EB-505 (2-4')**	**EB-506 (2-4')**	**EB-507 (2-4')**	**EB-508 (2-4')**	**EB-509 (2-4')**	**EB-510 (2-4')**	**EB-511 (2-4'**	**EB-512 (2-4')**	**EB-513 (2-4')**
Results (> or < 50 ppm)	**>50**	**<50**	<50	<50	**<50**	<50	**<50**	**>50**	<50	<50	NT	**<50**	NT

Dexsil® Clor-N-Soil Sampling kits used to determine PCB content above or below 50 ppm
ppm = parts per million
<50 = Sample submitted for laboratory analysis of PCBs by EPA Method 8082 + SOXHLET
<50 = Kit damaged during sampling. Result using the damaged kit was less than 50 ppm
Bold = Exceeds 50 ppm

Table 10
UST Product Analytics
1071 Main Street, Woburn, Massachusetts

Parameter	MCP - Method 1 Cleanup Standards		Sample Location
	S-1/GW-2	S-1/GW-3	Tank Product
Sampling Date			11/6/2014
Sample Depth			
EPA 600/4-81-045 (mg/Kg)			
PCB 1016	1	1	ND (0.96)
PCB 1221	1	1	ND (0.96)
PCB 1232	1	1	ND (0.96)
PCB 1242	1	1	ND (0.96)
PCB 1248	1	1	ND (0.96)
PCB 1254	1	1	**5.2**
PCB 1260	1	1	ND (0.96)
PCB 1262	1	1	ND (0.96)
PCB 1268	1	1	ND (0.96)
SW-846 8015C (mg/Kg)			
TPH	1000	1000	**42000**

MADEP Method 1 S-1/ GW-2 and S-1 / GW-3 Standards
mg/kg = milligrams per kilogram
PCBs = Polychlorinated biphenyls by EPA Method 8082
TPH = Total Petroleum Hydrocarbons by EPA Method 8015C

Table 11
Groundwater Data -April 2014
1071 Main Street, Woburn, Massachusetts

Parameter	Method 1 Standards		SAMPLING LOCATION			
	GW-2	GW-3	MW-1	MW-3	EB-202 GW	EB-204 GW
Sampling Date			4/8/2014	4/8/2014	4/8/2014	4/8/2014
Depth to Water (feet)			6.1	1.55	4.85	6.4
EPH MADEP Method (µg/L)						
C9-C18 Aliphatics	5000	50000	ND (100)	ND (100)	110	ND (100)
C19-C36 Aliphatics	~	50000	120	ND (100)	110	ND (100)
C11-C22 Aromatics	50000	5000	ND (100)	ND (100)	ND (100)	190
Metals (µg/L)						
Antimony	~	8000	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Chromium	~	300	ND (5.0)	ND (5.0)	6.3	6.8

Method 1 GW-2 and GW-3 standards
µg/L - micrograms per liter
EPH - Extractable Petroleum Hydrocarbons by the MADEP Method
Metals - RCRA 8 Metals by EPA Method 6010

`

APPENDIX B

Laboratory Analytical Data

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 17, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St., Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14D0277

Enclosed are results of analyses for samples received by the laboratory on April 8, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 4/17/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14D0277

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-201 (6-8)	14D0277-01	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
EB-201 (8-9.5)	14D0277-02	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
MW-3	14D0277-03	Ground Water		MADEP-EPH-04-1.1	
				SW-846 6020A	
EB-202 (5-7)	14D0277-04	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
EB-202 (10-12)	14D0277-05	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
EB-202 GW	14D0277-06	Ground Water		MADEP-EPH-04-1.1	
				SW-846 6020A	
EB-203 (1-3)	14D0277-07	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
EB-203 (10-12)	14D0277-08	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
EB-204 (1-4)	14D0277-09	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 4/17/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14D0277

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-204 (10-12)	14D0277-10	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
EB-204 GW	14D0277-11	Ground Water		MADEP-EPH-04-1.1	
				SW-846 6020A	
MW-1	14D0277-12	Ground Water		MADEP-EPH-04-1.1	
				SW-846 6020A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

MADEP-EPH-04-1.1

SPE cartridge contamination with non-petroleum compounds, if present, is verified by GC/MS in each method blank per extraction batch and excluded from C11-C22 aromatic range fraction in all samples in the batch. No significant modifications were made to the method.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Michael A. Erickson
Laboratory Director

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA Sample Description: Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-201 (6-8) Sampled: 4/8/2014 10:00

Sample ID: 14D0277-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	14	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
C19-C36 Aliphatics	120	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Unadjusted C11-C22 Aromatics	61	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
C11-C22 Aromatics	61	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Acenaphthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Acenaphthylene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Benzo(a)anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Benzo(a)pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Benzo(b)fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Benzo(g,h,i)perylene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Benzo(k)fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Chrysene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Dibenz(a,h)anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Fluorene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Indeno(1,2,3-cd)pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
2-Methylnaphthalene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Naphthalene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Phenanthrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	40.8	40-140		4/11/14 13:47
o-Terphenyl (OTP)	61.5	40-140		4/11/14 13:47
2-Bromonaphthalene	92.2	40-140		4/11/14 13:47
2-Fluorobiphenyl	94.2	40-140		4/11/14 13:47

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-201 (6-8)
Sampled: 4/8/2014 10:00

Sample ID: 14D0277-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.0	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:45	OP
Chromium	140	0.60	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:45	OP

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-201 (6-8)
Sampled: 4/8/2014 10:00

Sample ID: 14D0277-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	57		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @19.6°C	7.6		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	79.5		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-201 (8-9.5) | Sampled: 4/8/2014 10:15

Sample ID: 14D0277-02

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
C19-C36 Aliphatics	30	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Unadjusted C11-C22 Aromatics	20	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
C11-C22 Aromatics	20	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Acenaphthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Acenaphthylene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Benzo(a)anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Benzo(a)pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Benzo(b)fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Benzo(g,h,i)perylene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Benzo(k)fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Chrysene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Dibenz(a,h)anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Fluorene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Indeno(1,2,3-cd)pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
2-Methylnaphthalene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Naphthalene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Phenanthrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	44.3	40-140		4/11/14 14:08
o-Terphenyl (OTP)	62.9	40-140		4/11/14 14:08
2-Bromonaphthalene	95.8	40-140		4/11/14 14:08
2-Fluorobiphenyl	97.4	40-140		4/11/14 14:08

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-201 (8-9.5)
Sampled: 4/8/2014 10:15

Sample ID: 14D0277-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.0	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:50	OP
Chromium	22	0.61	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:50	OP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-201 (8-9.5)
Sampled: 4/8/2014 10:15

Sample ID: 14D0277-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	85		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @19.9°C	7.8		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	77.7		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: MW-3 | Sampled: 4/8/2014 10:30

Sample ID: 14D0277-03

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	63.6	40-140		4/16/14 9:29
o-Terphenyl (OTP)	84.0	40-140		4/16/14 9:29
2-Bromonaphthalene	105	40-140		4/16/14 9:29
2-Fluorobiphenyl	109	40-140		4/16/14 9:29

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: MW-3
Sampled: 4/8/2014 10:30

Sample ID: 14D0277-03

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:02	KSH
Chromium	ND	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:02	KSH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 (5-7) | Sampled: 4/8/2014 10:50

Sample ID: 14D0277-04

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	500	120	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 5:47	SCS
C19-C36 Aliphatics	780	120	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 5:47	SCS
Unadjusted C11-C22 Aromatics	660	120	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 5:47	SCS
C11-C22 Aromatics	660	120	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 5:47	SCS
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Chrysene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Fluorene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	46.5	40-140		4/11/14 14:29
o-Terphenyl (OTP)	86.5	40-140		4/11/14 14:29
2-Bromonaphthalene	99.1	40-140		4/11/14 14:29
2-Fluorobiphenyl	102	40-140		4/11/14 14:29

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 (5-7)
Sampled: 4/8/2014 10:50

Sample ID: 14D0277-04

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.9	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:55	OP
Chromium	16	0.57	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:55	OP

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 (5-7) | Sampled: 4/8/2014 10:50

Sample ID: 14D0277-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	73		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @20.2°C	7.6		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	82.0		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 (10-12) | Sampled: 4/8/2014 11:00

Sample ID: 14D0277-05

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
C19-C36 Aliphatics	ND	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Unadjusted C11-C22 Aromatics	ND	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
C11-C22 Aromatics	ND	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Acenaphthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Acenaphthylene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Benzo(a)anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Benzo(a)pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Benzo(b)fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Benzo(g,h,i)perylene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Benzo(k)fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Chrysene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Dibenz(a,h)anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Fluorene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Indeno(1,2,3-cd)pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
2-Methylnaphthalene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Naphthalene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Phenanthrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	51.0	40-140		4/11/14 14:55
o-Terphenyl (OTP)	68.3	40-140		4/11/14 14:55
2-Bromonaphthalene	104	40-140		4/11/14 14:55
2-Fluorobiphenyl	107	40-140		4/11/14 14:55

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 (10-12)
Sampled: 4/8/2014 11:00

Sample ID: 14D0277-05

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.2	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:59	OP
Chromium	13	0.64	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:59	OP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 (10-12)
Sampled: 4/8/2014 11:00

Sample ID: 14D0277-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	88		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @20.1°C	8.1		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	77.7		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 GW | Sampled: 4/8/2014 11:15

Sample ID: 14D0277-06

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	110	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
C19-C36 Aliphatics	110	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	52.0	40-140		4/16/14 10:10
o-Terphenyl (OTP)	85.2	40-140		4/16/14 10:10
2-Bromonaphthalene	104	40-140		4/16/14 10:10
2-Fluorobiphenyl	106	40-140		4/16/14 10:10

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 GW
Sampled: 4/8/2014 11:15

Sample ID: 14D0277-06

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:29	KSH
Chromium	6.3	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:29	KSH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-203 (1-3)
Sampled: 4/8/2014 11:45

Sample ID: 14D0277-07

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	54	16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
C19-C36 Aliphatics	900	160	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 6:07	SCS
Unadjusted C11-C22 Aromatics	990	160	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 6:07	SCS
C11-C22 Aromatics	990	160	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 6:07	SCS
Acenaphthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Acenaphthylene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Anthracene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Benzo(a)anthracene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Benzo(a)pyrene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Benzo(b)fluoranthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Benzo(g,h,i)perylene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Benzo(k)fluoranthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Chrysene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Dibenz(a,h)anthracene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Fluoranthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Fluorene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Indeno(1,2,3-cd)pyrene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
2-Methylnaphthalene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Naphthalene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Phenanthrene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Pyrene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	50.9	40-140		4/11/14 15:16
o-Terphenyl (OTP)	76.0	40-140		4/11/14 15:16
2-Bromonaphthalene	99.9	40-140		4/11/14 15:16
2-Fluorobiphenyl	103	40-140		4/11/14 15:16

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-203 (1-3)
Sampled: 4/8/2014 11:45

Sample ID: 14D0277-07

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	4.0	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:04	OP
Chromium	950	0.80	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:04	OP

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-203 (1-3)
Sampled: 4/8/2014 11:45

Sample ID: 14D0277-07

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	100		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @19.5°C	7.6		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	62.2		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-203 (10-12) | Sampled: 4/8/2014 12:00

Sample ID: 14D0277-08

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
C19-C36 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Unadjusted C11-C22 Aromatics	31	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
C11-C22 Aromatics	31	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Chrysene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Fluorene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	51.6	40-140		4/11/14 15:37
o-Terphenyl (OTP)	70.2	40-140		4/11/14 15:37
2-Bromonaphthalene	103	40-140		4/11/14 15:37
2-Fluorobiphenyl	107	40-140		4/11/14 15:37

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-203 (10-12)
Sampled: 4/8/2014 12:00

Sample ID: 14D0277-08

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.8	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:09	OP
Chromium	9.6	0.56	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:09	OP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-203 (10-12)
Sampled: 4/8/2014 12:00

Sample ID: 14D0277-08

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	63		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @19.7°C	11		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	83.3		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 (1-4) | Sampled: 4/8/2014 12:15

Sample ID: 14D0277-09

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
C19-C36 Aliphatics	60	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Unadjusted C11-C22 Aromatics	82	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
C11-C22 Aromatics	72	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Acenaphthene	0.14	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Anthracene	0.24	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Benzo(a)anthracene	0.78	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Benzo(a)pyrene	0.78	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Benzo(b)fluoranthene	1.0	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Benzo(g,h,i)perylene	0.63	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Benzo(k)fluoranthene	0.35	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Chrysene	1.0	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Dibenz(a,h)anthracene	0.17	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Fluoranthene	1.6	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Fluorene	0.14	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Indeno(1,2,3-cd)pyrene	0.66	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Phenanthrene	1.1	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Pyrene	2.1	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	44.5	40-140		4/11/14 15:58
o-Terphenyl (OTP)	62.3	40-140		4/11/14 15:58
2-Bromonaphthalene	92.5	40-140		4/11/14 15:58
2-Fluorobiphenyl	95.7	40-140		4/11/14 15:58

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 (1-4)
Sampled: 4/8/2014 12:15

Sample ID: 14D0277-09

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.8	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:14	OP
Chromium	130	0.56	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:14	OP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 (1-4)
Sampled: 4/8/2014 12:15

Sample ID: 14D0277-09

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	110		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @20.2°C	8.1		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	85.7		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 (10-12) | Sampled: 4/8/2014 12:30

Sample ID: 14D0277-10

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
C19-C36 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Unadjusted C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Chrysene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Fluorene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	45.6	40-140		4/11/14 16:19
o-Terphenyl (OTP)	61.2	40-140		4/11/14 16:19
2-Bromonaphthalene	100	40-140		4/11/14 16:19
2-Fluorobiphenyl	102	40-140		4/11/14 16:19

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 (10-12)
Sampled: 4/8/2014 12:30

Sample ID: 14D0277-10

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.0	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:19	OP
Chromium	8.5	0.61	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:19	OP

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 (10-12)
Sampled: 4/8/2014 12:30

Sample ID: 14D0277-10

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	78		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @19.8°C	8.2		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	81.8		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 GW | Sampled: 4/8/2014 13:00

Sample ID: 14D0277-11

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Unadjusted C11-C22 Aromatics	190	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
C11-C22 Aromatics	190	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	68.4	40-140		4/16/14 9:49
o-Terphenyl (OTP)	89.2	40-140		4/16/14 9:49
2-Bromonaphthalene	104	40-140		4/16/14 9:49
2-Fluorobiphenyl	108	40-140		4/16/14 9:49

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 GW
Sampled: 4/8/2014 13:00

Sample ID: 14D0277-11

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:32	KSH
Chromium	6.8	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:32	KSH

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: MW-1 | Sampled: 4/8/2014 13:30

Sample ID: 14D0277-12

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	97	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
C19-C36 Aliphatics	120	97	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Unadjusted C11-C22 Aromatics	ND	97	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
C11-C22 Aromatics	ND	97	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Acenaphthene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Acenaphthylene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Anthracene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Benzo(a)anthracene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Benzo(a)pyrene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Benzo(b)fluoranthene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Benzo(g,h,i)perylene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Benzo(k)fluoranthene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Chrysene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Dibenz(a,h)anthracene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Fluoranthene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Fluorene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Indeno(1,2,3-cd)pyrene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
2-Methylnaphthalene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Naphthalene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Phenanthrene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Pyrene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	59.9	40-140		4/16/14 10:30
o-Terphenyl (OTP)	79.4	40-140		4/16/14 10:30
2-Bromonaphthalene	98.0	40-140		4/16/14 10:30
2-Fluorobiphenyl	102	40-140		4/16/14 10:30

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: MW-1
Sampled: 4/8/2014 13:30

Sample ID: 14D0277-12

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:36	KSH
Chromium	ND	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:36	KSH

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Sample Extraction Data

Prep Method: SW-846 3546-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14D0277-01 [EB-201 (6-8)]	B093502	20.1	2.00	04/09/14
14D0277-02 [EB-201 (8-9.5)]	B093502	20.5	2.00	04/09/14
14D0277-04 [EB-202 (5-7)]	B093502	20.4	2.00	04/09/14
14D0277-05 [EB-202 (10-12)]	B093502	20.4	2.00	04/09/14
14D0277-07 [EB-203 (1-3)]	B093502	20.4	2.00	04/09/14
14D0277-08 [EB-203 (10-12)]	B093502	20.1	2.00	04/09/14
14D0277-09 [EB-204 (1-4)]	B093502	20.2	2.00	04/09/14
14D0277-10 [EB-204 (10-12)]	B093502	20.3	2.00	04/09/14

Prep Method: SW-846 3510C-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0277-03RE1 [MW-3]	B093787	1000	2.00	04/15/14
14D0277-06RE1 [EB-202 GW]	B093787	1000	2.00	04/15/14
14D0277-11RE1 [EB-204 GW]	B093787	1000	2.00	04/15/14
14D0277-12RE1 [MW-1]	B093787	980	1.90	04/15/14

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14D0277-01 [EB-201 (6-8)]	B093413	04/08/14
14D0277-02 [EB-201 (8-9.5)]	B093413	04/08/14
14D0277-04 [EB-202 (5-7)]	B093413	04/08/14
14D0277-05 [EB-202 (10-12)]	B093413	04/08/14
14D0277-07 [EB-203 (1-3)]	B093413	04/08/14
14D0277-08 [EB-203 (10-12)]	B093413	04/08/14
14D0277-09 [EB-204 (1-4)]	B093413	04/08/14
14D0277-10 [EB-204 (10-12)]	B093413	04/08/14

SM2580 A

Lab Number [Field ID]	Batch	Initial [g]	Date
14D0277-01 [EB-201 (6-8)]	B093422	20.0	04/09/14
14D0277-02 [EB-201 (8-9.5)]	B093422	20.0	04/09/14
14D0277-04 [EB-202 (5-7)]	B093422	20.0	04/09/14
14D0277-05 [EB-202 (10-12)]	B093422	20.0	04/09/14
14D0277-07 [EB-203 (1-3)]	B093422	20.0	04/09/14
14D0277-08 [EB-203 (10-12)]	B093422	20.0	04/09/14
14D0277-09 [EB-204 (1-4)]	B093422	20.0	04/09/14
14D0277-10 [EB-204 (10-12)]	B093422	20.0	04/09/14

Prep Method: SW-846 3050B-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14D0277-01 [EB-201 (6-8)]	B093480	1.04	50.0	04/09/14
14D0277-02 [EB-201 (8-9.5)]	B093480	1.06	50.0	04/09/14
14D0277-04 [EB-202 (5-7)]	B093480	1.07	50.0	04/09/14
14D0277-05 [EB-202 (10-12)]	B093480	1.01	50.0	04/09/14
14D0277-07 [EB-203 (1-3)]	B093480	1.01	50.0	04/09/14
14D0277-08 [EB-203 (10-12)]	B093480	1.08	50.0	04/09/14

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Sample Extraction Data

Prep Method: SW-846 3050B-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14D0277-09 [EB-204 (1-4)]	B093480	1.03	50.0	04/09/14
14D0277-10 [EB-204 (10-12)]	B093480	1.01	50.0	04/09/14

Prep Method: SW-846 3005A-SW-846 6020A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0277-03 [MW-3]	B093506	50.0	50.0	04/09/14
14D0277-06 [EB-202 GW]	B093506	50.0	50.0	04/09/14
14D0277-11 [EB-204 GW]	B093506	50.0	50.0	04/09/14
14D0277-12 [MW-1]	B093506	50.0	50.0	04/09/14

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
14D0277-01 [EB-201 (6-8)]	B093424	20.0	04/09/14
14D0277-02 [EB-201 (8-9.5)]	B093424	20.0	04/09/14
14D0277-04 [EB-202 (5-7)]	B093424	20.0	04/09/14
14D0277-05 [EB-202 (10-12)]	B093424	20.0	04/09/14
14D0277-07 [EB-203 (1-3)]	B093424	20.0	04/09/14
14D0277-08 [EB-203 (10-12)]	B093424	20.0	04/09/14
14D0277-09 [EB-204 (1-4)]	B093424	20.0	04/09/14
14D0277-10 [EB-204 (10-12)]	B093424	20.0	04/09/14

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093502 - SW-846 3546										
Blank (B093502-BLK1)				Prepared: 04/09/14 Analyzed: 04/11/14						
C9-C18 Aliphatics	ND	10	mg/Kg wet							
C19-C36 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg wet							
C11-C22 Aromatics	ND	10	mg/Kg wet							
Acenaphthene	ND	0.10	mg/Kg wet							
Acenaphthylene	ND	0.10	mg/Kg wet							
Anthracene	ND	0.10	mg/Kg wet							
Benzo(a)anthracene	ND	0.10	mg/Kg wet							
Benzo(a)pyrene	ND	0.10	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.10	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.10	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.10	mg/Kg wet							
Chrysene	ND	0.10	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.10	mg/Kg wet							
Fluoranthene	ND	0.10	mg/Kg wet							
Fluorene	ND	0.10	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg wet							
2-Methylnaphthalene	ND	0.10	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							
Phenanthrene	ND	0.10	mg/Kg wet							
Pyrene	ND	0.10	mg/Kg wet							
n-Decane	ND	0.10	mg/Kg wet							
n-Docosane	ND	0.10	mg/Kg wet							
n-Dodecane	ND	0.10	mg/Kg wet							
n-Eicosane	ND	0.10	mg/Kg wet							
n-Hexacosane	ND	0.10	mg/Kg wet							
n-Hexadecane	ND	0.10	mg/Kg wet							
n-Hexatriacontane	ND	0.10	mg/Kg wet							
n-Nonadecane	ND	0.10	mg/Kg wet							
n-Nonane	ND	0.10	mg/Kg wet							
n-Octacosane	ND	0.10	mg/Kg wet							
n-Octadecane	ND	0.10	mg/Kg wet							
n-Tetracosane	ND	0.10	mg/Kg wet							
n-Tetradecane	ND	0.10	mg/Kg wet							
n-Triacontane	ND	0.10	mg/Kg wet							
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
Surrogate: Chlorooctadecane (COD)	*2.89*		mg/Kg wet	5.00		57.9	40-140			
Surrogate: o-Terphenyl (OTP)	*3.76*		mg/Kg wet	5.00		75.3	40-140			
Surrogate: 2-Bromonaphthalene	*4.82*		mg/Kg wet	5.00		96.5	40-140			
Surrogate: 2-Fluorobiphenyl	*4.88*		mg/Kg wet	5.00		97.7	40-140			
LCS (B093502-BS1)				Prepared: 04/09/14 Analyzed: 04/11/14						
Acenaphthene	4.35	0.10	mg/Kg wet	5.00		87.0	40-140			
Acenaphthylene	4.22	0.10	mg/Kg wet	5.00		84.4	40-140			
Anthracene	4.26	0.10	mg/Kg wet	5.00		85.1	40-140			
Benzo(a)anthracene	4.34	0.10	mg/Kg wet	5.00		86.8	40-140			
Benzo(a)pyrene	4.28	0.10	mg/Kg wet	5.00		85.6	40-140			
Benzo(b)fluoranthene	4.41	0.10	mg/Kg wet	5.00		88.2	40-140			
Benzo(g,h,i)perylene	4.81	0.10	mg/Kg wet	5.00		96.2	40-140			
Benzo(k)fluoranthene	4.36	0.10	mg/Kg wet	5.00		87.2	40-140			
Chrysene	4.10	0.10	mg/Kg wet	5.00		82.0	40-140			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093502 - SW-846 3546										
LCS (B093502-BS1)				Prepared: 04/09/14 Analyzed: 04/11/14						
Dibenz(a,h)anthracene	4.69	0.10	mg/Kg wet	5.00		93.7	40-140			
Fluoranthene	4.22	0.10	mg/Kg wet	5.00		84.4	40-140			
Fluorene	4.29	0.10	mg/Kg wet	5.00		85.9	40-140			
Indeno(1,2,3-cd)pyrene	4.81	0.10	mg/Kg wet	5.00		96.1	40-140			
2-Methylnaphthalene	4.24	0.10	mg/Kg wet	5.00		84.8	40-140			
Naphthalene	3.82	0.10	mg/Kg wet	5.00		76.4	40-140			
Phenanthrene	4.24	0.10	mg/Kg wet	5.00		84.9	40-140			
Pyrene	4.13	0.10	mg/Kg wet	5.00		82.6	40-140			
n-Decane	2.63	0.10	mg/Kg wet	5.00		52.7	40-140			
n-Docosane	4.08	0.10	mg/Kg wet	5.00		81.5	40-140			
n-Dodecane	3.34	0.10	mg/Kg wet	5.00		66.8	40-140			
n-Eicosane	3.97	0.10	mg/Kg wet	5.00		79.4	40-140			
n-Hexacosane	4.10	0.10	mg/Kg wet	5.00		82.0	40-140			
n-Hexadecane	3.92	0.10	mg/Kg wet	5.00		78.4	40-140			
n-Hexatriacontane	3.25	0.10	mg/Kg wet	5.00		65.1	40-140			
n-Nonadecane	3.95	0.10	mg/Kg wet	5.00		79.1	40-140			
n-Nonane	1.78	0.10	mg/Kg wet	5.00		35.5	30-140			
n-Octacosane	3.98	0.10	mg/Kg wet	5.00		79.6	40-140			
n-Octadecane	3.97	0.10	mg/Kg wet	5.00		79.3	40-140			
n-Tetracosane	4.03	0.10	mg/Kg wet	5.00		80.6	40-140			
n-Tetradecane	3.71	0.10	mg/Kg wet	5.00		74.3	40-140			
n-Triacontane	4.04	0.10	mg/Kg wet	5.00		80.8	40-140			
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	*3.21*		mg/Kg wet	5.00		64.3	40-140			
Surrogate: o-Terphenyl (OTP)	*4.19*		mg/Kg wet	5.00		83.9	40-140			
Surrogate: 2-Bromonaphthalene	*4.93*		mg/Kg wet	5.00		98.6	40-140			
Surrogate: 2-Fluorobiphenyl	*5.06*		mg/Kg wet	5.00		101	40-140			
LCS Dup (B093502-BSD1)				Prepared: 04/09/14 Analyzed: 04/11/14						
Acenaphthene	4.30	0.10	mg/Kg wet	5.00		86.1	40-140	1.01	25	
Acenaphthylene	4.18	0.10	mg/Kg wet	5.00		83.6	40-140	0.981	25	
Anthracene	4.22	0.10	mg/Kg wet	5.00		84.3	40-140	0.914	25	
Benzo(a)anthracene	4.33	0.10	mg/Kg wet	5.00		86.5	40-140	0.337	25	
Benzo(a)pyrene	4.27	0.10	mg/Kg wet	5.00		85.5	40-140	0.105	25	
Benzo(b)fluoranthene	4.41	0.10	mg/Kg wet	5.00		88.1	40-140	0.118	25	
Benzo(g,h,i)perylene	4.80	0.10	mg/Kg wet	5.00		95.9	40-140	0.244	25	
Benzo(k)fluoranthene	4.35	0.10	mg/Kg wet	5.00		87.0	40-140	0.324	25	
Chrysene	4.08	0.10	mg/Kg wet	5.00		81.6	40-140	0.440	25	
Dibenz(a,h)anthracene	4.72	0.10	mg/Kg wet	5.00		94.4	40-140	0.681	25	
Fluoranthene	4.18	0.10	mg/Kg wet	5.00		83.6	40-140	0.895	25	
Fluorene	4.25	0.10	mg/Kg wet	5.00		85.1	40-140	0.964	25	
Indeno(1,2,3-cd)pyrene	4.80	0.10	mg/Kg wet	5.00		96.0	40-140	0.129	25	
2-Methylnaphthalene	4.20	0.10	mg/Kg wet	5.00		84.0	40-140	0.941	25	
Naphthalene	3.78	0.10	mg/Kg wet	5.00		75.6	40-140	0.950	25	
Phenanthrene	4.20	0.10	mg/Kg wet	5.00		84.1	40-140	0.942	25	
Pyrene	4.10	0.10	mg/Kg wet	5.00		82.0	40-140	0.800	25	
n-Decane	2.33	0.10	mg/Kg wet	5.00		46.6	40-140	12.4	25	
n-Docosane	3.61	0.10	mg/Kg wet	5.00		72.3	40-140	12.1	25	
n-Dodecane	2.95	0.10	mg/Kg wet	5.00		59.0	40-140	12.4	25	
n-Eicosane	3.50	0.10	mg/Kg wet	5.00		70.1	40-140	12.5	25	
n-Hexacosane	3.63	0.10	mg/Kg wet	5.00		72.6	40-140	12.1	25	

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093502 - SW-846 3546										
LCS Dup (B093502-BSD1)				Prepared: 04/09/14 Analyzed: 04/11/14						
n-Hexadecane	3.47	0.10	mg/Kg wet	5.00		69.4	40-140	12.2	25	
n-Hexatriacontane	2.87	0.10	mg/Kg wet	5.00		57.5	40-140	12.4	25	
n-Nonadecane	3.50	0.10	mg/Kg wet	5.00		70.1	40-140	12.1	25	
n-Nonane	1.57	0.10	mg/Kg wet	5.00		31.5	30-140	12.2	25	
n-Octacosane	3.53	0.10	mg/Kg wet	5.00		70.7	40-140	11.8	25	
n-Octadecane	3.51	0.10	mg/Kg wet	5.00		70.3	40-140	12.1	25	
n-Tetracosane	3.58	0.10	mg/Kg wet	5.00		71.6	40-140	11.8	25	
n-Tetradecane	3.27	0.10	mg/Kg wet	5.00		65.4	40-140	12.7	25	
n-Triacontane	3.58	0.10	mg/Kg wet	5.00		71.6	40-140	12.0	25	
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	*2.86*		mg/Kg wet	5.00		57.3	40-140			
Surrogate: o-Terphenyl (OTP)	*4.15*		mg/Kg wet	5.00		83.1	40-140			
Surrogate: 2-Bromonaphthalene	*4.89*		mg/Kg wet	5.00		97.7	40-140			
Surrogate: 2-Fluorobiphenyl	*5.01*		mg/Kg wet	5.00		100	40-140			
Batch B093787 - SW-846 3510C										
Blank (B093787-BLK1)				Prepared: 04/15/14 Analyzed: 04/16/14						
C9-C18 Aliphatics	ND	100	µg/L							
C19-C36 Aliphatics	ND	100	µg/L							
Unadjusted C11-C22 Aromatics	ND	100	µg/L							
C11-C22 Aromatics	ND	100	µg/L							
Acenaphthene	ND	2.0	µg/L							
Acenaphthylene	ND	2.0	µg/L							
Anthracene	ND	2.0	µg/L							
Benzo(a)anthracene	ND	2.0	µg/L							
Benzo(a)pyrene	ND	2.0	µg/L							
Benzo(b)fluoranthene	ND	2.0	µg/L							
Benzo(g,h,i)perylene	ND	2.0	µg/L							
Benzo(k)fluoranthene	ND	2.0	µg/L							
Chrysene	ND	2.0	µg/L							
Dibenz(a,h)anthracene	ND	2.0	µg/L							
Fluoranthene	ND	2.0	µg/L							
Fluorene	ND	2.0	µg/L							
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L							
2-Methylnaphthalene	ND	2.0	µg/L							
Naphthalene	ND	2.0	µg/L							
Phenanthrene	ND	2.0	µg/L							
Pyrene	ND	2.0	µg/L							
n-Decane	ND	2.0	µg/L							
n-Docosane	ND	2.0	µg/L							
n-Dodecane	ND	2.0	µg/L							
n-Eicosane	ND	2.0	µg/L							
n-Hexacosane	ND	2.0	µg/L							
n-Hexadecane	ND	2.0	µg/L							
n-Hexatriacontane	ND	2.0	µg/L							
n-Nonadecane	ND	2.0	µg/L							
n-Nonane	ND	2.0	µg/L							
n-Octacosane	ND	2.0	µg/L							
n-Octadecane	ND	2.0	µg/L							
n-Tetracosane	ND	2.0	µg/L							
n-Tetradecane	ND	2.0	µg/L							

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093787 - SW-846 3510C										
Blank (B093787-BLK1)				Prepared: 04/15/14 Analyzed: 04/16/14						
n-Triacontane	ND	2.0	µg/L							
Naphthalene-aliphatic fraction	ND	2.0	µg/L							
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L							
Surrogate: Chlorooctadecane (COD)	*70.6*		µg/L	100		70.6	40-140			
Surrogate: o-Terphenyl (OTP)	*83.0*		µg/L	100		83.0	40-140			
Surrogate: 2-Bromonaphthalene	*95.8*		µg/L	100		95.8	40-140			
Surrogate: 2-Fluorobiphenyl	*110*		µg/L	100		110	40-140			
LCS (B093787-BS1)				Prepared: 04/15/14 Analyzed: 04/16/14						
Acenaphthene	84.3	2.0	µg/L	100		84.3	40-140			
Acenaphthylene	80.2	2.0	µg/L	100		80.2	40-140			
Anthracene	86.7	2.0	µg/L	100		86.7	40-140			
Benzo(a)anthracene	90.1	2.0	µg/L	100		90.1	40-140			
Benzo(a)pyrene	88.9	2.0	µg/L	100		88.9	40-140			
Benzo(b)fluoranthene	91.5	2.0	µg/L	100		91.5	40-140			
Benzo(g,h,i)perylene	102	2.0	µg/L	100		102	40-140			
Benzo(k)fluoranthene	90.4	2.0	µg/L	100		90.4	40-140			
Chrysene	84.8	2.0	µg/L	100		84.8	40-140			
Dibenz(a,h)anthracene	98.8	2.0	µg/L	100		98.8	40-140			
Fluoranthene	87.3	2.0	µg/L	100		87.3	40-140			
Fluorene	85.7	2.0	µg/L	100		85.7	40-140			
Indeno(1,2,3-cd)pyrene	100	2.0	µg/L	100		100	40-140			
2-Methylnaphthalene	75.8	2.0	µg/L	100		75.8	40-140			
Naphthalene	65.6	2.0	µg/L	100		65.6	40-140			
Phenanthrene	86.9	2.0	µg/L	100		86.9	40-140			
Pyrene	85.5	2.0	µg/L	100		85.5	40-140			
n-Decane	44.3	2.0	µg/L	100		44.3	40-140			
n-Docosane	82.8	2.0	µg/L	100		82.8	40-140			
n-Dodecane	59.5	2.0	µg/L	100		59.5	40-140			
n-Eicosane	80.6	2.0	µg/L	100		80.6	40-140			
n-Hexacosane	83.6	2.0	µg/L	100		83.6	40-140			
n-Hexadecane	78.2	2.0	µg/L	100		78.2	40-140			
n-Hexatriacontane	83.2	2.0	µg/L	100		83.2	40-140			
n-Nonadecane	80.3	2.0	µg/L	100		80.3	40-140			
n-Nonane	33.0	2.0	µg/L	100		33.0	30-140			
n-Octacosane	81.8	2.0	µg/L	100		81.8	40-140			
n-Octadecane	80.1	2.0	µg/L	100		80.1	40-140			
n-Tetracosane	82.1	2.0	µg/L	100		82.1	40-140			
n-Tetradecane	72.0	2.0	µg/L	100		72.0	40-140			
n-Triacontane	83.9	2.0	µg/L	100		83.9	40-140			
Naphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
Surrogate: Chlorooctadecane (COD)	*69.4*		µg/L	100		69.4	40-140			
Surrogate: o-Terphenyl (OTP)	*87.7*		µg/L	100		87.7	40-140			
Surrogate: 2-Bromonaphthalene	*98.9*		µg/L	100		98.9	40-140			
Surrogate: 2-Fluorobiphenyl	*102*		µg/L	100		102	40-140			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093787 - SW-846 3510C										
LCS Dup (B093787-BSD1)				Prepared: 04/15/14 Analyzed: 04/16/14						
Acenaphthene	85.6	2.0	µg/L	100		85.6	40-140	1.61	25	
Acenaphthylene	81.4	2.0	µg/L	100		81.4	40-140	1.50	25	
Anthracene	88.8	2.0	µg/L	100		88.8	40-140	2.36	25	
Benzo(a)anthracene	92.2	2.0	µg/L	100		92.2	40-140	2.32	25	
Benzo(a)pyrene	91.1	2.0	µg/L	100		91.1	40-140	2.40	25	
Benzo(b)fluoranthene	93.7	2.0	µg/L	100		93.7	40-140	2.35	25	
Benzo(g,h,i)perylene	104	2.0	µg/L	100		104	40-140	2.72	25	
Benzo(k)fluoranthene	92.7	2.0	µg/L	100		92.7	40-140	2.55	25	
Chrysene	87.0	2.0	µg/L	100		87.0	40-140	2.56	25	
Dibenz(a,h)anthracene	101	2.0	µg/L	100		101	40-140	2.43	25	
Fluoranthene	89.3	2.0	µg/L	100		89.3	40-140	2.33	25	
Fluorene	87.2	2.0	µg/L	100		87.2	40-140	1.69	25	
Indeno(1,2,3-cd)pyrene	103	2.0	µg/L	100		103	40-140	2.48	25	
2-Methylnaphthalene	77.1	2.0	µg/L	100		77.1	40-140	1.63	25	
Naphthalene	66.9	2.0	µg/L	100		66.9	40-140	1.93	25	
Phenanthrene	88.6	2.0	µg/L	100		88.6	40-140	1.86	25	
Pyrene	87.6	2.0	µg/L	100		87.6	40-140	2.41	25	
n-Decane	44.6	2.0	µg/L	100		44.6	40-140	0.649	25	
n-Docosane	85.0	2.0	µg/L	100		85.0	40-140	2.53	25	
n-Dodecane	59.3	2.0	µg/L	100		59.3	40-140	0.306	25	
n-Eicosane	82.7	2.0	µg/L	100		82.7	40-140	2.61	25	
n-Hexacosane	86.2	2.0	µg/L	100		86.2	40-140	3.12	25	
n-Hexadecane	79.3	2.0	µg/L	100		79.3	40-140	1.39	25	
n-Hexatriacontane	87.0	2.0	µg/L	100		87.0	40-140	4.48	25	
n-Nonadecane	82.4	2.0	µg/L	100		82.4	40-140	2.64	25	
n-Nonane	33.1	2.0	µg/L	100		33.1	30-140	0.490	25	
n-Octacosane	84.3	2.0	µg/L	100		84.3	40-140	3.03	25	
n-Octadecane	82.0	2.0	µg/L	100		82.0	40-140	2.36	25	
n-Tetracosane	84.5	2.0	µg/L	100		84.5	40-140	2.94	25	
n-Tetradecane	72.2	2.0	µg/L	100		72.2	40-140	0.283	25	
n-Triacontane	87.0	2.0	µg/L	100		87.0	40-140	3.54	25	
Naphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
Surrogate: Chlorooctadecane (COD)	*72.0*		µg/L	100		72.0	40-140			
Surrogate: o-Terphenyl (OTP)	*88.2*		µg/L	100		88.2	40-140			
Surrogate: 2-Bromonaphthalene	*102*		µg/L	100		102	40-140			
Surrogate: 2-Fluorobiphenyl	*107*		µg/L	100		107	40-140			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093480 - SW-846 3050B										
Blank (B093480-BLK1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	ND	2.5	mg/Kg wet							
Chromium	ND	0.50	mg/Kg wet							
LCS (B093480-BS1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	112	5.0	mg/Kg wet	88.2		127	8.2-218.9			
Chromium	145	0.99	mg/Kg wet	136		106	81.6-117.6			
LCS Dup (B093480-BSD1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	110	5.0	mg/Kg wet	88.2		125	8.2-218.9	1.51	30	
Chromium	140	0.99	mg/Kg wet	136		103	81.6-117.6	3.33	30	
Batch B093506 - SW-846 3005A										
Blank (B093506-BLK1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	ND	5.0	µg/L							
Chromium	ND	5.0	µg/L							
LCS (B093506-BS1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	535	10	µg/L	500		107	80-120			
Chromium	555	10	µg/L	500		111	80-120			
LCS Dup (B093506-BSD1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	556	10	µg/L	500		111	80-120	3.74	20	
Chromium	558	10	µg/L	500		112	80-120	0.475	20	
Duplicate (B093506-DUP1)	**Source: 14D0277-03**			Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	ND	5.0	µg/L		ND			NC	20	
Chromium	ND	5.0	µg/L		ND			NC	20	
Matrix Spike (B093506-MS1)	**Source: 14D0277-03**			Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	529	10	µg/L	500	ND	106	75-125			
Chromium	510	10	µg/L	500	ND	102	75-125			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093413 - % Solids										
Duplicate (B093413-DUP4)		**Source: 14D0277-10**		Prepared: 04/08/14 Analyzed: 04/09/14						
% Solids	81.6		% Wt		81.8			0.245	20	
Batch B093422 - SM2580 A										
Duplicate (B093422-DUP1)		**Source: 14D0277-09**		Prepared & Analyzed: 04/09/14						
Oxidation/Reduction Potential	115		mV		114			0.873	17.5	
Batch B093424 - SW-846 9045C										
LCS (B093424-BS1)				Prepared & Analyzed: 04/09/14						
pH	6.03		pH Units	6.00		100	99-102			
LCS (B093424-BS2)				Prepared & Analyzed: 04/09/14						
pH	5.99		pH Units	6.00		99.8	99-102			
Duplicate (B093424-DUP1)		**Source: 14D0277-09**		Prepared & Analyzed: 04/09/14						
pH	8.2		pH Units		8.1			1.11	6.77	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
MADEP-EPH-04-1.1 in Soil	
C9-C18 Aliphatics	CT,NC,WA,ME,ME,NH-P
C19-C36 Aliphatics	CT,NC,WA,ME,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,WA,ME,ME,NH-P
C11-C22 Aromatics	CT,NC,WA,ME,ME,NH-P
Acenaphthene	CT,NC,WA,ME,ME,NH-P
Acenaphthylene	CT,NC,WA,ME,ME,NH-P
Anthracene	CT,NC,WA,ME,ME,NH-P
Benzo(a)anthracene	CT,NC,WA,ME,ME,NH-P
Benzo(a)pyrene	CT,NC,WA,ME,ME,NH-P
Benzo(b)fluoranthene	CT,NC,WA,ME,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,WA,ME,ME,NH-P
Benzo(k)fluoranthene	CT,NC,WA,ME,ME,NH-P
Chrysene	CT,NC,WA,ME,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,WA,ME,ME,NH-P
Fluoranthene	CT,NC,WA,ME,ME,NH-P
Fluorene	CT,NC,WA,ME,ME
Indeno(1,2,3-cd)pyrene	CT,NC,WA,ME,ME,NH-P
2-Methylnaphthalene	CT,NC,WA,ME,ME
Naphthalene	CT,NC,WA,ME,ME,NH-P
Phenanthrene	CT,NC,WA,ME,ME,NH-P
Pyrene	CT,NC,WA,ME,ME,NH-P
MADEP-EPH-04-1.1 in Water	
C9-C18 Aliphatics	CT,NC,WA,ME,NH-P
C19-C36 Aliphatics	CT,NC,WA,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,WA,ME,NH-P
C11-C22 Aromatics	CT,NC,WA,ME,NH-P
Acenaphthene	CT,NC,WA,ME,NH-P
Acenaphthylene	CT,NC,WA,ME,NH-P
Anthracene	CT,NC,WA,ME,NH-P
Benzo(a)anthracene	CT,NC,WA,ME,NH-P
Benzo(a)pyrene	CT,NC,WA,ME,NH-P
Benzo(b)fluoranthene	CT,NC,WA,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,WA,ME,NH-P
Benzo(k)fluoranthene	CT,NC,WA,ME,NH-P
Chrysene	CT,NC,WA,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,WA,ME,NH-P
Fluoranthene	CT,NC,WA,ME,NH-P
Fluorene	CT,NC,WA,ME
Indeno(1,2,3-cd)pyrene	CT,NC,WA,ME,NH-P
2-Methylnaphthalene	CT,NC,WA,ME
Naphthalene	CT,NC,WA,ME,NH-P
Phenanthrene	CT,NC,WA,ME,NH-P
Pyrene	CT,NC,WA,ME,NH-P
SW-846 6010C in Soil	
Antimony	CT,NH,NY,NC,ME,VA,NJ
Chromium	CT,NH,NY,ME,NC,VA,NJ

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6020A in Water	
Antimony	CT,NH,NY,NC,ME,VA,NJ
Chromium	CT,NH,NY,NC,ME,VA,NJ

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2014
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

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Email: info@contestlabs.com
www.contestlabs.com
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East longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

14D0277

Rev 04.05.12

Page 1 of 1

Company Name: EBI Consulting
Address: 21B St Burlington, MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St., Woburn, MA
Sampled By: Dan Bellucci

Telephone: (781) 418 2344
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ● EMAIL ● WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ● PDF ● EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	EPH-MADEP	Chromium/Antimony	pH & ORP										# of Containers / ** Preservation / ***Container Code
1	EB-201 (6-8')	04/08/14	10:00		X	S	H	X	X	X										
2	EB-201 (8-9.5')		10:15		X	S	H	X	X	X										
3	MW-3		10:30		X	GW		X	X											
4	EB-202 (5-7')		10:50		X	S	H	X	X	X										
5	EB-202 (10-12')		11:00		X	S	M	X	X	X										
6	EB-202 GW		11:15		X	GW		X	X											
7	EB-203 (1-3')		11:45		X	S	H	X	X	X										
8	EB-203 (10-12')		12:00		X	S	M	X	X	X										
9	EB-204 (1-4')		12:15		X	S	M	X	X	X										
10	EB-204 (10-12')		12:30		X	S	M	X	X	X										

Comments:

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

*Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Relinquished by: (signature)	Date/Time:
[signature] 04/08/14	14:00
Received by: (signature) [signature] 4/8/14	Date/Time: 14:00
Relinquished by: (signature) [signature] 4/8/14	Date/Time: 16:20
Received by: (signature) [signature] 4/8/14	Date/Time: 16:20

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: S-1 GW-2/GW-3
Connecticut:
Other:

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

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East longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

14D0277

Rev 04.05.12

Company Name: ERI Consulting
Address: 21 B St
Burlington MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St., Webster, MA
Sampled By: Don Bellucci

Telephone:
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ○ EMAIL ○ WEBSITE
Fax #
Email:
Format: ○ PDF ○ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	EPH-MADEP	Chromium/Antimony	# of Containers	** Preservation	***Container Code
11	~~MW-1~~ EB-204 GW	04/08/14	13:00		X	GW		X	X			
12	MW-1	↓	13:30		X	GW		X	X			

Dissolved Metal
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Comments:

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
D Bellucci 04/08/14	17:00
Received by: (signature) 4/8/14	Date/Time: 17:00
Relinquished by: (signature) 4/8/14	Date/Time: 16:15
Received by: (signature) 4/8/14	Date/Time: 16:15

Turnaround ††
☐ 7-Day
☐ 10-Day
☐ Other ____
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: S-1
GW-2 / GW-3
Connecticut:
Other:

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

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East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
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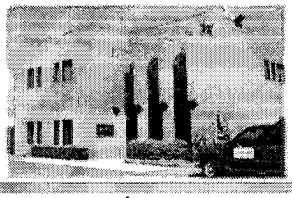

Sample Receipt Checklist

CLIENT NAME: EBI Consl hg **RECEIVED BY:** MJ **DATE:** 4/8/14

1) **Was the chain(s) of custody relinquished and signed?** **Yes** **No** **No CoC Included**
2) **Does the chain agree with the samples?** **Yes** **No**
   If not, explain:
3) **Are all the samples in good condition?** **Yes** **No**
   If not, explain:
4) **How were the samples received:**

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? **Yes** **No** **N/A**

Temperature °C by Temp blank _____ Temperature °C by Temp gun 4.1°C

5) **Are there Dissolved samples for the lab to filter?** **Yes** **No**
   Who was notified _____ Date _____ Time _____
6) **Are there any RUSH or SHORT HOLDING TIME samples?** **Yes** **No**
   Who was notified Dave Date 4/8/14 Time 16:15
7) **Location where samples are stored:** 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) **Do all samples have the proper Acid pH:** **Yes** **No** **N/A** See comments
9) **Do all samples have the proper Base pH:** **Yes** **No** **N/A**
10) **Was the PC notified of any discrepancies with the CoC vs the samples:** **Yes** **No** **N/A**

Containers received at Con-Test

	# of containers			# of containers
1 Liter Amber	8		8 oz amber/clear jar	16 A
500 mL Amber			4 oz amber/clear jar	
250 mL Amber (8oz amber)			2 oz amber/clear jar	
1 Liter Plastic			Plastic Bag / Ziploc	
500 mL Plastic			SOC Kit	
250 mL plastic	4		Non-ConTest Container	
40 mL Vial - type listed below			Perchlorate Kit	
Colisure / bacteria bottle			Flashpoint bottle	
Dissolved Oxygen bottle			Other glass jar	
Encore			Other	

Laboratory Comments:
14D0277-6A "EB-202" GW
and 14D0277-11A "EB-204" GW not at proper Acid pH (pH=7)

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved

Time and Date Frozen:

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	T	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	T	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** **Date/Time:**

MT 4/8/16 1615

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory	Project #: 14D0277
Project Location: 1071 Main St., Woburn, MA	RTN:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

14D0277-01 thru 14D0277-12

Matrices: Soil Water

CAM Protocol (check all that below)

8260 VOC CAM II A ( )	7470/7471 Hg CAM IIIB ( )	MassDEP VPH CAM IV A ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassDEP APH CAM IX A ( )
8270 SVOC CAM II B ( )	7010 Metals CAM III C ( )	MassDEP EPH CAM IV A (X)	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )
6010 Metals CAM III A ( )	6020 Metals CAM III D ( )	8082 PCB CAM V A ( )	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )	

Affirmative response to Questions A throughF is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No[1]
B	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?	☑ Yes	☐ No[1]
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No[1]
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?	☑ Yes	☐ No[1]
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☑ Yes	☐ No[1]
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes	☐ No[1]
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?	☑ Yes	☐ No[1]

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC perfomance standards specified in the CAM protocol(s) achieved?	☑ Yes	☐ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

[1] *All Negative responses must be addressed in an attached Environmental Laboratory case narrative.*

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

Signature: M Erickson Position: Laboratory Director

Printed Name: Michael A. Erickson Date: 04/16/14

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 17, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St., Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14D0277

Enclosed are results of analyses for samples received by the laboratory on April 8, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 4/17/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14D0277

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-201 (6-8)	14D0277-01	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
EB-201 (8-9.5)	14D0277-02	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
MW-3	14D0277-03	Ground Water		MADEP-EPH-04-1.1	
				SW-846 6020A	
EB-202 (5-7)	14D0277-04	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
EB-202 (10-12)	14D0277-05	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
EB-202 GW	14D0277-06	Ground Water		MADEP-EPH-04-1.1	
				SW-846 6020A	
EB-203 (1-3)	14D0277-07	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
EB-203 (10-12)	14D0277-08	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
EB-204 (1-4)	14D0277-09	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	

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EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 4/17/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14D0277

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-204 (10-12)	14D0277-10	Soil		MADEP-EPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 9045C	
EB-204 GW	14D0277-11	Ground Water		MADEP-EPH-04-1.1	
				SW-846 6020A	
MW-1	14D0277-12	Ground Water		MADEP-EPH-04-1.1	
				SW-846 6020A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

MADEP-EPH-04-1.1

SPE cartridge contamination with non-petroleum compounds, if present, is verified by GC/MS in each method blank per extraction batch and excluded from C11-C22 aromatic range fraction in all samples in the batch. No significant modifications were made to the method.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Michael A. Erickson
Laboratory Director

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA Sample Description: Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-201 (6-8) Sampled: 4/8/2014 10:00

Sample ID: 14D0277-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	14	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
C19-C36 Aliphatics	120	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Unadjusted C11-C22 Aromatics	61	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
C11-C22 Aromatics	61	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Acenaphthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Acenaphthylene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Benzo(a)anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Benzo(a)pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Benzo(b)fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Benzo(g,h,i)perylene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Benzo(k)fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Chrysene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Dibenz(a,h)anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Fluorene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Indeno(1,2,3-cd)pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
2-Methylnaphthalene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Naphthalene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Phenanthrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS
Pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 13:47	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	40.8	40-140		4/11/14 13:47
o-Terphenyl (OTP)	61.5	40-140		4/11/14 13:47
2-Bromonaphthalene	92.2	40-140		4/11/14 13:47
2-Fluorobiphenyl	94.2	40-140		4/11/14 13:47

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-201 (6-8)
Sampled: 4/8/2014 10:00

Sample ID: 14D0277-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.0	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:45	OP
Chromium	140	0.60	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:45	OP

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-201 (6-8)
Sampled: 4/8/2014 10:00

Sample ID: 14D0277-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	57		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @19.6°C	7.6		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	79.5		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-201 (8-9.5) | Sampled: 4/8/2014 10:15

Sample ID: 14D0277-02

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
C19-C36 Aliphatics	30	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Unadjusted C11-C22 Aromatics	20	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
C11-C22 Aromatics	20	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Acenaphthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Acenaphthylene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Benzo(a)anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Benzo(a)pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Benzo(b)fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Benzo(g,h,i)perylene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Benzo(k)fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Chrysene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Dibenz(a,h)anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Fluorene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Indeno(1,2,3-cd)pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
2-Methylnaphthalene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Naphthalene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Phenanthrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS
Pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:08	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	44.3	40-140		4/11/14 14:08
o-Terphenyl (OTP)	62.9	40-140		4/11/14 14:08
2-Bromonaphthalene	95.8	40-140		4/11/14 14:08
2-Fluorobiphenyl	97.4	40-140		4/11/14 14:08

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-201 (8-9.5)
Sampled: 4/8/2014 10:15

Sample ID: 14D0277-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.0	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:50	OP
Chromium	22	0.61	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:50	OP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-201 (8-9.5)
Sampled: 4/8/2014 10:15

Sample ID: 14D0277-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	85		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @19.9°C	7.8		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	77.7		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: MW-3 | Sampled: 4/8/2014 10:30

Sample ID: 14D0277-03

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:29	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	63.6	40-140		4/16/14 9:29
o-Terphenyl (OTP)	84.0	40-140		4/16/14 9:29
2-Bromonaphthalene	105	40-140		4/16/14 9:29
2-Fluorobiphenyl	109	40-140		4/16/14 9:29

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: MW-3
Sampled: 4/8/2014 10:30

Sample ID: 14D0277-03

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:02	KSH
Chromium	ND	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:02	KSH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 (5-7) | Sampled: 4/8/2014 10:50

Sample ID: 14D0277-04

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	500	120	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 5:47	SCS
C19-C36 Aliphatics	780	120	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 5:47	SCS
Unadjusted C11-C22 Aromatics	660	120	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 5:47	SCS
C11-C22 Aromatics	660	120	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 5:47	SCS
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Chrysene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Fluorene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS
Pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:29	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	46.5	40-140		4/11/14 14:29
o-Terphenyl (OTP)	86.5	40-140		4/11/14 14:29
2-Bromonaphthalene	99.1	40-140		4/11/14 14:29
2-Fluorobiphenyl	102	40-140		4/11/14 14:29

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 (5-7)
Sampled: 4/8/2014 10:50

Sample ID: 14D0277-04

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.9	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:55	OP
Chromium	16	0.57	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:55	OP

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 (5-7) | Sampled: 4/8/2014 10:50

Sample ID: 14D0277-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	73		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @20.2°C	7.6		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	82.0		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 (10-12) | Sampled: 4/8/2014 11:00

Sample ID: 14D0277-05

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
C19-C36 Aliphatics	ND	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Unadjusted C11-C22 Aromatics	ND	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
C11-C22 Aromatics	ND	13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Acenaphthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Acenaphthylene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Benzo(a)anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Benzo(a)pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Benzo(b)fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Benzo(g,h,i)perylene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Benzo(k)fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Chrysene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Dibenz(a,h)anthracene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Fluoranthene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Fluorene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Indeno(1,2,3-cd)pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
2-Methylnaphthalene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Naphthalene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Phenanthrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS
Pyrene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 14:55	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	51.0	40-140		4/11/14 14:55
o-Terphenyl (OTP)	68.3	40-140		4/11/14 14:55
2-Bromonaphthalene	104	40-140		4/11/14 14:55
2-Fluorobiphenyl	107	40-140		4/11/14 14:55

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 (10-12)
Sampled: 4/8/2014 11:00

Sample ID: 14D0277-05

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.2	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:59	OP
Chromium	13	0.64	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:59	OP

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 (10-12)
Sampled: 4/8/2014 11:00

Sample ID: 14D0277-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	88		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @20.1°C	8.1		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	77.7		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 GW | Sampled: 4/8/2014 11:15

Sample ID: 14D0277-06

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	110	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
C19-C36 Aliphatics	110	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:10	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	52.0	40-140		4/16/14 10:10
o-Terphenyl (OTP)	85.2	40-140		4/16/14 10:10
2-Bromonaphthalene	104	40-140		4/16/14 10:10
2-Fluorobiphenyl	106	40-140		4/16/14 10:10

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-202 GW
Sampled: 4/8/2014 11:15

Sample ID: 14D0277-06

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:29	KSH
Chromium	6.3	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:29	KSH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-203 (1-3)
Sampled: 4/8/2014 11:45

Sample ID: 14D0277-07

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	54	16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
C19-C36 Aliphatics	900	160	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 6:07	SCS
Unadjusted C11-C22 Aromatics	990	160	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 6:07	SCS
C11-C22 Aromatics	990	160	mg/Kg dry	10		MADEP-EPH-04-1.1	4/9/14	4/15/14 6:07	SCS
Acenaphthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Acenaphthylene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Anthracene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Benzo(a)anthracene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Benzo(a)pyrene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Benzo(b)fluoranthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Benzo(g,h,i)perylene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Benzo(k)fluoranthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Chrysene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Dibenz(a,h)anthracene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Fluoranthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Fluorene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Indeno(1,2,3-cd)pyrene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
2-Methylnaphthalene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Naphthalene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Phenanthrene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS
Pyrene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:16	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	50.9	40-140		4/11/14 15:16
o-Terphenyl (OTP)	76.0	40-140		4/11/14 15:16
2-Bromonaphthalene	99.9	40-140		4/11/14 15:16
2-Fluorobiphenyl	103	40-140		4/11/14 15:16

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-203 (1-3)
Sampled: 4/8/2014 11:45

Sample ID: 14D0277-07

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	4.0	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:04	OP
Chromium	950	0.80	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:04	OP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-203 (1-3)
Sampled: 4/8/2014 11:45

Sample ID: 14D0277-07

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	100		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @19.5°C	7.6		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	62.2		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-203 (10-12) | Sampled: 4/8/2014 12:00

Sample ID: 14D0277-08

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
C19-C36 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Unadjusted C11-C22 Aromatics	31	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
C11-C22 Aromatics	31	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Chrysene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Fluorene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS
Pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:37	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	51.6	40-140		4/11/14 15:37
o-Terphenyl (OTP)	70.2	40-140		4/11/14 15:37
2-Bromonaphthalene	103	40-140		4/11/14 15:37
2-Fluorobiphenyl	107	40-140		4/11/14 15:37

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-203 (10-12)
Sampled: 4/8/2014 12:00

Sample ID: 14D0277-08

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.8	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:09	OP
Chromium	9.6	0.56	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:09	OP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-203 (10-12)
Sampled: 4/8/2014 12:00

Sample ID: 14D0277-08

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	63		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @19.7°C	11		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	83.3		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 (1-4) | Sampled: 4/8/2014 12:15

Sample ID: 14D0277-09

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
C19-C36 Aliphatics	60	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Unadjusted C11-C22 Aromatics	82	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
C11-C22 Aromatics	72	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Acenaphthene	0.14	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Anthracene	0.24	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Benzo(a)anthracene	0.78	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Benzo(a)pyrene	0.78	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Benzo(b)fluoranthene	1.0	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Benzo(g,h,i)perylene	0.63	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Benzo(k)fluoranthene	0.35	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Chrysene	1.0	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Dibenz(a,h)anthracene	0.17	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Fluoranthene	1.6	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Fluorene	0.14	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Indeno(1,2,3-cd)pyrene	0.66	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Phenanthrene	1.1	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS
Pyrene	2.1	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 15:58	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	44.5	40-140		4/11/14 15:58
o-Terphenyl (OTP)	62.3	40-140		4/11/14 15:58
2-Bromonaphthalene	92.5	40-140		4/11/14 15:58
2-Fluorobiphenyl	95.7	40-140		4/11/14 15:58

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 (1-4)
Sampled: 4/8/2014 12:15

Sample ID: 14D0277-09

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.8	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:14	OP
Chromium	130	0.56	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:14	OP

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 (1-4)
Sampled: 4/8/2014 12:15

Sample ID: 14D0277-09

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	110		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @20.2°C	8.1		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	85.7		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 (10-12) | Sampled: 4/8/2014 12:30

Sample ID: 14D0277-10

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
C19-C36 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Unadjusted C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Chrysene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Fluorene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS
Pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	4/9/14	4/11/14 16:19	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	45.6	40-140		4/11/14 16:19
o-Terphenyl (OTP)	61.2	40-140		4/11/14 16:19
2-Bromonaphthalene	100	40-140		4/11/14 16:19
2-Fluorobiphenyl	102	40-140		4/11/14 16:19

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 (10-12)
Sampled: 4/8/2014 12:30

Sample ID: 14D0277-10

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.0	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:19	OP
Chromium	8.5	0.61	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:19	OP

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 (10-12)
Sampled: 4/8/2014 12:30

Sample ID: 14D0277-10

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oxidation/Reduction Potential	78		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @19.8°C	8.2		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	81.8		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 GW | Sampled: 4/8/2014 13:00

Sample ID: 14D0277-11

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Unadjusted C11-C22 Aromatics	190	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
C11-C22 Aromatics	190	100	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 9:49	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	68.4	40-140		4/16/14 9:49
o-Terphenyl (OTP)	89.2	40-140		4/16/14 9:49
2-Bromonaphthalene	104	40-140		4/16/14 9:49
2-Fluorobiphenyl	108	40-140		4/16/14 9:49

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: EB-204 GW
Sampled: 4/8/2014 13:00

Sample ID: 14D0277-11

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:32	KSH
Chromium	6.8	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:32	KSH

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Project Location: 1071 Main St., Woburn, MA | Sample Description: | Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: MW-1 | Sampled: 4/8/2014 13:30

Sample ID: 14D0277-12

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	97	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
C19-C36 Aliphatics	120	97	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Unadjusted C11-C22 Aromatics	ND	97	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
C11-C22 Aromatics	ND	97	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Acenaphthene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Acenaphthylene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Anthracene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Benzo(a)anthracene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Benzo(a)pyrene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Benzo(b)fluoranthene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Benzo(g,h,i)perylene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Benzo(k)fluoranthene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Chrysene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Dibenz(a,h)anthracene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Fluoranthene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Fluorene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Indeno(1,2,3-cd)pyrene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
2-Methylnaphthalene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Naphthalene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Phenanthrene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS
Pyrene	ND	1.9	µg/L	1		MADEP-EPH-04-1.1	4/15/14	4/16/14 10:30	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	59.9	40-140		4/16/14 10:30
o-Terphenyl (OTP)	79.4	40-140		4/16/14 10:30
2-Bromonaphthalene	98.0	40-140		4/16/14 10:30
2-Fluorobiphenyl	102	40-140		4/16/14 10:30

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0277

Date Received: 4/8/2014

Field Sample #: MW-1
Sampled: 4/8/2014 13:30

Sample ID: 14D0277-12

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:36	KSH
Chromium	ND	5.0	µg/L	5		SW-846 6020A	4/9/14	4/10/14 14:36	KSH

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Sample Extraction Data

Prep Method: SW-846 3546-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14D0277-01 [EB-201 (6-8)]	B093502	20.1	2.00	04/09/14
14D0277-02 [EB-201 (8-9.5)]	B093502	20.5	2.00	04/09/14
14D0277-04 [EB-202 (5-7)]	B093502	20.4	2.00	04/09/14
14D0277-05 [EB-202 (10-12)]	B093502	20.4	2.00	04/09/14
14D0277-07 [EB-203 (1-3)]	B093502	20.4	2.00	04/09/14
14D0277-08 [EB-203 (10-12)]	B093502	20.1	2.00	04/09/14
14D0277-09 [EB-204 (1-4)]	B093502	20.2	2.00	04/09/14
14D0277-10 [EB-204 (10-12)]	B093502	20.3	2.00	04/09/14

Prep Method: SW-846 3510C-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0277-03RE1 [MW-3]	B093787	1000	2.00	04/15/14
14D0277-06RE1 [EB-202 GW]	B093787	1000	2.00	04/15/14
14D0277-11RE1 [EB-204 GW]	B093787	1000	2.00	04/15/14
14D0277-12RE1 [MW-1]	B093787	980	1.90	04/15/14

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14D0277-01 [EB-201 (6-8)]	B093413	04/08/14
14D0277-02 [EB-201 (8-9.5)]	B093413	04/08/14
14D0277-04 [EB-202 (5-7)]	B093413	04/08/14
14D0277-05 [EB-202 (10-12)]	B093413	04/08/14
14D0277-07 [EB-203 (1-3)]	B093413	04/08/14
14D0277-08 [EB-203 (10-12)]	B093413	04/08/14
14D0277-09 [EB-204 (1-4)]	B093413	04/08/14
14D0277-10 [EB-204 (10-12)]	B093413	04/08/14

SM2580 A

Lab Number [Field ID]	Batch	Initial [g]	Date
14D0277-01 [EB-201 (6-8)]	B093422	20.0	04/09/14
14D0277-02 [EB-201 (8-9.5)]	B093422	20.0	04/09/14
14D0277-04 [EB-202 (5-7)]	B093422	20.0	04/09/14
14D0277-05 [EB-202 (10-12)]	B093422	20.0	04/09/14
14D0277-07 [EB-203 (1-3)]	B093422	20.0	04/09/14
14D0277-08 [EB-203 (10-12)]	B093422	20.0	04/09/14
14D0277-09 [EB-204 (1-4)]	B093422	20.0	04/09/14
14D0277-10 [EB-204 (10-12)]	B093422	20.0	04/09/14

Prep Method: SW-846 3050B-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14D0277-01 [EB-201 (6-8)]	B093480	1.04	50.0	04/09/14
14D0277-02 [EB-201 (8-9.5)]	B093480	1.06	50.0	04/09/14
14D0277-04 [EB-202 (5-7)]	B093480	1.07	50.0	04/09/14
14D0277-05 [EB-202 (10-12)]	B093480	1.01	50.0	04/09/14
14D0277-07 [EB-203 (1-3)]	B093480	1.01	50.0	04/09/14
14D0277-08 [EB-203 (10-12)]	B093480	1.08	50.0	04/09/14

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Sample Extraction Data

Prep Method: SW-846 3050B-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14D0277-09 [EB-204 (1-4)]	B093480	1.03	50.0	04/09/14
14D0277-10 [EB-204 (10-12)]	B093480	1.01	50.0	04/09/14

Prep Method: SW-846 3005A-SW-846 6020A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0277-03 [MW-3]	B093506	50.0	50.0	04/09/14
14D0277-06 [EB-202 GW]	B093506	50.0	50.0	04/09/14
14D0277-11 [EB-204 GW]	B093506	50.0	50.0	04/09/14
14D0277-12 [MW-1]	B093506	50.0	50.0	04/09/14

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
14D0277-01 [EB-201 (6-8)]	B093424	20.0	04/09/14
14D0277-02 [EB-201 (8-9.5)]	B093424	20.0	04/09/14
14D0277-04 [EB-202 (5-7)]	B093424	20.0	04/09/14
14D0277-05 [EB-202 (10-12)]	B093424	20.0	04/09/14
14D0277-07 [EB-203 (1-3)]	B093424	20.0	04/09/14
14D0277-08 [EB-203 (10-12)]	B093424	20.0	04/09/14
14D0277-09 [EB-204 (1-4)]	B093424	20.0	04/09/14
14D0277-10 [EB-204 (10-12)]	B093424	20.0	04/09/14

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093502 - SW-846 3546										
Blank (B093502-BLK1)				Prepared: 04/09/14 Analyzed: 04/11/14						
C9-C18 Aliphatics	ND	10	mg/Kg wet							
C19-C36 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg wet							
C11-C22 Aromatics	ND	10	mg/Kg wet							
Acenaphthene	ND	0.10	mg/Kg wet							
Acenaphthylene	ND	0.10	mg/Kg wet							
Anthracene	ND	0.10	mg/Kg wet							
Benzo(a)anthracene	ND	0.10	mg/Kg wet							
Benzo(a)pyrene	ND	0.10	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.10	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.10	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.10	mg/Kg wet							
Chrysene	ND	0.10	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.10	mg/Kg wet							
Fluoranthene	ND	0.10	mg/Kg wet							
Fluorene	ND	0.10	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg wet							
2-Methylnaphthalene	ND	0.10	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							
Phenanthrene	ND	0.10	mg/Kg wet							
Pyrene	ND	0.10	mg/Kg wet							
n-Decane	ND	0.10	mg/Kg wet							
n-Docosane	ND	0.10	mg/Kg wet							
n-Dodecane	ND	0.10	mg/Kg wet							
n-Eicosane	ND	0.10	mg/Kg wet							
n-Hexacosane	ND	0.10	mg/Kg wet							
n-Hexadecane	ND	0.10	mg/Kg wet							
n-Hexatriacontane	ND	0.10	mg/Kg wet							
n-Nonadecane	ND	0.10	mg/Kg wet							
n-Nonane	ND	0.10	mg/Kg wet							
n-Octacosane	ND	0.10	mg/Kg wet							
n-Octadecane	ND	0.10	mg/Kg wet							
n-Tetracosane	ND	0.10	mg/Kg wet							
n-Tetradecane	ND	0.10	mg/Kg wet							
n-Triacontane	ND	0.10	mg/Kg wet							
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
Surrogate: Chlorooctadecane (COD)	*2.89*		mg/Kg wet	5.00		57.9	40-140			
Surrogate: o-Terphenyl (OTP)	*3.76*		mg/Kg wet	5.00		75.3	40-140			
Surrogate: 2-Bromonaphthalene	*4.82*		mg/Kg wet	5.00		96.5	40-140			
Surrogate: 2-Fluorobiphenyl	*4.88*		mg/Kg wet	5.00		97.7	40-140			
LCS (B093502-BS1)				Prepared: 04/09/14 Analyzed: 04/11/14						
Acenaphthene	4.35	0.10	mg/Kg wet	5.00		87.0	40-140			
Acenaphthylene	4.22	0.10	mg/Kg wet	5.00		84.4	40-140			
Anthracene	4.26	0.10	mg/Kg wet	5.00		85.1	40-140			
Benzo(a)anthracene	4.34	0.10	mg/Kg wet	5.00		86.8	40-140			
Benzo(a)pyrene	4.28	0.10	mg/Kg wet	5.00		85.6	40-140			
Benzo(b)fluoranthene	4.41	0.10	mg/Kg wet	5.00		88.2	40-140			
Benzo(g,h,i)perylene	4.81	0.10	mg/Kg wet	5.00		96.2	40-140			
Benzo(k)fluoranthene	4.36	0.10	mg/Kg wet	5.00		87.2	40-140			
Chrysene	4.10	0.10	mg/Kg wet	5.00		82.0	40-140			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093502 - SW-846 3546										
LCS (B093502-BS1)				Prepared: 04/09/14 Analyzed: 04/11/14						
Dibenz(a,h)anthracene	4.69	0.10	mg/Kg wet	5.00		93.7	40-140			
Fluoranthene	4.22	0.10	mg/Kg wet	5.00		84.4	40-140			
Fluorene	4.29	0.10	mg/Kg wet	5.00		85.9	40-140			
Indeno(1,2,3-cd)pyrene	4.81	0.10	mg/Kg wet	5.00		96.1	40-140			
2-Methylnaphthalene	4.24	0.10	mg/Kg wet	5.00		84.8	40-140			
Naphthalene	3.82	0.10	mg/Kg wet	5.00		76.4	40-140			
Phenanthrene	4.24	0.10	mg/Kg wet	5.00		84.9	40-140			
Pyrene	4.13	0.10	mg/Kg wet	5.00		82.6	40-140			
n-Decane	2.63	0.10	mg/Kg wet	5.00		52.7	40-140			
n-Docosane	4.08	0.10	mg/Kg wet	5.00		81.5	40-140			
n-Dodecane	3.34	0.10	mg/Kg wet	5.00		66.8	40-140			
n-Eicosane	3.97	0.10	mg/Kg wet	5.00		79.4	40-140			
n-Hexacosane	4.10	0.10	mg/Kg wet	5.00		82.0	40-140			
n-Hexadecane	3.92	0.10	mg/Kg wet	5.00		78.4	40-140			
n-Hexatriacontane	3.25	0.10	mg/Kg wet	5.00		65.1	40-140			
n-Nonadecane	3.95	0.10	mg/Kg wet	5.00		79.1	40-140			
n-Nonane	1.78	0.10	mg/Kg wet	5.00		35.5	30-140			
n-Octacosane	3.98	0.10	mg/Kg wet	5.00		79.6	40-140			
n-Octadecane	3.97	0.10	mg/Kg wet	5.00		79.3	40-140			
n-Tetracosane	4.03	0.10	mg/Kg wet	5.00		80.6	40-140			
n-Tetradecane	3.71	0.10	mg/Kg wet	5.00		74.3	40-140			
n-Triacontane	4.04	0.10	mg/Kg wet	5.00		80.8	40-140			
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	*3.21*		mg/Kg wet	5.00		64.3	40-140			
Surrogate: o-Terphenyl (OTP)	*4.19*		mg/Kg wet	5.00		83.9	40-140			
Surrogate: 2-Bromonaphthalene	*4.93*		mg/Kg wet	5.00		98.6	40-140			
Surrogate: 2-Fluorobiphenyl	*5.06*		mg/Kg wet	5.00		101	40-140			
LCS Dup (B093502-BSD1)				Prepared: 04/09/14 Analyzed: 04/11/14						
Acenaphthene	4.30	0.10	mg/Kg wet	5.00		86.1	40-140	1.01	25	
Acenaphthylene	4.18	0.10	mg/Kg wet	5.00		83.6	40-140	0.981	25	
Anthracene	4.22	0.10	mg/Kg wet	5.00		84.3	40-140	0.914	25	
Benzo(a)anthracene	4.33	0.10	mg/Kg wet	5.00		86.5	40-140	0.337	25	
Benzo(a)pyrene	4.27	0.10	mg/Kg wet	5.00		85.5	40-140	0.105	25	
Benzo(b)fluoranthene	4.41	0.10	mg/Kg wet	5.00		88.1	40-140	0.118	25	
Benzo(g,h,i)perylene	4.80	0.10	mg/Kg wet	5.00		95.9	40-140	0.244	25	
Benzo(k)fluoranthene	4.35	0.10	mg/Kg wet	5.00		87.0	40-140	0.324	25	
Chrysene	4.08	0.10	mg/Kg wet	5.00		81.6	40-140	0.440	25	
Dibenz(a,h)anthracene	4.72	0.10	mg/Kg wet	5.00		94.4	40-140	0.681	25	
Fluoranthene	4.18	0.10	mg/Kg wet	5.00		83.6	40-140	0.895	25	
Fluorene	4.25	0.10	mg/Kg wet	5.00		85.1	40-140	0.964	25	
Indeno(1,2,3-cd)pyrene	4.80	0.10	mg/Kg wet	5.00		96.0	40-140	0.129	25	
2-Methylnaphthalene	4.20	0.10	mg/Kg wet	5.00		84.0	40-140	0.941	25	
Naphthalene	3.78	0.10	mg/Kg wet	5.00		75.6	40-140	0.950	25	
Phenanthrene	4.20	0.10	mg/Kg wet	5.00		84.1	40-140	0.942	25	
Pyrene	4.10	0.10	mg/Kg wet	5.00		82.0	40-140	0.800	25	
n-Decane	2.33	0.10	mg/Kg wet	5.00		46.6	40-140	12.4	25	
n-Docosane	3.61	0.10	mg/Kg wet	5.00		72.3	40-140	12.1	25	
n-Dodecane	2.95	0.10	mg/Kg wet	5.00		59.0	40-140	12.4	25	
n-Eicosane	3.50	0.10	mg/Kg wet	5.00		70.1	40-140	12.5	25	
n-Hexacosane	3.63	0.10	mg/Kg wet	5.00		72.6	40-140	12.1	25	

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093502 - SW-846 3546										
LCS Dup (B093502-BSD1)				Prepared: 04/09/14 Analyzed: 04/11/14						
n-Hexadecane	3.47	0.10	mg/Kg wet	5.00		69.4	40-140	12.2	25	
n-Hexatriacontane	2.87	0.10	mg/Kg wet	5.00		57.5	40-140	12.4	25	
n-Nonadecane	3.50	0.10	mg/Kg wet	5.00		70.1	40-140	12.1	25	
n-Nonane	1.57	0.10	mg/Kg wet	5.00		31.5	30-140	12.2	25	
n-Octacosane	3.53	0.10	mg/Kg wet	5.00		70.7	40-140	11.8	25	
n-Octadecane	3.51	0.10	mg/Kg wet	5.00		70.3	40-140	12.1	25	
n-Tetracosane	3.58	0.10	mg/Kg wet	5.00		71.6	40-140	11.8	25	
n-Tetradecane	3.27	0.10	mg/Kg wet	5.00		65.4	40-140	12.7	25	
n-Triacontane	3.58	0.10	mg/Kg wet	5.00		71.6	40-140	12.0	25	
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	*2.86*		mg/Kg wet	5.00		57.3	40-140			
Surrogate: o-Terphenyl (OTP)	*4.15*		mg/Kg wet	5.00		83.1	40-140			
Surrogate: 2-Bromonaphthalene	*4.89*		mg/Kg wet	5.00		97.7	40-140			
Surrogate: 2-Fluorobiphenyl	*5.01*		mg/Kg wet	5.00		100	40-140			
Batch B093787 - SW-846 3510C										
Blank (B093787-BLK1)				Prepared: 04/15/14 Analyzed: 04/16/14						
C9-C18 Aliphatics	ND	100	µg/L							
C19-C36 Aliphatics	ND	100	µg/L							
Unadjusted C11-C22 Aromatics	ND	100	µg/L							
C11-C22 Aromatics	ND	100	µg/L							
Acenaphthene	ND	2.0	µg/L							
Acenaphthylene	ND	2.0	µg/L							
Anthracene	ND	2.0	µg/L							
Benzo(a)anthracene	ND	2.0	µg/L							
Benzo(a)pyrene	ND	2.0	µg/L							
Benzo(b)fluoranthene	ND	2.0	µg/L							
Benzo(g,h,i)perylene	ND	2.0	µg/L							
Benzo(k)fluoranthene	ND	2.0	µg/L							
Chrysene	ND	2.0	µg/L							
Dibenz(a,h)anthracene	ND	2.0	µg/L							
Fluoranthene	ND	2.0	µg/L							
Fluorene	ND	2.0	µg/L							
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L							
2-Methylnaphthalene	ND	2.0	µg/L							
Naphthalene	ND	2.0	µg/L							
Phenanthrene	ND	2.0	µg/L							
Pyrene	ND	2.0	µg/L							
n-Decane	ND	2.0	µg/L							
n-Docosane	ND	2.0	µg/L							
n-Dodecane	ND	2.0	µg/L							
n-Eicosane	ND	2.0	µg/L							
n-Hexacosane	ND	2.0	µg/L							
n-Hexadecane	ND	2.0	µg/L							
n-Hexatriacontane	ND	2.0	µg/L							
n-Nonadecane	ND	2.0	µg/L							
n-Nonane	ND	2.0	µg/L							
n-Octacosane	ND	2.0	µg/L							
n-Octadecane	ND	2.0	µg/L							
n-Tetracosane	ND	2.0	µg/L							
n-Tetradecane	ND	2.0	µg/L							

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093787 - SW-846 3510C										
Blank (B093787-BLK1)				Prepared: 04/15/14 Analyzed: 04/16/14						
n-Triacontane	ND	2.0	µg/L							
Naphthalene-aliphatic fraction	ND	2.0	µg/L							
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L							
Surrogate: Chlorooctadecane (COD)	*70.6*		µg/L	100		70.6	40-140			
Surrogate: o-Terphenyl (OTP)	*83.0*		µg/L	100		83.0	40-140			
Surrogate: 2-Bromonaphthalene	*95.8*		µg/L	100		95.8	40-140			
Surrogate: 2-Fluorobiphenyl	*110*		µg/L	100		110	40-140			
LCS (B093787-BS1)				Prepared: 04/15/14 Analyzed: 04/16/14						
Acenaphthene	84.3	2.0	µg/L	100		84.3	40-140			
Acenaphthylene	80.2	2.0	µg/L	100		80.2	40-140			
Anthracene	86.7	2.0	µg/L	100		86.7	40-140			
Benzo(a)anthracene	90.1	2.0	µg/L	100		90.1	40-140			
Benzo(a)pyrene	88.9	2.0	µg/L	100		88.9	40-140			
Benzo(b)fluoranthene	91.5	2.0	µg/L	100		91.5	40-140			
Benzo(g,h,i)perylene	102	2.0	µg/L	100		102	40-140			
Benzo(k)fluoranthene	90.4	2.0	µg/L	100		90.4	40-140			
Chrysene	84.8	2.0	µg/L	100		84.8	40-140			
Dibenz(a,h)anthracene	98.8	2.0	µg/L	100		98.8	40-140			
Fluoranthene	87.3	2.0	µg/L	100		87.3	40-140			
Fluorene	85.7	2.0	µg/L	100		85.7	40-140			
Indeno(1,2,3-cd)pyrene	100	2.0	µg/L	100		100	40-140			
2-Methylnaphthalene	75.8	2.0	µg/L	100		75.8	40-140			
Naphthalene	65.6	2.0	µg/L	100		65.6	40-140			
Phenanthrene	86.9	2.0	µg/L	100		86.9	40-140			
Pyrene	85.5	2.0	µg/L	100		85.5	40-140			
n-Decane	44.3	2.0	µg/L	100		44.3	40-140			
n-Docosane	82.8	2.0	µg/L	100		82.8	40-140			
n-Dodecane	59.5	2.0	µg/L	100		59.5	40-140			
n-Eicosane	80.6	2.0	µg/L	100		80.6	40-140			
n-Hexacosane	83.6	2.0	µg/L	100		83.6	40-140			
n-Hexadecane	78.2	2.0	µg/L	100		78.2	40-140			
n-Hexatriacontane	83.2	2.0	µg/L	100		83.2	40-140			
n-Nonadecane	80.3	2.0	µg/L	100		80.3	40-140			
n-Nonane	33.0	2.0	µg/L	100		33.0	30-140			
n-Octacosane	81.8	2.0	µg/L	100		81.8	40-140			
n-Octadecane	80.1	2.0	µg/L	100		80.1	40-140			
n-Tetracosane	82.1	2.0	µg/L	100		82.1	40-140			
n-Tetradecane	72.0	2.0	µg/L	100		72.0	40-140			
n-Triacontane	83.9	2.0	µg/L	100		83.9	40-140			
Naphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
Surrogate: Chlorooctadecane (COD)	*69.4*		µg/L	100		69.4	40-140			
Surrogate: o-Terphenyl (OTP)	*87.7*		µg/L	100		87.7	40-140			
Surrogate: 2-Bromonaphthalene	*98.9*		µg/L	100		98.9	40-140			
Surrogate: 2-Fluorobiphenyl	*102*		µg/L	100		102	40-140			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093787 - SW-846 3510C										
LCS Dup (B093787-BSD1)				Prepared: 04/15/14 Analyzed: 04/16/14						
Acenaphthene	85.6	2.0	µg/L	100		85.6	40-140	1.61	25	
Acenaphthylene	81.4	2.0	µg/L	100		81.4	40-140	1.50	25	
Anthracene	88.8	2.0	µg/L	100		88.8	40-140	2.36	25	
Benzo(a)anthracene	92.2	2.0	µg/L	100		92.2	40-140	2.32	25	
Benzo(a)pyrene	91.1	2.0	µg/L	100		91.1	40-140	2.40	25	
Benzo(b)fluoranthene	93.7	2.0	µg/L	100		93.7	40-140	2.35	25	
Benzo(g,h,i)perylene	104	2.0	µg/L	100		104	40-140	2.72	25	
Benzo(k)fluoranthene	92.7	2.0	µg/L	100		92.7	40-140	2.55	25	
Chrysene	87.0	2.0	µg/L	100		87.0	40-140	2.56	25	
Dibenz(a,h)anthracene	101	2.0	µg/L	100		101	40-140	2.43	25	
Fluoranthene	89.3	2.0	µg/L	100		89.3	40-140	2.33	25	
Fluorene	87.2	2.0	µg/L	100		87.2	40-140	1.69	25	
Indeno(1,2,3-cd)pyrene	103	2.0	µg/L	100		103	40-140	2.48	25	
2-Methylnaphthalene	77.1	2.0	µg/L	100		77.1	40-140	1.63	25	
Naphthalene	66.9	2.0	µg/L	100		66.9	40-140	1.93	25	
Phenanthrene	88.6	2.0	µg/L	100		88.6	40-140	1.86	25	
Pyrene	87.6	2.0	µg/L	100		87.6	40-140	2.41	25	
n-Decane	44.6	2.0	µg/L	100		44.6	40-140	0.649	25	
n-Docosane	85.0	2.0	µg/L	100		85.0	40-140	2.53	25	
n-Dodecane	59.3	2.0	µg/L	100		59.3	40-140	0.306	25	
n-Eicosane	82.7	2.0	µg/L	100		82.7	40-140	2.61	25	
n-Hexacosane	86.2	2.0	µg/L	100		86.2	40-140	3.12	25	
n-Hexadecane	79.3	2.0	µg/L	100		79.3	40-140	1.39	25	
n-Hexatriacontane	87.0	2.0	µg/L	100		87.0	40-140	4.48	25	
n-Nonadecane	82.4	2.0	µg/L	100		82.4	40-140	2.64	25	
n-Nonane	33.1	2.0	µg/L	100		33.1	30-140	0.490	25	
n-Octacosane	84.3	2.0	µg/L	100		84.3	40-140	3.03	25	
n-Octadecane	82.0	2.0	µg/L	100		82.0	40-140	2.36	25	
n-Tetracosane	84.5	2.0	µg/L	100		84.5	40-140	2.94	25	
n-Tetradecane	72.2	2.0	µg/L	100		72.2	40-140	0.283	25	
n-Triacontane	87.0	2.0	µg/L	100		87.0	40-140	3.54	25	
Naphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
Surrogate: Chlorooctadecane (COD)	*72.0*		µg/L	100		72.0	40-140			
Surrogate: o-Terphenyl (OTP)	*88.2*		µg/L	100		88.2	40-140			
Surrogate: 2-Bromonaphthalene	*102*		µg/L	100		102	40-140			
Surrogate: 2-Fluorobiphenyl	*107*		µg/L	100		107	40-140			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093480 - SW-846 3050B										
Blank (B093480-BLK1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	ND	2.5	mg/Kg wet							
Chromium	ND	0.50	mg/Kg wet							
LCS (B093480-BS1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	112	5.0	mg/Kg wet	88.2		127	8.2-218.9			
Chromium	145	0.99	mg/Kg wet	136		106	81.6-117.6			
LCS Dup (B093480-BSD1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	110	5.0	mg/Kg wet	88.2		125	8.2-218.9	1.51	30	
Chromium	140	0.99	mg/Kg wet	136		103	81.6-117.6	3.33	30	
Batch B093506 - SW-846 3005A										
Blank (B093506-BLK1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	ND	5.0	µg/L							
Chromium	ND	5.0	µg/L							
LCS (B093506-BS1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	535	10	µg/L	500		107	80-120			
Chromium	555	10	µg/L	500		111	80-120			
LCS Dup (B093506-BSD1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	556	10	µg/L	500		111	80-120	3.74	20	
Chromium	558	10	µg/L	500		112	80-120	0.475	20	
Duplicate (B093506-DUP1)	**Source: 14D0277-03**			Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	ND	5.0	µg/L		ND			NC	20	
Chromium	ND	5.0	µg/L		ND			NC	20	
Matrix Spike (B093506-MS1)	**Source: 14D0277-03**			Prepared: 04/09/14 Analyzed: 04/10/14						
Antimony	529	10	µg/L	500	ND	106	75-125			
Chromium	510	10	µg/L	500	ND	102	75-125			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093413 - % Solids										
Duplicate (B093413-DUP4)		**Source: 14D0277-10**		Prepared: 04/08/14 Analyzed: 04/09/14						
% Solids	81.6		% Wt		81.8			0.245	20	
Batch B093422 - SM2580 A										
Duplicate (B093422-DUP1)		**Source: 14D0277-09**		Prepared & Analyzed: 04/09/14						
Oxidation/Reduction Potential	115		mV		114			0.873	17.5	
Batch B093424 - SW-846 9045C										
LCS (B093424-BS1)				Prepared & Analyzed: 04/09/14						
pH	6.03		pH Units	6.00		100	99-102			
LCS (B093424-BS2)				Prepared & Analyzed: 04/09/14						
pH	5.99		pH Units	6.00		99.8	99-102			
Duplicate (B093424-DUP1)		**Source: 14D0277-09**		Prepared & Analyzed: 04/09/14						
pH	8.2		pH Units		8.1			1.11	6.77	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
MADEP-EPH-04-1.1 in Soil	
C9-C18 Aliphatics	CT,NC,WA,ME,ME,NH-P
C19-C36 Aliphatics	CT,NC,WA,ME,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,WA,ME,ME,NH-P
C11-C22 Aromatics	CT,NC,WA,ME,ME,NH-P
Acenaphthene	CT,NC,WA,ME,ME,NH-P
Acenaphthylene	CT,NC,WA,ME,ME,NH-P
Anthracene	CT,NC,WA,ME,ME,NH-P
Benzo(a)anthracene	CT,NC,WA,ME,ME,NH-P
Benzo(a)pyrene	CT,NC,WA,ME,ME,NH-P
Benzo(b)fluoranthene	CT,NC,WA,ME,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,WA,ME,ME,NH-P
Benzo(k)fluoranthene	CT,NC,WA,ME,ME,NH-P
Chrysene	CT,NC,WA,ME,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,WA,ME,ME,NH-P
Fluoranthene	CT,NC,WA,ME,ME,NH-P
Fluorene	CT,NC,WA,ME,ME
Indeno(1,2,3-cd)pyrene	CT,NC,WA,ME,ME,NH-P
2-Methylnaphthalene	CT,NC,WA,ME,ME
Naphthalene	CT,NC,WA,ME,ME,NH-P
Phenanthrene	CT,NC,WA,ME,ME,NH-P
Pyrene	CT,NC,WA,ME,ME,NH-P
MADEP-EPH-04-1.1 in Water	
C9-C18 Aliphatics	CT,NC,WA,ME,NH-P
C19-C36 Aliphatics	CT,NC,WA,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,WA,ME,NH-P
C11-C22 Aromatics	CT,NC,WA,ME,NH-P
Acenaphthene	CT,NC,WA,ME,NH-P
Acenaphthylene	CT,NC,WA,ME,NH-P
Anthracene	CT,NC,WA,ME,NH-P
Benzo(a)anthracene	CT,NC,WA,ME,NH-P
Benzo(a)pyrene	CT,NC,WA,ME,NH-P
Benzo(b)fluoranthene	CT,NC,WA,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,WA,ME,NH-P
Benzo(k)fluoranthene	CT,NC,WA,ME,NH-P
Chrysene	CT,NC,WA,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,WA,ME,NH-P
Fluoranthene	CT,NC,WA,ME,NH-P
Fluorene	CT,NC,WA,ME
Indeno(1,2,3-cd)pyrene	CT,NC,WA,ME,NH-P
2-Methylnaphthalene	CT,NC,WA,ME
Naphthalene	CT,NC,WA,ME,NH-P
Phenanthrene	CT,NC,WA,ME,NH-P
Pyrene	CT,NC,WA,ME,NH-P
SW-846 6010C in Soil	
Antimony	CT,NH,NY,NC,ME,VA,NJ
Chromium	CT,NH,NY,ME,NC,VA,NJ

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6020A in Water	
Antimony	CT,NH,NY,NC,ME,VA,NJ
Chromium	CT,NH,NY,NC,ME,VA,NJ

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2014
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

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East longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

14D0277

Rev 04.05.12

Page 1 of 1

Company Name: EBI Consulting
Address: 21B St Burlington, MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St., Woburn, MA
Sampled By: Dan Bellucci

Telephone: (781) 418 2344
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ● EMAIL ● WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ● PDF ● EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	EPH-MADEP	Chromium/Antimony	pH & ORP										# of Containers / ** Preservation / ***Container Code
1	EB-201 (6-8')	04/08/14	10:00		X	S	H	X	X	X										
2	EB-201 (8-9.5')		10:15		X	S	H	X	X	X										
3	MW-3		10:30		X	GW		X	X											
4	EB-202 (5-7')		10:50		X	S	H	X	X	X										
5	EB-202 (10-12')		11:00		X	S	M	X	X	X										
6	EB-202 GW		11:15		X	GW		X	X											
7	EB-203 (1-3')		11:45		X	S	H	X	X	X										
8	EB-203 (10-12')		12:00		X	S	M	X	X	X										
9	EB-204 (1-4')		12:15		X	S	M	X	X	X										
10	EB-204 (10-12')		12:30		X	S	M	X	X	X										

Comments:

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

*Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Relinquished by: (signature)	Date/Time:
[signature] 04/08/14	14:00
Received by: (signature) [signature] 4/8/14	Date/Time: 14:00
Relinquished by: (signature) [signature] 4/8/14	Date/Time: 16:20
Received by: (signature) [signature] 4/8/14	Date/Time: 16:20

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: S-1 GW-2/GW-3
Connecticut:
Other:

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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East longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

14D0277

Rev 04.05.12

Company Name: ERI Consulting
Address: 21 B St
Burlington MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St., Webster, MA
Sampled By: Don Bellucci

Telephone:
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ○ EMAIL ○ WEBSITE
Fax #
Email:
Format: ○ PDF ○ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	EPH-MADEP	Chromium/Antimony	# of Containers	** Preservation	***Container Code
11	~~MW-1~~ EB-204 GW	04/08/14	13:00		X	GW		X	X			
12	MW-1	↓	13:30		X	GW		X	X			

Dissolved Metal
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Comments:

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
D Bellucci 04/08/14	17:00
Received by: (signature) 4/8/14	Date/Time: 17:00
Relinquished by: (signature) 4/8/14	Date/Time: 16:15
Received by: (signature) 4/8/14	Date/Time: 16:15

Turnaround ††
☐ 7-Day
☐ 10-Day
☐ Other ____
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: S-1
GW-2 / GW-3
Connecticut:
Other:

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

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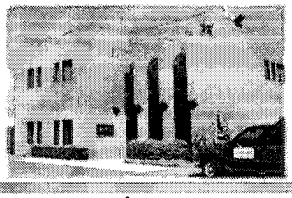
†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

con-test® ANALYTICAL LABORATORY



Sample Receipt Checklist

CLIENT NAME: EBI Consl hg **RECEIVED BY:** MJ **DATE:** 4/8/14

1) **Was the chain(s) of custody relinquished and signed?** **Yes** **No** **No CoC Included**
2) **Does the chain agree with the samples?** **Yes** **No**
   If not, explain:
3) **Are all the samples in good condition?** **Yes** **No**
   If not, explain:
4) **How were the samples received:**

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? **Yes** **No** **N/A**

Temperature °C by Temp blank _____ Temperature °C by Temp gun 4.1°C

5) **Are there Dissolved samples for the lab to filter?** **Yes** **No**
   Who was notified _____ Date _____ Time _____
6) **Are there any RUSH or SHORT HOLDING TIME samples?** **Yes** **No**
   Who was notified Dave Date 4/8/14 Time 16:15
7) **Location where samples are stored:** 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) **Do all samples have the proper Acid pH:** **Yes** **No** **N/A** See comments
9) **Do all samples have the proper Base pH:** **Yes** **No** **N/A**
10) **Was the PC notified of any discrepancies with the CoC vs the samples:** **Yes** **No** **N/A**

Containers received at Con-Test

	# of containers			# of containers
1 Liter Amber	8		8 oz amber/clear jar	16 A
500 mL Amber			4 oz amber/clear jar	
250 mL Amber (8oz amber)			2 oz amber/clear jar	
1 Liter Plastic			Plastic Bag / Ziploc	
500 mL Plastic			SOC Kit	
250 mL plastic	4		Non-ConTest Container	
40 mL Vial - type listed below			Perchlorate Kit	
Colisure / bacteria bottle			Flashpoint bottle	
Dissolved Oxygen bottle			Other glass jar	
Encore			Other	

Laboratory Comments:
14D0277-6A "EB-202" GW
and 14D0277-11A "EB-204" GW not at proper Acid pH (pH=7)

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved

Time and Date Frozen:

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	T	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	T	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** **Date/Time:**

MT 4/8/16 1615

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 24, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St., Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14D0634

Enclosed are results of analyses for samples received by the laboratory on April 17, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 4/24/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14D0634

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-201 (6-8)	14D0634-01	Soil		SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 7196A	
				SW-846 9045C	
				Tri Chrome Calc.	
EB-203 (1-3)	14D0634-02	Soil		SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 7196A	
				SW-846 9045C	
				Tri Chrome Calc.	
EB-204 (1-4)	14D0634-03	Soil		SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 7196A	
				SW-846 9045C	
				Tri Chrome Calc.	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SW-846 7196A

Qualifications:

For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.

Analyte & Samples(s) Qualified:

Hexavalent Chromium

14D0634-03[EB-204 (1-4)], B094100-MS1, B094100-MS2, B094100-MS3, B094100-MSD1

Elevated method reporting limit due to intense color of sample

Analyte & Samples(s) Qualified:

Hexavalent Chromium

14D0634-01[EB-201 (6-8)], 14D0634-02[EB-203 (1-3)], 14D0634-03[EB-204 (1-4)]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Michael A. Erickson
Laboratory Director

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0634

Date Received: 4/17/2014

Field Sample #: EB-201 (6-8)
Sampled: 4/8/2014 10:00

Sample ID: 14D0634-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chromium	140	0.60	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 18:45	OP
Chromium, Trivalent	140		mg/Kg	1		Tri Chrome Calc.	4/17/14	4/21/14 16:03	OP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0634

Date Received: 4/17/2014

Field Sample #: EB-201 (6-8)
Sampled: 4/8/2014 10:00

Sample ID: 14D0634-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.40	mg/Kg dry	2	W-06	SW-846 7196A	4/18/14	4/21/14 13:00	LL
Oxidation/Reduction Potential	57		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @19.6°C	7.6		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	79.5		% Wt	1		SM 2540G	4/17/14	4/17/14 17:14	AKS

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0634

Date Received: 4/17/2014

Field Sample #: EB-203 (1-3)
Sampled: 4/8/2014 11:45

Sample ID: 14D0634-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chromium	950	0.80	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:04	OP
Chromium, Trivalent	950		mg/Kg	1		Tri Chrome Calc.	4/17/14	4/21/14 16:03	OP

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0634

Date Received: 4/17/2014

Field Sample #: EB-203 (1-3)
Sampled: 4/8/2014 11:45

Sample ID: 14D0634-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	6.4	mg/Kg dry	25	W-06	SW-846 7196A	4/18/14	4/21/14 13:00	LL
Oxidation/Reduction Potential	100		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @19.5°C	7.6		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	62.2		% Wt	1		SM 2540G	4/17/14	4/17/14 17:14	AKS

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0634

Date Received: 4/17/2014

Field Sample #: EB-204 (1-4)
Sampled: 4/8/2014 12:15

Sample ID: 14D0634-03

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chromium	130	0.56	mg/Kg dry	1		SW-846 6010C	4/9/14	4/10/14 19:14	OP
Chromium, Trivalent	130		mg/Kg	1		Tri Chrome Calc.	4/17/14	4/21/14 16:03	OP

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14D0634

Date Received: 4/17/2014

Field Sample #: EB-204 (1-4)
Sampled: 4/8/2014 12:15

Sample ID: 14D0634-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.93	mg/Kg dry	5	MS-16, W-06	SW-846 7196A	4/18/14	4/21/14 13:00	LL
Oxidation/Reduction Potential	110		mV	1		SM2580 A	4/9/14	4/9/14 9:15	LL
pH @20.2°C	8.1		pH Units	1		SW-846 9045C	4/9/14	4/9/14 9:15	LL
% Solids	85.7		% Wt	1		SM 2540G	4/17/14	4/17/14 17:14	AKS

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Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14D0634-01 [EB-201 (6-8)]	B094025	04/17/14
14D0634-02 [EB-203 (1-3)]	B094025	04/17/14
14D0634-03 [EB-204 (1-4)]	B094025	04/17/14

SM2580 A

Lab Number [Field ID]	Batch	Initial [g]	Date
14D0634-01 [EB-201 (6-8)]	B094053	20.0	04/09/14
14D0634-02 [EB-203 (1-3)]	B094053	20.0	04/09/14
14D0634-03 [EB-204 (1-4)]	B094053	20.0	04/09/14

Prep Method: SW-846 3050B-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14D0634-01 [EB-201 (6-8)]	B093480	1.04	50.0	04/09/14
14D0634-02 [EB-203 (1-3)]	B093480	1.01	50.0	04/09/14
14D0634-03 [EB-204 (1-4)]	B093480	1.03	50.0	04/09/14

SW-846 7196A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14D0634-01 [EB-201 (6-8)]	B094100	2.54	100	04/18/14
14D0634-02 [EB-203 (1-3)]	B094100	2.50	100	04/18/14
14D0634-03 [EB-204 (1-4)]	B094100	2.50	100	04/18/14

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
14D0634-01 [EB-201 (6-8)]	B094057	20.0	04/09/14
14D0634-02 [EB-203 (1-3)]	B094057	20.0	04/09/14
14D0634-03 [EB-204 (1-4)]	B094057	20.0	04/09/14

Prep Method: SW-846 3050B-Tri Chrome Calc.

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14D0634-03 [EB-204 (1-4)]	B094023	50.0	50.0	04/17/14

Prep Method: SW-846 3050B-Tri Chrome Calc.

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14D0634-01 [EB-201 (6-8)]	B094024	50.0	50.0	04/17/14
14D0634-02 [EB-203 (1-3)]	B094024	50.0	50.0	04/17/14

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B093480 - SW-846 3050B										
Blank (B093480-BLK1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Chromium	ND	0.50	mg/Kg wet							
LCS (B093480-BS1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Chromium	145	0.99	mg/Kg wet	136		106	81.6-117.6			
LCS Dup (B093480-BSD1)				Prepared: 04/09/14 Analyzed: 04/10/14						
Chromium	140	0.99	mg/Kg wet	136		103	81.6-117.6	3.33	30	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B094057 - SW-846 9045C											
LCS (B094057-BS1)				Prepared & Analyzed: 04/09/14							
pH	6.03		pH Units	6.00		100		99-102			
Batch B094100 - SW-846 7196A											
Blank (B094100-BLK1)				Prepared: 04/18/14 Analyzed: 04/21/14							
Hexavalent Chromium	ND	0.16	mg/Kg wet								
LCS (B094100-BS1)				Prepared: 04/18/14 Analyzed: 04/21/14							
Hexavalent Chromium	170	3.9	mg/Kg wet	183		93.0		80-120			
LCS Dup (B094100-BSD1)				Prepared: 04/18/14 Analyzed: 04/21/14							
Hexavalent Chromium	170	3.8	mg/Kg wet	176		96.4		80-120	0.131	20	
Matrix Spike (B094100-MS1) Soluble MS	**Source: 14D0634-03**			Prepared: 04/18/14 Analyzed: 04/21/14							
Hexavalent Chromium	20	0.91	mg/Kg dry	45.5	ND	**44.8**	*	75-125			MS-16
Matrix Spike (B094100-MS2) PDMS	**Source: 14D0634-03**			Prepared: 04/18/14 Analyzed: 04/21/14							
Hexavalent Chromium	33	1.9	mg/Kg dry	46.4	ND	**70.4**	*	75-125			MS-16
Matrix Spike (B094100-MS3) Insoluble MS	**Source: 14D0634-03**			Prepared: 04/18/14 Analyzed: 04/21/14							
Hexavalent Chromium	480	19	mg/Kg dry	746	ND	**63.9**	*	75-125			MS-16
Matrix Spike Dup (B094100-MSD1) Soluble MS Dup	**Source: 14D0634-03**			Prepared: 04/18/14 Analyzed: 04/21/14							
Hexavalent Chromium	18	0.90	mg/Kg dry	45.1	ND	**39.2**	*	75-125	14.1	35	MS-16

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
MS-16	For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.
W-06	Elevated method reporting limit due to intense color of sample

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010C in Soil	
Chromium	CT,NH,NY,ME,NC,VA,NJ
SW-846 7196A in Soil	
Hexavalent Chromium	NY,CT,NH,NC,ME,VA,NJ

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2014
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

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Phone: 413-525-2332
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Email: info@contestlabs.com
www.contestlabs.com

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~~14D0277~~
14D0034
Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Company Name: EBI Consulting
Address: 21B St
Burlington, MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St., Woburn, MA
Sampled By: Dan Bellucci

Telephone: (781) 418 2344
Project #: 12140078
Client PO#:

DATA DELIVERY (check all that apply)
○ FAX ● EMAIL ● WEBSITE
Fax #:
Email: dbellucci@ebiconsulting.com
Format: ● PDF ● EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	EPH MADEP	Chromium/Antimony	pH & ORP	Hex+tri chrom
⊛ 1	EB-201 (6-8')	04/08/14	10:00		X	S	H	X	X	X	X
2	EB-201 (8-9.5')		10:15		X	S	H	X	X	X	
3	MW-3		10:30		X	GW		X	X		
4	EB-202 (5-7')		10:50		X	S	H	X	X	X	
5	EB-202 (10-12')		11:00		X	S	M	X	X	X	
6	EB-202 GW		11:15		X	GW		X	X		
⊛ 7	EB-203 (1-3')		11:45		X	S	H	X	X	X	X
8	EB-203 (10-12')		12:00		X	S	M	X	X	X	
⊛ 9	EB-204 (1-4')		12:15		X	S	M	X	X	X	X
10	EB-204 (10-12')		12:30		X	S	M	X	X	X	

# of Containers
** Preservation
***Container Code

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other

Comments:
⊛ Activate for hexchrom, pH and ORP already analysed
MEP 4/17/14

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) [signature] 04/08/14	Date/Time: 19:00
Received by: (signature) [signature] 4/8/14	Date/Time: 19:00
Relinquished by: (signature) [signature] 4/8/14	Date/Time: 16:30
Received by: (signature) [signature] 4/8/14	Date/Time: 16:20

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: S-1
GW-2/GW-3
Connecticut:
Other:

Is your project MCP or RCP?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID #

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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www.contestlabs.com

CHAIN OF CUSTODY RECORD

14D0277

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Company Name: EBI Consulting
Address: 21 B St
Burlington MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St., Woburn, MA
Sampled By: Don Bellucci

Telephone:
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ○ EMAIL ○ WEBSITE
Fax #
Email:
Format: ○ PDF ○ EXCEL ○ GIS ○ OTHER ○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection: Beginning Date/Time	Collection: Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	EPH MADEP	Chromium / Antimony
11	~~[illegible]~~ EB-204 GW	04/08/14	13:00		X	GW		X	X
12	MW-1	↓	13:30		X	GW		X	X

Comments:

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) [signature] 04/08/14	Date/Time: 14:00
Received by: (signature) [signature] 4/8/14	Date/Time: 14:00
Relinquished by: (signature) [signature] 4/8/14	Date/Time: 16:15
Received by: (signature) [signature] 4/8/14	Date/Time: 16:15

Turnaround ††
☐ 7-Day
☐ 10-Day
☐ Other ____
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: S-1
GW2 / GW3
Connecticut:
Other:

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

# of Containers
** Preservation
***Container Code

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

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Sample Receipt Checklist

CLIENT NAME: EBI Consl hg RECEIVED BY: MJ DATE: 4/8/14

1) Was the chain(s) of custody relinquished and signed? (Yes) No No CoC Included
2) Does the chain agree with the samples? (Yes) No
   If not, explain:
3) Are all the samples in good condition? (Yes) No
   If not, explain:
4) How were the samples received:

On Ice ☑ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☑

Were the samples received in Temperature Compliance of (2-6°C)? (Yes) No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 4.1°C

5) Are there Dissolved samples for the lab to filter? Yes (No)
   Who was notified _____ Date _____ Time _____
6) Are there any RUSH or SHORT HOLDING TIME samples? (Yes) No
   Who was notified Dave Date 4/8/14 Time 16:15
7) Location where samples are stored: 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature:

8) Do all samples have the proper Acid pH: Yes (No) N/A See comments
9) Do all samples have the proper Base pH: Yes No (N/A)
10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No (N/A)

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber	8	8 oz amber/clear jar	16 A
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic	4	Non-ConTest Container	
40 mL Vial - type listed below		Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:
14D0277-6A "EB-202" GW
and 14D0277-11A "EB-204" GW not at proper Acid pH (pH=7)

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	T	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	T	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** **Date/Time:**

MJ 4/8/14 1615

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory	Project #: 14D0277
Project Location: 1071 Main St., Woburn, MA	RTN:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

14D0277-01 thru 14D0277-12

Matrices: Soil Water

CAM Protocol (check all that below)

8260 VOC CAM II A ( )	7470/7471 Hg CAM IIIB ( )	MassDEP VPH CAM IV A ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassDEP APH CAM IX A ( )
8270 SVOC CAM II B ( )	7010 Metals CAM III C ( )	MassDEP EPH CAM IV A (X)	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )
6010 Metals CAM III A ( )	6020 Metals CAM III D ( )	8082 PCB CAM V A ( )	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )	

Affirmative response to Questions A throughF is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No[1]
B	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?	☑ Yes	☐ No[1]
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No[1]
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?	☑ Yes	☐ No[1]
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☑ Yes	☐ No[1]
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes	☐ No[1]
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?	☑ Yes	☐ No[1]

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC perfomance standards specified in the CAM protocol(s) achieved?	☑ Yes	☐ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

[1] *All Negative responses must be addressed in an attached Environmental Laboratory case narrative.*

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

Signature: M Erickson Position: Laboratory Director

Printed Name: Michael A. Erickson Date: 04/16/14

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

September 8, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St. Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14H1387

Enclosed are results of analyses for samples received by the laboratory on August 29, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 9/8/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14H1387

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St. Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-302 (2-5)	14H1387-01	Soil		SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 7196A	
				SW-846 9045C	
				Tri Chrome Calc.	
EB-303 (1-4)	14H1387-02	Soil		SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 7196A	
				SW-846 9045C	
				Tri Chrome Calc.	
EB-305 (2-5)	14H1387-03	Soil		SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 7196A	
				SW-846 9045C	
				Tri Chrome Calc.	
EB-308 (2-5)	14H1387-04	Soil		SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 7196A	
				SW-846 9045C	
				Tri Chrome Calc.	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 6010, only Sb and Cr were requested and reported.

SW-846 7196A

Qualifications:

MS-16

For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.

Analyte & Samples(s) Qualified:

Hexavalent Chromium

14H1387-01[EB-302 (2-5)], B103948-MS6

W-06

Elevated method reporting limit due to intense color of sample

Analyte & Samples(s) Qualified:

Hexavalent Chromium

14H1387-01[EB-302 (2-5)], 14H1387-02[EB-303 (1-4)], 14H1387-03[EB-305 (2-5)]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski
Laboratory Director

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14H1387

Date Received: 8/29/2014

Field Sample #: EB-302 (2-5)
Sampled: 8/29/2014 09:00

Sample ID: 14H1387-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.6	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:43	OP
Chromium	5.6	0.53	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:43	OP
Chromium, Trivalent	5.6		mg/Kg	1		Tri Chrome Calc.	9/2/14	9/4/14 14:52	OP

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Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14H1387
Date Received: 8/29/2014
Field Sample #: EB-302 (2-5)
Sampled: 8/29/2014 09:00
Sample ID: 14H1387-01
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.83	mg/Kg dry	5	MS-16, W-06	SW-846 7196A	9/2/14	9/3/14 14:00	LL
Oxidation/Reduction Potential	87		mV	1		SM2580 A	8/29/14	8/29/14 20:16	ABH
pH @23°C	6.8		pH Units	1		SW-846 9045C	8/29/14	8/29/14 20:16	ABH
% Solids	93.3		% Wt	1		SM 2540G	9/4/14	9/4/14 22:20	HF

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Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14H1387

Date Received: 8/29/2014

Field Sample #: EB-303 (1-4)
Sampled: 8/29/2014 09:15

Sample ID: 14H1387-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.6	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:49	OP
Chromium	18	0.52	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:49	OP
Chromium, Trivalent	18		mg/Kg	1		Tri Chrome Calc.	9/2/14	9/4/14 14:52	OP

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14H1387

Date Received: 8/29/2014

Field Sample #: EB-303 (1-4)
Sampled: 8/29/2014 09:15

Sample ID: 14H1387-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.83	mg/Kg dry	5	W-06	SW-846 7196A	9/2/14	9/3/14 14:00	LL
Oxidation/Reduction Potential	86		mV	1		SM2580 A	8/29/14	8/29/14 20:16	ABH
pH @20.8°C	5.8		pH Units	1		SW-846 9045C	8/29/14	8/29/14 20:16	ABH
% Solids	94.8		% Wt	1		SM 2540G	9/4/14	9/4/14 22:20	HF

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Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14H1387
Date Received: 8/29/2014
Field Sample #: EB-305 (2-5)
Sampled: 8/29/2014 09:40
Sample ID: 14H1387-03
Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.5	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:54	OP
Chromium	37	0.50	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:54	OP
Chromium, Trivalent	37		mg/Kg	1		Tri Chrome Calc.	9/2/14	9/4/14 14:52	OP

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Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14H1387

Date Received: 8/29/2014

Field Sample #: EB-305 (2-5)
Sampled: 8/29/2014 09:40

Sample ID: 14H1387-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.82	mg/Kg dry	5	W-06	SW-846 7196A	9/2/14	9/3/14 14:00	LL
Oxidation/Reduction Potential	100		mV	1		SM2580 A	8/29/14	8/29/14 20:16	ABH
pH @21.6°C	6.8		pH Units	1		SW-846 9045C	8/29/14	8/29/14 20:16	ABH
% Solids	94.5		% Wt	1		SM 2540G	9/4/14	9/4/14 22:20	HF

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Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14H1387

Date Received: 8/29/2014

Field Sample #: EB-308 (2-5)
Sampled: 8/29/2014 10:50

Sample ID: 14H1387-04

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.7	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 20:00	OP
Chromium	1100	0.54	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 20:00	OP
Chromium, Trivalent	1100		mg/Kg	1		Tri Chrome Calc.	9/2/14	9/4/14 14:52	OP

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Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14H1387

Date Received: 8/29/2014

Field Sample #: EB-308 (2-5)
Sampled: 8/29/2014 10:50

Sample ID: 14H1387-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	2.7	0.90	mg/Kg dry	5		SW-846 7196A	9/2/14	9/3/14 14:00	LL
Oxidation/Reduction Potential	100		mV	1		SM2580 A	8/29/14	8/29/14 20:16	ABH
pH @20.7°C	7.8		pH Units	1		SW-846 9045C	8/29/14	8/29/14 20:16	ABH
% Solids	87.8		% Wt	1		SM 2540G	9/4/14	9/4/14 22:20	HF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14H1387-01 [EB-302 (2-5)]	B104189	09/04/14
14H1387-02 [EB-303 (1-4)]	B104189	09/04/14
14H1387-03 [EB-305 (2-5)]	B104189	09/04/14
14H1387-04 [EB-308 (2-5)]	B104189	09/04/14

SM2580 A

Lab Number [Field ID]	Batch	Initial [g]	Date
14H1387-01 [EB-302 (2-5)]	B103972	20.0	08/29/14
14H1387-02 [EB-303 (1-4)]	B103972	20.0	08/29/14
14H1387-03 [EB-305 (2-5)]	B103972	20.0	08/29/14
14H1387-04 [EB-308 (2-5)]	B103972	20.0	08/29/14

Prep Method: SW-846 3050B-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1387-01 [EB-302 (2-5)]	B103996	1.01	50.0	09/02/14
14H1387-02 [EB-303 (1-4)]	B103996	1.01	50.0	09/02/14
14H1387-03 [EB-305 (2-5)]	B103996	1.06	50.0	09/02/14
14H1387-04 [EB-308 (2-5)]	B103996	1.05	50.0	09/02/14

SW-846 7196A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1387-01 [EB-302 (2-5)]	B103948	2.60	100	09/02/14
14H1387-02 [EB-303 (1-4)]	B103948	2.53	100	09/02/14
14H1387-03 [EB-305 (2-5)]	B103948	2.58	100	09/02/14
14H1387-04 [EB-308 (2-5)]	B103948	2.54	100	09/02/14

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
14H1387-01 [EB-302 (2-5)]	B104027	20.0	08/29/14
14H1387-02 [EB-303 (1-4)]	B104027	20.0	08/29/14
14H1387-03 [EB-305 (2-5)]	B104027	20.0	08/29/14
14H1387-04 [EB-308 (2-5)]	B104027	20.0	08/29/14

Prep Method: SW-846 3050B-Tri Chrome Calc.

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1387-01 [EB-302 (2-5)]	B103997	50.0	50.0	09/02/14
14H1387-02 [EB-303 (1-4)]	B103997	50.0	50.0	09/02/14
14H1387-03 [EB-305 (2-5)]	B103997	50.0	50.0	09/02/14
14H1387-04 [EB-308 (2-5)]	B103997	50.0	50.0	09/02/14

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B103996 - SW-846 3050B										
Blank (B103996-BLK1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Antimony	ND	2.5	mg/Kg wet							
Chromium	ND	0.50	mg/Kg wet							
LCS (B103996-BS1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Antimony	124	5.0	mg/Kg wet	116		107	0-210.3			
Chromium	114	0.99	mg/Kg wet	102		111	78.7-120.6			
LCS Dup (B103996-BSD1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Antimony	124	5.0	mg/Kg wet	116		107	0-210.3	0.363	30	
Chromium	114	0.99	mg/Kg wet	102		111	78.7-120.6	0.0987	30	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B103948 - SW-846 7196A											
Blank (B103948-BLK1)				Prepared: 09/02/14 Analyzed: 09/03/14							
Hexavalent Chromium	ND	0.16	mg/Kg wet								
LCS (B103948-BS1)				Prepared: 09/02/14 Analyzed: 09/03/14							
Hexavalent Chromium	65	1.9	mg/Kg wet	59.5		109		80-120			
LCS Dup (B103948-BSD1)				Prepared: 09/02/14 Analyzed: 09/03/14							
Hexavalent Chromium	66	2.0	mg/Kg wet	62.0		106		80-120	1.63	20	
Matrix Spike (B103948-MS4) Soluble MS		**Source: 14H1387-01**		Prepared: 09/02/14 Analyzed: 09/03/14							
Hexavalent Chromium	37	0.83	mg/Kg dry	41.6	ND	88.6		75-125			
Matrix Spike (B103948-MS5) PDMS		**Source: 14H1387-01**		Prepared: 09/02/14 Analyzed: 09/03/14							
Hexavalent Chromium	40	1.7	mg/Kg dry	42.6	ND	94.6		75-125			
Matrix Spike (B103948-MS6) Insoluble MS		**Source: 14H1387-01**		Prepared: 09/02/14 Analyzed: 09/03/14							
Hexavalent Chromium	470	17	mg/Kg dry	666	ND	**70.7**	*	75-125			MS-16
Matrix Spike Dup (B103948-MSD4) Soluble MS Dup		**Source: 14H1387-01**		Prepared: 09/02/14 Analyzed: 09/03/14							
Hexavalent Chromium	37	0.83	mg/Kg dry	41.7	ND	89.5		75-125	1.31	35	
Batch B103972 - SM2580 A											
Duplicate (B103972-DUP1)		**Source: 14H1387-02**		Prepared & Analyzed: 08/29/14							
Oxidation/Reduction Potential	84.0		mV		86				2.35	20.6	
Batch B104027 - SW-846 9045C											
LCS (B104027-BS1)				Prepared & Analyzed: 08/29/14							
pH	6.04		pH Units	6.00		101		98.5-102			
LCS (B104027-BS2)				Prepared & Analyzed: 08/29/14							
pH	6.02		pH Units	6.00		100		98.5-102			
Duplicate (B104027-DUP2)		**Source: 14H1387-02**		Prepared & Analyzed: 08/29/14							
pH	5.8		pH Units		5.8				0.172	5.72	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
MS-16	For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.
W-06	Elevated method reporting limit due to intense color of sample

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010C in Soil	
Antimony	CT,NH,NY,NC,ME,VA,NJ
Chromium	CT,NH,NY,ME,NC,VA,NJ
SW-846 7196A in Soil	
Hexavalent Chromium	NY,CT,NH,NC,ME,VA,NJ

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

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CHAIN OF CUSTODY RECORD

14H1387

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Page 1 of 1

Company Name: EBI Consulting
Address: 21 B St
Burlington, MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St, Woburn, MA
Sampled By: Dan Bellucci

Telephone:
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ● EMAIL ● WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ○ PDF ○ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	Total Chromium	Trivalent Chromium	Hex Chromium	Antimony									# of Containers	** Preservation	***Container Code
																				72		
01	EB-302 (2-5')	08/29/14	09:00		X	X	U	X	X	X	X											
02	EB-303 (1-4')		09:15		X	X	U	X	X	X	X											
03	EB-305 (2-5')		09:40		X	X	U	X	X	X	X											
04	EB-308 (2-5')		10:50		X	X	U	X	X	X	X											

Comments:

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Relinquished by: (signature)	Date/Time:
[signature]	08/29/14
Received by: (signature) [signature] 8/29/14	Date/Time: 1610
Relinquished by: (signature) [signature] 8/29/14	Date/Time: 1915
Received by: (signature) [signature] 3.9° 8.29.14	Date/Time: 1915

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: RCS-1
Connecticut:
Other:

Is your project MCP or RCP ?
● MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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East Longmeadow, MA. 01028
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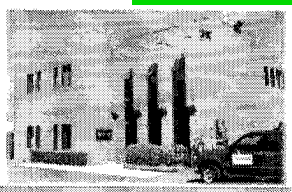

Sample Receipt Checklist

CLIENT NAME: EBI **RECEIVED BY:** CC **DATE:** 8·29·14

1) Was the chain(s) of custody relinquished and signed? ~~Yes~~ **No** **No CoC Included**

2) Does the chain agree with the samples? ~~Yes~~ **No**

If not, explain:

3) Are all the samples in good condition? ~~Yes~~ **No**

If not, explain:

4) How were the samples received:

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? ~~Yes~~ **No** **N/A**

Temperature °C by Temp blank _____ Temperature °C by Temp gun 3.9°

5) Are there Dissolved samples for the lab to filter? **Yes** ~~No~~

Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples? ~~Yes~~ **No**

Who was notified David Date 8·29·14 Time 1915

7) Location where samples are stored: 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) Do all samples have the proper Acid pH: **Yes** **No** ~~N/A~~ _____

9) Do all samples have the proper Base pH: **Yes** **No** ~~N/A~~ _____

10) Was the PC notified of any discrepancies with the CoC vs the samples: **Yes** **No** ~~N/A~~

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	4A
500 mL Amber		4 oz amber/clear jar	4C
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below		Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	T	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** CC **Date/Time:** 8.29.14 1915

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MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Con-Test Analytical Laboratory	Project #:	14H1387
Project Location:	1071 Main St. Woburn, MA	RTN:	

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

14H1387-01 thru 14H1387-04

Matrices: Soil

CAM Protocol (check all that below)

8260 VOC CAM II A ( )	7470/7471 Hg CAM IIIB ( )	MassDEP VPH CAM IV A ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B (X)	MassDEP APH CAM IX A ( )
8270 SVOC CAM II B ( )	7010 Metals CAM III C ( )	MassDEP EPH CAM IV A ( )	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )
6010 Metals CAM III A (X)	6020 Metals CAM III D ( )	8082 PCB CAM V A ( )	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )	

Affirmative response to Questions A throughF is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No[1]
B	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?	☑ Yes	☐ No[1]
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No[1]
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?	☑ Yes	☐ No[1]
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☐ Yes	☐ No[1]
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes	☐ No[1]
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?	☑ Yes	☐ No[1]

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC perfomance standards specified in the CAM protocol(s) achieved?	☐ Yes	☑ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes	☑ No[1]

[1] *All Negative responses must be addressed in an attached Environmental Laboratory case narrative.*

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

Signature: Tod Kopyscinski Position: Laboratory Director

Printed Name: Tod E. Kopyscinski Date: 09/08/14

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September 8, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St., Woburn, MA
Client Job Number:
Project Number: [none]
Laboratory Work Order Number: 14H1382

Enclosed are results of analyses for samples received by the laboratory on August 29, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 9/8/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: [none]

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14H1382

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-301 (4-10)	14H1382-01	Soil		SM 2540G	
				SM18-20 2510B	
				SW-846 1030	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8100 Modified	
				SW-846 8270D	
				SW-846 9014	
				SW-846 9030A	
				SW-846 9045C	
EB-301 (6)	14H1382-02	Soil		SW-846 8260C	
EB-304 (5-10)	14H1382-03	Soil		SM 2540G	
				SM18-20 2510B	
				SW-846 1030	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8100 Modified	
				SW-846 8270D	
				SW-846 9014	
				SW-846 9030A	
				SW-846 9045C	
EB-304 (7)	14H1382-04	Soil		SW-846 8260C	
EB-306 (0-3)	14H1382-05	Soil		SM 2540G	
				SM18-20 2510B	
				SW-846 1030	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8100 Modified	
				SW-846 8270D	
				SW-846 9014	
				SW-846 9030A	
				SW-846 9045C	
EB-306 (2)	14H1382-06	Soil		SW-846 8260C	

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EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 9/8/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: [none]

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14H1382

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-307 (2-6)	14H1382-07	Soil		SM 2540G	
				SM18-20 2510B	
				SW-846 1030	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8100 Modified	
				SW-846 8270D	
				SW-846 9014	
				SW-846 9030A	
				SW-846 9045C	
EB-307 (3)	14H1382-08	Soil		SW-846 8260C	
EB-309 (4-8)	14H1382-09	Soil		SM 2540G	
				SM18-20 2510B	
				SW-846 1030	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8100 Modified	
				SW-846 8270D	
				SW-846 9014	
				SW-846 9030A	
				SW-846 9045C	
EB-309 (6)	14H1382-10	Soil		SW-846 8260C	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 6010, only RCRA 8 metals were requested and reported.

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SW-846 8082A

Qualifications:

O-32

A five times dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

14H1382-03[EB-304 (5-10)]

Aroclor-1242 [2C]
14H1382-01[EB-301 (4-10)]

Aroclor-1248
14H1382-01[EB-301 (4-10)]

Aroclor-1248 [2C]
14H1382-01[EB-301 (4-10)]

Aroclor-1254
14H1382-01[EB-301 (4-10)]

Aroclor-1254 [2C]
14H1382-01[EB-301 (4-10)]

Aroclor-1260
14H1382-01[EB-301 (4-10)]

Aroclor-1260 [2C]
14H1382-01[EB-301 (4-10)]

Aroclor-1262
14H1382-01[EB-301 (4-10)]

Aroclor-1262 [2C]
14H1382-01[EB-301 (4-10)]

Aroclor-1268
14H1382-01[EB-301 (4-10)]

Aroclor-1268 [2C]
14H1382-01[EB-301 (4-10)]

P-02

Sample RPD between primary and confirmatory analysis exceeded 40%. Per EPA method 8000, the lower value was reported due to obvious chromatographic interference on the column with the higher result.

Analyte & Samples(s) Qualified:

Aroclor-1248
14H1382-09[EB-309 (4-8)]

P-04

Due to continuing calibration non-conformance on the confirmatory detector, the lower of two results was reported.

Analyte & Samples(s) Qualified:

Aroclor-1248
14H1382-09[EB-309 (4-8)]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Decachlorobiphenyl
14H1382-05[EB-306 (0-3)], 14H1382-07[EB-307 (2-6)]

Decachlorobiphenyl [2C]
14H1382-05[EB-306 (0-3)], 14H1382-07[EB-307 (2-6)]

Tetrachloro-m-xylene
14H1382-05[EB-306 (0-3)], 14H1382-07[EB-307 (2-6)]

Tetrachloro-m-xylene [2C]
14H1382-05[EB-306 (0-3)], 14H1382-07[EB-307 (2-6)]

SW-846 8260C

Qualifications:

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L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Vinyl Chloride

14H1382-02[EB-301 (6)], 14H1382-04[EB-304 (7)], 14H1382-06[EB-306 (2)], 14H1382-08[EB-307 (3)], 14H1382-10[EB-309 (6)], B103970-BLK1, B103970-BS1, B103970-BSD1

L-14

Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.

Analyte & Samples(s) Qualified:

Bromomethane

B103970-BS1, B103970-BSD1

Chloromethane

B103970-BS1, B103970-BSD1

Dichlorodifluoromethane (Freon 1

B103970-BS1, B103970-BSD1

V-05

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Acetone

14H1382-02[EB-301 (6)], 14H1382-04[EB-304 (7)], 14H1382-06[EB-306 (2)], 14H1382-08[EB-307 (3)], 14H1382-10[EB-309 (6)], B103970-BLK1, B103970-BS1, B103970-BSD1

Naphthalene

14H1382-02[EB-301 (6)], 14H1382-04[EB-304 (7)], 14H1382-06[EB-306 (2)], 14H1382-08[EB-307 (3)], 14H1382-10[EB-309 (6)], B103970-BLK1, B103970-BS1, B103970-BSD1

V-16

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

Analyte & Samples(s) Qualified:

1,4-Dioxane

14H1382-02[EB-301 (6)], 14H1382-04[EB-304 (7)], 14H1382-06[EB-306 (2)], 14H1382-08[EB-307 (3)], 14H1382-10[EB-309 (6)], B103970-BLK1, B103970-BS1, B103970-BSD1

SW-846 8270D

Qualifications:

V-04

Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria.

Analyte & Samples(s) Qualified:

2,4-Dinitrophenol

14H1382-01[EB-301 (4-10)], 14H1382-03[EB-304 (5-10)], 14H1382-05[EB-306 (0-3)], 14H1382-07[EB-307 (2-6)], 14H1382-09[EB-309 (4-8)], B104013-BLK1, B104013-BS1, B104013-BSD1, B104013-MS1, B104013-MSD1

V-05

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

2,4-Dinitrophenol

B104013-BLK1, B104013-BS1, B104013-BSD1

4-Nitrophenol

B104013-BLK1, B104013-BS1, B104013-BSD1

V-06

Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.

Analyte & Samples(s) Qualified:

Di-n-octylphthalate

B104013-MS1, B104013-MSD1

Hexachlorobutadiene

B104013-MS1, B104013-MSD1

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V-20

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

4-Nitrophenol

14H1382-07[EB-307 (2-6)]

Di-n-octylphthalate

14H1382-01[EB-301 (4-10)], 14H1382-03[EB-304 (5-10)], 14H1382-05[EB-306 (0-3)], 14H1382-09[EB-309 (4-8)]

Hexachlorobutadiene

14H1382-01[EB-301 (4-10)], 14H1382-03[EB-304 (5-10)], 14H1382-05[EB-306 (0-3)], 14H1382-09[EB-309 (4-8)]

SW-846 8100 Modified

TPH (C9-C36) is quantitated against a calibration made with a diesel standard.

SW-846 8260C

Laboratory control sample recoveries for required MCP Data Enhancement 8260 compounds were all within limits specified by the method except for “difficult analytes” where recovery control limits of 40-160% are used and/or unless otherwise listed in this narrative. Difficult analytes: MIBK, MEK, acetone, 1,4-dioxane, chloromethane, dichlorodifluoromethane, 2-hexanone, and bromomethane.

SW-846 8270D

Laboratory control sample recoveries for required MCP Data Enhancement 8270 compounds were all within control limits specified by the method, 40-140% for base/neutrals and 30-130% for acids except for “difficult analytes” listed below and/or otherwise listed in this narrative. Difficult analytes limits are 15 and 140%: 2,4-dinitrophenol, 4-chloroaniline, 4-nitrophenol, and phenol.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damboragian
Laboratory Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-301 (4-10)
Sampled: 8/29/2014 08:30

Sample ID: 14H1382-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Acetophenone	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Aniline	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Benzo(b)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Bis(2-chloroethoxy)methane	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Bis(2-chloroethyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Bis(2-chloroisopropyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
4-Bromophenylphenylether	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Butylbenzylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
4-Chloroaniline	ND	0.77	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
2-Chloronaphthalene	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
2-Chlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Chrysene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Dibenzofuran	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Di-n-butylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
1,2-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
1,3-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
1,4-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
3,3-Dichlorobenzidine	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
2,4-Dichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Diethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
2,4-Dimethylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Dimethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
2,4-Dinitrophenol	ND	0.77	mg/Kg dry	1	V-04	SW-846 8270D	9/2/14	9/5/14 12:13	BGL
2,4-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
2,6-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Di-n-octylphthalate	ND	0.78	mg/Kg dry	1	V-20	SW-846 8270D	9/2/14	9/5/14 12:13	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Hexachlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Hexachlorobutadiene	ND	0.39	mg/Kg dry	1	V-20	SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Hexachloroethane	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Isophorone	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-301 (4-10)
Sampled: 8/29/2014 08:30

Sample ID: 14H1382-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
3/4-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Nitrobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
2-Nitrophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
4-Nitrophenol	ND	0.77	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Pentachlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Phenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
Pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
1,2,4-Trichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
2,4,5-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL
2,4,6-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:13	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	75.8	30-130		9/5/14 12:13
Phenol-d6	90.5	30-130		9/5/14 12:13
Nitrobenzene-d5	72.0	30-130		9/5/14 12:13
2-Fluorobiphenyl	73.5	30-130		9/5/14 12:13
2,4,6-Tribromophenol	110	30-130		9/5/14 12:13
p-Terphenyl-d14	81.4	30-130		9/5/14 12:13

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-301 (4-10)
Sampled: 8/29/2014 08:30

Sample ID: 14H1382-01

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 12:06	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 12:06	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 12:06	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 12:06	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5	O-32	SW-846 8082A	9/2/14	9/4/14 12:06	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5	O-32	SW-846 8082A	9/2/14	9/4/14 12:06	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5	O-32	SW-846 8082A	9/2/14	9/4/14 12:06	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5	O-32	SW-846 8082A	9/2/14	9/4/14 12:06	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5	O-32	SW-846 8082A	9/2/14	9/4/14 12:06	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	85.7	30-150		9/4/14 12:06
Decachlorobiphenyl [2]	85.2	30-150		9/4/14 12:06
Tetrachloro-m-xylene [1]	103	30-150		9/4/14 12:06
Tetrachloro-m-xylene [2]	93.2	30-150		9/4/14 12:06

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-301 (4-10)
Sampled: 8/29/2014 08:30

Sample ID: 14H1382-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	ND	9.7	mg/Kg dry	1		SW-846 8100 Modified	9/2/14	9/3/14 13:28	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	75.7	40-140		9/3/14 13:28

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-301 (4-10)
Sampled: 8/29/2014 08:30

Sample ID: 14H1382-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	3.4	2.9	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:16	OP
Barium	13	2.9	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:16	OP
Cadmium	ND	0.29	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:16	OP
Chromium	7.9	0.58	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:16	OP
Lead	2.9	0.86	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:16	OP
Mercury	ND	0.028	mg/Kg dry	1		SW-846 7471B	9/3/14	9/4/14 11:19	JMP
Selenium	ND	5.8	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:16	OP
Silver	ND	0.58	mg/Kg dry	1		SW-846 6010C	9/2/14	9/5/14 14:08	OP

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-301 (4-10)
Sampled: 8/29/2014 08:30

Sample ID: 14H1382-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ignitability	Absent		present/absent	1		SW-846 1030	9/3/14	9/3/14 14:25	DJM
pH @19.1°C	7.7		pH Units	1		SW-846 9045C	8/29/14	8/29/14 20:16	ABH
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	9/5/14	9/5/14 16:25	DJM
Reactive Sulfide	ND	19	mg/Kg	1		SW-846 9030A	9/5/14	9/5/14 15:25	DJM
Specific conductance	16	2.0	µmhos/cm	1		SM18-20 2510B	9/8/14	9/8/14 13:00	ABH
% Solids	85.4		% Wt	1		SM 2540G	9/4/14	9/4/14 21:02	HF

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-301 (6)
Sampled: 8/29/2014 08:30

Sample ID: 14H1382-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.085	mg/Kg wet	1	V-05	SW-846 8260C	9/2/14	9/2/14 14:01	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Benzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Bromobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Bromochloromethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Bromodichloromethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Bromoform	ND	0.0085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Bromomethane	ND	0.0085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
2-Butanone (MEK)	ND	0.034	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
n-Butylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
sec-Butylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
tert-Butylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Carbon Disulfide	ND	0.017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Carbon Tetrachloride	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Chlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Chlorodibromomethane	ND	0.00085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Chloroethane	ND	0.0085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Chloroform	ND	0.0034	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Chloromethane	ND	0.0085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
2-Chlorotoluene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
4-Chlorotoluene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,2-Dibromoethane (EDB)	ND	0.00085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Dibromomethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,2-Dichlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,3-Dichlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,4-Dichlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,1-Dichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,2-Dichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,1-Dichloroethylene	ND	0.0034	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
cis-1,2-Dichloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
trans-1,2-Dichloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,2-Dichloropropane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,3-Dichloropropane	ND	0.00085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
2,2-Dichloropropane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,1-Dichloropropene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
cis-1,3-Dichloropropene	ND	0.00085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
trans-1,3-Dichloropropene	ND	0.00085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Diethyl Ether	ND	0.0085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Diisopropyl Ether (DIPE)	ND	0.00085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,4-Dioxane	ND	0.085	mg/Kg wet	1	V-16	SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Ethylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-301 (6)
Sampled: 8/29/2014 08:30

Sample ID: 14H1382-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
2-Hexanone (MBK)	ND	0.017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Isopropylbenzene (Cumene)	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0034	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Methylene Chloride	ND	0.0085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Naphthalene	ND	0.0085	mg/Kg wet	1	V-05	SW-846 8260C	9/2/14	9/2/14 14:01	MFF
n-Propylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Styrene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,1,1,2-Tetrachloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,1,2,2-Tetrachloroethane	ND	0.00085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Tetrachloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Tetrahydrofuran	ND	0.0085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Toluene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,2,3-Trichlorobenzene	ND	0.0085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,2,4-Trichlorobenzene	ND	0.0034	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,1,1-Trichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,1,2-Trichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Trichloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0085	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,2,3-Trichloropropane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,2,4-Trimethylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
1,3,5-Trimethylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
Vinyl Chloride	ND	0.0085	mg/Kg wet	1	L-04	SW-846 8260C	9/2/14	9/2/14 14:01	MFF
m+p Xylene	ND	0.0034	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF
o-Xylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:01	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	105	70-130		9/2/14 14:01
Toluene-d8	97.6	70-130		9/2/14 14:01
4-Bromofluorobenzene	95.1	70-130		9/2/14 14:01

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-304 (5-10)
Sampled: 8/29/2014 09:30

Sample ID: 14H1382-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Acetophenone	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Aniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Bis(2-chloroethoxy)methane	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Bis(2-chloroethyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Bis(2-chloroisopropyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
4-Bromophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Butylbenzylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
4-Chloroaniline	ND	0.74	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
2-Chloronaphthalene	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
2-Chlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Dibenzofuran	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Di-n-butylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
1,2-Dichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
1,3-Dichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
1,4-Dichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
3,3-Dichlorobenzidine	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
2,4-Dichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Diethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
2,4-Dimethylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Dimethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
2,4-Dinitrophenol	ND	0.74	mg/Kg dry	1	V-04	SW-846 8270D	9/2/14	9/5/14 12:44	BGL
2,4-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
2,6-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Di-n-octylphthalate	ND	0.75	mg/Kg dry	1	V-20	SW-846 8270D	9/2/14	9/5/14 12:44	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Hexachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Hexachlorobutadiene	ND	0.38	mg/Kg dry	1	V-20	SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Hexachloroethane	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Isophorone	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-304 (5-10)
Sampled: 8/29/2014 09:30

Sample ID: 14H1382-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
3/4-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Nitrobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
2-Nitrophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
4-Nitrophenol	ND	0.74	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Pentachlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Phenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
1,2,4-Trichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
2,4,5-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL
2,4,6-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 12:44	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	76.5	30-130		9/5/14 12:44
Phenol-d6	90.1	30-130		9/5/14 12:44
Nitrobenzene-d5	76.7	30-130		9/5/14 12:44
2-Fluorobiphenyl	78.7	30-130		9/5/14 12:44
2,4,6-Tribromophenol	103	30-130		9/5/14 12:44
p-Terphenyl-d14	78.4	30-130		9/5/14 12:44

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-304 (5-10)
Sampled: 8/29/2014 09:30

Sample ID: 14H1382-03

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 2:59	MJC
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 2:59	MJC
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 2:59	MJC
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 2:59	MJC
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 2:59	MJC
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 2:59	MJC
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 2:59	MJC
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 2:59	MJC
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 2:59	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	112	30-150		9/4/14 2:59
Decachlorobiphenyl [2]	104	30-150		9/4/14 2:59
Tetrachloro-m-xylene [1]	107	30-150		9/4/14 2:59
Tetrachloro-m-xylene [2]	101	30-150		9/4/14 2:59

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-304 (5-10)
Sampled: 8/29/2014 09:30

Sample ID: 14H1382-03

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	ND	9.2	mg/Kg dry	1		SW-846 8100 Modified	9/2/14	9/3/14 13:46	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	73.0	40-140		9/3/14 13:46

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-304 (5-10)
Sampled: 8/29/2014 09:30

Sample ID: 14H1382-03

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	8.8	2.8	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:21	OP
Barium	14	2.8	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:21	OP
Cadmium	0.48	0.28	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:21	OP
Chromium	9.6	0.57	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:21	OP
Lead	3.5	0.85	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:21	OP
Mercury	ND	0.027	mg/Kg dry	1		SW-846 7471B	9/3/14	9/4/14 11:20	JMP
Selenium	ND	5.7	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:21	OP
Silver	ND	0.57	mg/Kg dry	1		SW-846 6010C	9/2/14	9/5/14 14:13	OP

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-304 (5-10)
Sampled: 8/29/2014 09:30

Sample ID: 14H1382-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ignitability	Absent		present/absent	1		SW-846 1030	9/3/14	9/3/14 22:35	DJM
pH @21.8°C	5.5		pH Units	1		SW-846 9045C	8/29/14	8/29/14 20:16	ABH
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	9/5/14	9/5/14 16:25	DJM
Reactive Sulfide	ND	20	mg/Kg	1		SW-846 9030A	9/5/14	9/5/14 15:25	DJM
Specific conductance	180	2.0	µmhos/cm	1		SM18-20 2510B	9/8/14	9/8/14 13:00	ABH
% Solids	89.2		% Wt	1		SM 2540G	9/4/14	9/4/14 21:02	HF

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-304 (7)
Sampled: 8/29/2014 09:30

Sample ID: 14H1382-04

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.087	mg/Kg wet	1	V-05	SW-846 8260C	9/2/14	9/2/14 14:29	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Benzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Bromobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Bromochloromethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Bromodichloromethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Bromoform	ND	0.0087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Bromomethane	ND	0.0087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
2-Butanone (MEK)	ND	0.035	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
n-Butylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
sec-Butylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
tert-Butylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Carbon Disulfide	ND	0.017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Carbon Tetrachloride	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Chlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Chlorodibromomethane	ND	0.00087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Chloroethane	ND	0.0087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Chloroform	ND	0.0035	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Chloromethane	ND	0.0087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
2-Chlorotoluene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
4-Chlorotoluene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,2-Dibromoethane (EDB)	ND	0.00087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Dibromomethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,2-Dichlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,3-Dichlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,4-Dichlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,1-Dichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,2-Dichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,1-Dichloroethylene	ND	0.0035	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
cis-1,2-Dichloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
trans-1,2-Dichloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,2-Dichloropropane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,3-Dichloropropane	ND	0.00087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
2,2-Dichloropropane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,1-Dichloropropene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
cis-1,3-Dichloropropene	ND	0.00087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
trans-1,3-Dichloropropene	ND	0.00087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Diethyl Ether	ND	0.0087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Diisopropyl Ether (DIPE)	ND	0.00087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,4-Dioxane	ND	0.087	mg/Kg wet	1	V-16	SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Ethylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-304 (7)
Sampled: 8/29/2014 09:30

Sample ID: 14H1382-04

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
2-Hexanone (MBK)	ND	0.017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Isopropylbenzene (Cumene)	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0035	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Methylene Chloride	ND	0.0087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Naphthalene	ND	0.0087	mg/Kg wet	1	V-05	SW-846 8260C	9/2/14	9/2/14 14:29	MFF
n-Propylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Styrene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,1,1,2-Tetrachloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,1,2,2-Tetrachloroethane	ND	0.00087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Tetrachloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Tetrahydrofuran	ND	0.0087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Toluene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,2,3-Trichlorobenzene	ND	0.0087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,2,4-Trichlorobenzene	ND	0.0035	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,1,1-Trichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,1,2-Trichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Trichloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0087	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,2,3-Trichloropropane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,2,4-Trimethylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
1,3,5-Trimethylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
Vinyl Chloride	ND	0.0087	mg/Kg wet	1	L-04	SW-846 8260C	9/2/14	9/2/14 14:29	MFF
m+p Xylene	ND	0.0035	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF
o-Xylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:29	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	110	70-130		9/2/14 14:29
Toluene-d8	98.1	70-130		9/2/14 14:29
4-Bromofluorobenzene	96.5	70-130		9/2/14 14:29

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-306 (0-3)
Sampled: 8/29/2014 09:50

Sample ID: 14H1382-05

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Acenaphthylene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Acetophenone	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Aniline	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Benzo(a)anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Benzo(a)pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Benzo(b)fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Benzo(g,h,i)perylene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Benzo(k)fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Bis(2-chloroethoxy)methane	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Bis(2-chloroethyl)ether	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Bis(2-chloroisopropyl)ether	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
4-Bromophenylphenylether	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Butylbenzylphthalate	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
4-Chloroaniline	ND	0.82	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
2-Chloronaphthalene	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
2-Chlorophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Chrysene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Dibenz(a,h)anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Dibenzofuran	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Di-n-butylphthalate	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
1,2-Dichlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
1,3-Dichlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
1,4-Dichlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
3,3-Dichlorobenzidine	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
2,4-Dichlorophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Diethylphthalate	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
2,4-Dimethylphenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Dimethylphthalate	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
2,4-Dinitrophenol	ND	0.82	mg/Kg dry	1	V-04	SW-846 8270D	9/2/14	9/5/14 13:16	BGL
2,4-Dinitrotoluene	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
2,6-Dinitrotoluene	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Di-n-octylphthalate	ND	0.84	mg/Kg dry	1	V-20	SW-846 8270D	9/2/14	9/5/14 13:16	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Fluoranthene	0.25	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Fluorene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Hexachlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Hexachlorobutadiene	ND	0.42	mg/Kg dry	1	V-20	SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Hexachloroethane	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Indeno(1,2,3-cd)pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Isophorone	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
2-Methylnaphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-306 (0-3)
Sampled: 8/29/2014 09:50

Sample ID: 14H1382-05

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
3/4-Methylphenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Naphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Nitrobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
2-Nitrophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
4-Nitrophenol	ND	0.82	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Pentachlorophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Phenanthrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Phenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
Pyrene	0.22	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
1,2,4-Trichlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
2,4,5-Trichlorophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL
2,4,6-Trichlorophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 13:16	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	66.0	30-130		9/5/14 13:16
Phenol-d6	85.3	30-130		9/5/14 13:16
Nitrobenzene-d5	66.4	30-130		9/5/14 13:16
2-Fluorobiphenyl	65.3	30-130		9/5/14 13:16
2,4,6-Tribromophenol	110	30-130		9/5/14 13:16
p-Terphenyl-d14	68.7	30-130		9/5/14 13:16

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-306 (0-3)
Sampled: 8/29/2014 09:50

Sample ID: 14H1382-05

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	9/2/14	9/4/14 12:19	JMB
Aroclor-1221 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	9/2/14	9/4/14 12:19	JMB
Aroclor-1232 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	9/2/14	9/4/14 12:19	JMB
Aroclor-1242 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	9/2/14	9/4/14 12:19	JMB
Aroclor-1248 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	9/2/14	9/4/14 12:19	JMB
Aroclor-1254 [1]	39	6.1	mg/Kg dry	250		SW-846 8082A	9/2/14	9/4/14 12:19	JMB
Aroclor-1260 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	9/2/14	9/4/14 12:19	JMB
Aroclor-1262 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	9/2/14	9/4/14 12:19	JMB
Aroclor-1268 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	9/2/14	9/4/14 12:19	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	9/4/14 12:19
Decachlorobiphenyl [2]	*	30-150	S-01	9/4/14 12:19
Tetrachloro-m-xylene [1]	*	30-150	S-01	9/4/14 12:19
Tetrachloro-m-xylene [2]	*	30-150	S-01	9/4/14 12:19

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-306 (0-3)
Sampled: 8/29/2014 09:50

Sample ID: 14H1382-05

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	850	100	mg/Kg dry	10		SW-846 8100 Modified	9/2/14	9/3/14 14:04	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	55.1	40-140		9/3/14 14:04

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-306 (0-3)
Sampled: 8/29/2014 09:50

Sample ID: 14H1382-05

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.9	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:27	OP
Barium	380	2.9	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:27	OP
Cadmium	1.4	0.29	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:27	OP
Chromium	5300	5.8	mg/Kg dry	10		SW-846 6010C	9/2/14	9/5/14 13:54	OP
Lead	82	0.86	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:27	OP
Mercury	0.094	0.030	mg/Kg dry	1		SW-846 7471B	9/3/14	9/4/14 11:21	JMP
Selenium	ND	5.8	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:27	OP
Silver	ND	0.58	mg/Kg dry	1		SW-846 6010C	9/2/14	9/5/14 16:57	OP

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-306 (0-3)
Sampled: 8/29/2014 09:50

Sample ID: 14H1382-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ignitability	Absent		present/absent	1		SW-846 1030	9/3/14	9/3/14 22:35	DJM
pH @19.7°C	6.8		pH Units	1		SW-846 9045C	8/29/14	8/29/14 20:16	ABH
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	9/2/14	9/3/14 16:40	DJM
Reactive Sulfide	ND	20	mg/Kg	1		SW-846 9030A	9/2/14	9/3/14 16:05	DJM
Specific conductance	210	2.0	µmhos/cm	1		SM18-20 2510B	9/8/14	9/8/14 13:00	ABH
% Solids	80.1		% Wt	1		SM 2540G	9/4/14	9/4/14 21:02	HF

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-306 (2)
Sampled: 8/29/2014 09:50

Sample ID: 14H1382-06

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.084	mg/Kg wet	1	V-05	SW-846 8260C	9/2/14	9/2/14 14:57	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Benzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Bromobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Bromochloromethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Bromodichloromethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Bromoform	ND	0.0084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Bromomethane	ND	0.0084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
2-Butanone (MEK)	ND	0.033	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
n-Butylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
sec-Butylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
tert-Butylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Carbon Disulfide	ND	0.017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Carbon Tetrachloride	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Chlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Chlorodibromomethane	ND	0.00084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Chloroethane	ND	0.0084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Chloroform	ND	0.0033	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Chloromethane	ND	0.0084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
2-Chlorotoluene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
4-Chlorotoluene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,2-Dibromoethane (EDB)	ND	0.00084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Dibromomethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,2-Dichlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,3-Dichlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,4-Dichlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,1-Dichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,2-Dichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,1-Dichloroethylene	ND	0.0033	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
cis-1,2-Dichloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
trans-1,2-Dichloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,2-Dichloropropane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,3-Dichloropropane	ND	0.00084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
2,2-Dichloropropane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,1-Dichloropropene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
cis-1,3-Dichloropropene	ND	0.00084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
trans-1,3-Dichloropropene	ND	0.00084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Diethyl Ether	ND	0.0084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Diisopropyl Ether (DIPE)	ND	0.00084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,4-Dioxane	ND	0.084	mg/Kg wet	1	V-16	SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Ethylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-306 (2)
Sampled: 8/29/2014 09:50

Sample ID: 14H1382-06

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
2-Hexanone (MBK)	ND	0.017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Isopropylbenzene (Cumene)	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0033	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Methylene Chloride	ND	0.0084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Naphthalene	ND	0.0084	mg/Kg wet	1	V-05	SW-846 8260C	9/2/14	9/2/14 14:57	MFF
n-Propylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Styrene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,1,1,2-Tetrachloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,1,2,2-Tetrachloroethane	ND	0.00084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Tetrachloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Tetrahydrofuran	ND	0.0084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Toluene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,2,3-Trichlorobenzene	ND	0.0084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,2,4-Trichlorobenzene	ND	0.0033	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,1,1-Trichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,1,2-Trichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Trichloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0084	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,2,3-Trichloropropane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,2,4-Trimethylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
1,3,5-Trimethylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
Vinyl Chloride	ND	0.0084	mg/Kg wet	1	L-04	SW-846 8260C	9/2/14	9/2/14 14:57	MFF
m+p Xylene	ND	0.0033	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF
o-Xylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 14:57	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	110	70-130		9/2/14 14:57
Toluene-d8	97.9	70-130		9/2/14 14:57
4-Bromofluorobenzene	96.4	70-130		9/2/14 14:57

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-307 (2-6)
Sampled: 8/29/2014 10:15

Sample ID: 14H1382-07

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Acenaphthylene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Acetophenone	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Aniline	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Anthracene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Benzo(a)anthracene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Benzo(a)pyrene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Benzo(b)fluoranthene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Benzo(g,h,i)perylene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Benzo(k)fluoranthene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Bis(2-chloroethoxy)methane	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Bis(2-chloroethyl)ether	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Bis(2-chloroisopropyl)ether	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
4-Bromophenylphenylether	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Butylbenzylphthalate	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
4-Chloroaniline	ND	0.93	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
2-Chloronaphthalene	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
2-Chlorophenol	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Chrysene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Dibenz(a,h)anthracene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Dibenzofuran	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Di-n-butylphthalate	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
1,2-Dichlorobenzene	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
1,3-Dichlorobenzene	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
1,4-Dichlorobenzene	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
3,3-Dichlorobenzidine	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
2,4-Dichlorophenol	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Diethylphthalate	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
2,4-Dimethylphenol	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Dimethylphthalate	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
2,4-Dinitrophenol	ND	0.93	mg/Kg dry	1	V-04	SW-846 8270D	9/2/14	9/6/14 12:34	BGL
2,4-Dinitrotoluene	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
2,6-Dinitrotoluene	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Di-n-octylphthalate	ND	0.94	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Fluoranthene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Fluorene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Hexachlorobenzene	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Hexachlorobutadiene	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Hexachloroethane	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Indeno(1,2,3-cd)pyrene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Isophorone	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
2-Methylnaphthalene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-307 (2-6)
Sampled: 8/29/2014 10:15

Sample ID: 14H1382-07

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
3/4-Methylphenol	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Naphthalene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Nitrobenzene	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
2-Nitrophenol	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
4-Nitrophenol	ND	0.93	mg/Kg dry	1	V-20	SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Pentachlorophenol	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Phenanthrene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Phenol	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
Pyrene	ND	0.24	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
1,2,4-Trichlorobenzene	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
2,4,5-Trichlorophenol	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL
2,4,6-Trichlorophenol	ND	0.48	mg/Kg dry	1		SW-846 8270D	9/2/14	9/6/14 12:34	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	63.2	30-130		9/6/14 12:34
Phenol-d6	75.8	30-130		9/6/14 12:34
Nitrobenzene-d5	62.8	30-130		9/6/14 12:34
2-Fluorobiphenyl	61.5	30-130		9/6/14 12:34
2,4,6-Tribromophenol	111	30-130		9/6/14 12:34
p-Terphenyl-d14	65.6	30-130		9/6/14 12:34

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-307 (2-6)
Sampled: 8/29/2014 10:15

Sample ID: 14H1382-07

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	9/2/14	9/4/14 17:05	JMB
Aroclor-1221 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	9/2/14	9/4/14 17:05	JMB
Aroclor-1232 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	9/2/14	9/4/14 17:05	JMB
Aroclor-1242 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	9/2/14	9/4/14 17:05	JMB
Aroclor-1248 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	9/2/14	9/4/14 17:05	JMB
Aroclor-1254 [2]	8.8	1.4	mg/Kg dry	50		SW-846 8082A	9/2/14	9/4/14 17:05	JMB
Aroclor-1260 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	9/2/14	9/4/14 17:05	JMB
Aroclor-1262 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	9/2/14	9/4/14 17:05	JMB
Aroclor-1268 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	9/2/14	9/4/14 17:05	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	9/4/14 17:05
Decachlorobiphenyl [2]	*	30-150	S-01	9/4/14 17:05
Tetrachloro-m-xylene [1]	*	30-150	S-01	9/4/14 17:05
Tetrachloro-m-xylene [2]	*	30-150	S-01	9/4/14 17:05

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-307 (2-6)
Sampled: 8/29/2014 10:15

Sample ID: 14H1382-07

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	64	12	mg/Kg dry	1		SW-846 8100 Modified	9/2/14	9/3/14 14:04	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	71.2	40-140		9/3/14 14:04

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-307 (2-6)
Sampled: 8/29/2014 10:15

Sample ID: 14H1382-07

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	6.0	3.4	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:32	OP
Barium	20	3.4	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:32	OP
Cadmium	0.46	0.34	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:32	OP
Chromium	47	0.68	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:32	OP
Lead	7.7	1.0	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:32	OP
Mercury	0.037	0.036	mg/Kg dry	1		SW-846 7471B	9/3/14	9/4/14 11:23	JMP
Selenium	ND	6.8	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:32	OP
Silver	ND	0.68	mg/Kg dry	1		SW-846 6010C	9/2/14	9/5/14 17:02	OP

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-307 (2-6)
Sampled: 8/29/2014 10:15

Sample ID: 14H1382-07

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ignitability	Absent		present/absent	1		SW-846 1030	9/3/14	9/3/14 22:35	DJM
pH @21.1°C	6.9		pH Units	1		SW-846 9045C	8/29/14	8/29/14 20:16	ABH
Reactive Cyanide	ND	4.0	mg/Kg	1		SW-846 9014	9/2/14	9/3/14 16:40	DJM
Reactive Sulfide	ND	20	mg/Kg	1		SW-846 9030A	9/2/14	9/3/14 16:05	DJM
Specific conductance	19	2.0	µmhos/cm	1		SM18-20 2510B	9/8/14	9/8/14 13:00	ABH
% Solids	71.0		% Wt	1		SM 2540G	9/4/14	9/4/14 21:02	HF

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-307 (3)
Sampled: 8/29/2014 10:15

Sample ID: 14H1382-08

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.089	mg/Kg wet	1	V-05	SW-846 8260C	9/2/14	9/2/14 15:25	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Benzene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Bromobenzene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Bromochloromethane	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Bromodichloromethane	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Bromoform	ND	0.0089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Bromomethane	ND	0.0089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
2-Butanone (MEK)	ND	0.036	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
n-Butylbenzene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
sec-Butylbenzene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
tert-Butylbenzene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Carbon Disulfide	ND	0.018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Carbon Tetrachloride	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Chlorobenzene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Chlorodibromomethane	ND	0.00089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Chloroethane	ND	0.0089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Chloroform	ND	0.0036	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Chloromethane	ND	0.0089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
2-Chlorotoluene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
4-Chlorotoluene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,2-Dibromoethane (EDB)	ND	0.00089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Dibromomethane	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,2-Dichlorobenzene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,3-Dichlorobenzene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,4-Dichlorobenzene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,1-Dichloroethane	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,2-Dichloroethane	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,1-Dichloroethylene	ND	0.0036	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
cis-1,2-Dichloroethylene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
trans-1,2-Dichloroethylene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,2-Dichloropropane	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,3-Dichloropropane	ND	0.00089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
2,2-Dichloropropane	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,1-Dichloropropene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
cis-1,3-Dichloropropene	ND	0.00089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
trans-1,3-Dichloropropene	ND	0.00089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Diethyl Ether	ND	0.0089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Diisopropyl Ether (DIPE)	ND	0.00089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,4-Dioxane	ND	0.089	mg/Kg wet	1	V-16	SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Ethylbenzene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-307 (3)
Sampled: 8/29/2014 10:15

Sample ID: 14H1382-08

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
2-Hexanone (MBK)	ND	0.018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Isopropylbenzene (Cumene)	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0036	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Methylene Chloride	ND	0.0089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Naphthalene	ND	0.0089	mg/Kg wet	1	V-05	SW-846 8260C	9/2/14	9/2/14 15:25	MFF
n-Propylbenzene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Styrene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,1,1,2-Tetrachloroethane	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,1,2,2-Tetrachloroethane	ND	0.00089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Tetrachloroethylene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Tetrahydrofuran	ND	0.0089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Toluene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,2,3-Trichlorobenzene	ND	0.0089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,2,4-Trichlorobenzene	ND	0.0036	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,1,1-Trichloroethane	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,1,2-Trichloroethane	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Trichloroethylene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0089	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,2,3-Trichloropropane	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,2,4-Trimethylbenzene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
1,3,5-Trimethylbenzene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
Vinyl Chloride	ND	0.0089	mg/Kg wet	1	L-04	SW-846 8260C	9/2/14	9/2/14 15:25	MFF
m+p Xylene	ND	0.0036	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF
o-Xylene	ND	0.0018	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:25	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	109	70-130		9/2/14 15:25
Toluene-d8	98.2	70-130		9/2/14 15:25
4-Bromofluorobenzene	95.6	70-130		9/2/14 15:25

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-309 (4-8)
Sampled: 8/29/2014 11:00

Sample ID: 14H1382-09

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Acenaphthylene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Acetophenone	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Aniline	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Benzo(a)anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Benzo(a)pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Benzo(b)fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Benzo(g,h,i)perylene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Benzo(k)fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Bis(2-chloroethoxy)methane	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Bis(2-chloroethyl)ether	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Bis(2-chloroisopropyl)ether	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
4-Bromophenylphenylether	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Butylbenzylphthalate	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
4-Chloroaniline	ND	0.83	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
2-Chloronaphthalene	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
2-Chlorophenol	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Chrysene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Dibenz(a,h)anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Dibenzofuran	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Di-n-butylphthalate	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
1,2-Dichlorobenzene	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
1,3-Dichlorobenzene	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
1,4-Dichlorobenzene	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
3,3-Dichlorobenzidine	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
2,4-Dichlorophenol	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Diethylphthalate	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
2,4-Dimethylphenol	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Dimethylphthalate	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
2,4-Dinitrophenol	ND	0.83	mg/Kg dry	1	V-04	SW-846 8270D	9/2/14	9/5/14 14:20	BGL
2,4-Dinitrotoluene	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
2,6-Dinitrotoluene	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Di-n-octylphthalate	ND	0.84	mg/Kg dry	1	V-20	SW-846 8270D	9/2/14	9/5/14 14:20	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Fluorene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Hexachlorobenzene	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Hexachlorobutadiene	ND	0.43	mg/Kg dry	1	V-20	SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Hexachloroethane	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Indeno(1,2,3-cd)pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Isophorone	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
2-Methylnaphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-309 (4-8)
Sampled: 8/29/2014 11:00

Sample ID: 14H1382-09

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
3/4-Methylphenol	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Naphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Nitrobenzene	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
2-Nitrophenol	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
4-Nitrophenol	ND	0.83	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Pentachlorophenol	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Phenanthrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Phenol	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
Pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
1,2,4-Trichlorobenzene	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
2,4,5-Trichlorophenol	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL
2,4,6-Trichlorophenol	ND	0.43	mg/Kg dry	1		SW-846 8270D	9/2/14	9/5/14 14:20	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	68.1	30-130		9/5/14 14:20
Phenol-d6	75.4	30-130		9/5/14 14:20
Nitrobenzene-d5	68.3	30-130		9/5/14 14:20
2-Fluorobiphenyl	60.4	30-130		9/5/14 14:20
2,4,6-Tribromophenol	105	30-130		9/5/14 14:20
p-Terphenyl-d14	60.4	30-130		9/5/14 14:20

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-309 (4-8)
Sampled: 8/29/2014 11:00

Sample ID: 14H1382-09

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 12:45	JMB
Aroclor-1221 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 12:45	JMB
Aroclor-1232 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 12:45	JMB
Aroclor-1242 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 12:45	JMB
Aroclor-1248 [1]	0.50	0.13	mg/Kg dry	5	P-02, P-04	SW-846 8082A	9/2/14	9/4/14 12:45	JMB
Aroclor-1254 [1]	0.71	0.13	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 12:45	JMB
Aroclor-1260 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 12:45	JMB
Aroclor-1262 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 12:45	JMB
Aroclor-1268 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	9/2/14	9/4/14 12:45	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	75.6	30-150		9/4/14 12:45
Decachlorobiphenyl [2]	75.1	30-150		9/4/14 12:45
Tetrachloro-m-xylene [1]	99.7	30-150		9/4/14 12:45
Tetrachloro-m-xylene [2]	89.1	30-150		9/4/14 12:45

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-309 (4-8)
Sampled: 8/29/2014 11:00

Sample ID: 14H1382-09

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	30	10	mg/Kg dry	1		SW-846 8100 Modified	9/2/14	9/3/14 14:22	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	67.7	40-140		9/3/14 14:22

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-309 (4-8)
Sampled: 8/29/2014 11:00

Sample ID: 14H1382-09

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	3.1	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:38	OP
Barium	16	3.1	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:38	OP
Cadmium	ND	0.31	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:38	OP
Chromium	15	0.61	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:38	OP
Lead	3.4	0.92	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:38	OP
Mercury	ND	0.031	mg/Kg dry	1		SW-846 7471B	9/4/14	9/5/14 11:17	JMP
Selenium	ND	6.1	mg/Kg dry	1		SW-846 6010C	9/2/14	9/3/14 19:38	OP
Silver	ND	0.61	mg/Kg dry	1		SW-846 6010C	9/2/14	9/5/14 17:07	OP

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-309 (4-8)
Sampled: 8/29/2014 11:00

Sample ID: 14H1382-09

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ignitability	Absent		present/absent	1		SW-846 1030	9/3/14	9/3/14 22:35	DJM
pH @21.2°C	8.0		pH Units	1		SW-846 9045C	8/29/14	8/29/14 20:16	ABH
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	9/2/14	9/3/14 16:40	DJM
Reactive Sulfide	ND	20	mg/Kg	1		SW-846 9030A	9/2/14	9/3/14 16:05	DJM
Specific conductance	150	2.0	µmhos/cm	1		SM18-20 2510B	9/8/14	9/8/14 13:00	ABH
% Solids	79.2		% Wt	1		SM 2540G	9/4/14	9/4/14 21:02	HF

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-309 (6)
Sampled: 8/29/2014 11:00

Sample ID: 14H1382-10

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.086	mg/Kg wet	1	V-05	SW-846 8260C	9/2/14	9/2/14 15:53	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Benzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Bromobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Bromochloromethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Bromodichloromethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Bromoform	ND	0.0086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Bromomethane	ND	0.0086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
2-Butanone (MEK)	ND	0.034	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
n-Butylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
sec-Butylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
tert-Butylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Carbon Disulfide	ND	0.017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Carbon Tetrachloride	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Chlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Chlorodibromomethane	ND	0.00086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Chloroethane	ND	0.0086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Chloroform	ND	0.0034	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Chloromethane	ND	0.0086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
2-Chlorotoluene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
4-Chlorotoluene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,2-Dibromoethane (EDB)	ND	0.00086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Dibromomethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,2-Dichlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,3-Dichlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,4-Dichlorobenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,1-Dichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,2-Dichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,1-Dichloroethylene	ND	0.0034	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
cis-1,2-Dichloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
trans-1,2-Dichloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,2-Dichloropropane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,3-Dichloropropane	ND	0.00086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
2,2-Dichloropropane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,1-Dichloropropene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
cis-1,3-Dichloropropene	ND	0.00086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
trans-1,3-Dichloropropene	ND	0.00086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Diethyl Ether	ND	0.0086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Diisopropyl Ether (DIPE)	ND	0.00086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,4-Dioxane	ND	0.086	mg/Kg wet	1	V-16	SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Ethylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14H1382

Date Received: 8/29/2014

Field Sample #: EB-309 (6)
Sampled: 8/29/2014 11:00

Sample ID: 14H1382-10

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
2-Hexanone (MBK)	ND	0.017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Isopropylbenzene (Cumene)	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0034	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Methylene Chloride	ND	0.0086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Naphthalene	ND	0.0086	mg/Kg wet	1	V-05	SW-846 8260C	9/2/14	9/2/14 15:53	MFF
n-Propylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Styrene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,1,1,2-Tetrachloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,1,2,2-Tetrachloroethane	ND	0.00086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Tetrachloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Tetrahydrofuran	ND	0.0086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Toluene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,2,3-Trichlorobenzene	ND	0.0086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,2,4-Trichlorobenzene	ND	0.0034	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,1,1-Trichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,1,2-Trichloroethane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Trichloroethylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0086	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,2,3-Trichloropropane	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,2,4-Trimethylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
1,3,5-Trimethylbenzene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
Vinyl Chloride	ND	0.0086	mg/Kg wet	1	L-04	SW-846 8260C	9/2/14	9/2/14 15:53	MFF
m+p Xylene	ND	0.0034	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF
o-Xylene	ND	0.0017	mg/Kg wet	1		SW-846 8260C	9/2/14	9/2/14 15:53	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	111	70-130		9/2/14 15:53
Toluene-d8	96.8	70-130		9/2/14 15:53
4-Bromofluorobenzene	97.5	70-130		9/2/14 15:53

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14H1382-01 [EB-301 (4-10)]	B104172	09/04/14
14H1382-03 [EB-304 (5-10)]	B104172	09/04/14
14H1382-05 [EB-306 (0-3)]	B104172	09/04/14
14H1382-07 [EB-307 (2-6)]	B104172	09/04/14
14H1382-09 [EB-309 (4-8)]	B104172	09/04/14

SM18-20 2510B

Lab Number [Field ID]	Batch	Initial [g]	Date
14H1382-01 [EB-301 (4-10)]	B104388	1.00	09/08/14
14H1382-03 [EB-304 (5-10)]	B104388	1.00	09/08/14
14H1382-05 [EB-306 (0-3)]	B104388	1.00	09/08/14
14H1382-07 [EB-307 (2-6)]	B104388	1.00	09/08/14
14H1382-09 [EB-309 (4-8)]	B104388	1.00	09/08/14

SW-846 1030

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1382-01 [EB-301 (4-10)]	B104098	50.0	50.0	09/03/14

SW-846 1030

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1382-03 [EB-304 (5-10)]	B104133	50.0	50.0	09/03/14
14H1382-05 [EB-306 (0-3)]	B104133	50.0	50.0	09/03/14
14H1382-07 [EB-307 (2-6)]	B104133	50.0	50.0	09/03/14
14H1382-09 [EB-309 (4-8)]	B104133	50.0	50.0	09/03/14

Prep Method: SW-846 3050B-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1382-01 [EB-301 (4-10)]	B103996	1.02	50.0	09/02/14
14H1382-03 [EB-304 (5-10)]	B103996	0.989	50.0	09/02/14
14H1382-05 [EB-306 (0-3)]	B103996	1.08	50.0	09/02/14
14H1382-07 [EB-307 (2-6)]	B103996	1.03	50.0	09/02/14
14H1382-09 [EB-309 (4-8)]	B103996	1.03	50.0	09/02/14

Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1382-01 [EB-301 (4-10)]	B104104	0.621	50.0	09/03/14
14H1382-03 [EB-304 (5-10)]	B104104	0.629	50.0	09/03/14
14H1382-05 [EB-306 (0-3)]	B104104	0.623	50.0	09/03/14
14H1382-07 [EB-307 (2-6)]	B104104	0.594	50.0	09/03/14

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1382-09 [EB-309 (4-8)]	B104186	0.606	50.0	09/04/14

Prep Method: SW-846 3546-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1382-01 [EB-301 (4-10)]	B104009	10.2	10.0	09/02/14
14H1382-03 [EB-304 (5-10)]	B104009	10.1	10.0	09/02/14
14H1382-05 [EB-306 (0-3)]	B104009	10.2	10.0	09/02/14
14H1382-07 [EB-307 (2-6)]	B104009	10.2	10.0	09/02/14
14H1382-09 [EB-309 (4-8)]	B104009	10.1	10.0	09/02/14

Prep Method: SW-846 3546-SW-846 8100 Modified

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1382-01 [EB-301 (4-10)]	B104003	30.2	1.00	09/02/14
14H1382-03 [EB-304 (5-10)]	B104003	30.4	1.00	09/02/14
14H1382-05 [EB-306 (0-3)]	B104003	30.2	1.00	09/02/14
14H1382-07 [EB-307 (2-6)]	B104003	30.3	1.00	09/02/14
14H1382-09 [EB-309 (4-8)]	B104003	30.4	1.00	09/02/14

Prep Method: SW-846 5035-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1382-02 [EB-301 (6)]	B103970	5.87	10.0	09/02/14
14H1382-04 [EB-304 (7)]	B103970	5.74	10.0	09/02/14
14H1382-06 [EB-306 (2)]	B103970	5.98	10.0	09/02/14
14H1382-08 [EB-307 (3)]	B103970	5.63	10.0	09/02/14
14H1382-10 [EB-309 (6)]	B103970	5.84	10.0	09/02/14

Prep Method: SW-846 3546-SW-846 8270D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1382-01 [EB-301 (4-10)]	B104013	30.3	1.00	09/02/14
14H1382-03 [EB-304 (5-10)]	B104013	30.0	1.00	09/02/14
14H1382-05 [EB-306 (0-3)]	B104013	30.0	1.00	09/02/14
14H1382-07 [EB-307 (2-6)]	B104013	30.0	1.00	09/02/14
14H1382-09 [EB-309 (4-8)]	B104013	30.1	1.00	09/02/14

SW-846 9014

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1382-05 [EB-306 (0-3)]	B103973	25.5	250	09/02/14
14H1382-07 [EB-307 (2-6)]	B103973	25.3	250	09/02/14
14H1382-09 [EB-309 (4-8)]	B103973	25.5	250	09/02/14

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

SW-846 9014

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1382-01 [EB-301 (4-10)]	B104241	25.8	250	09/05/14
14H1382-03 [EB-304 (5-10)]	B104241	25.4	250	09/05/14

SW-846 9030A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1382-05 [EB-306 (0-3)]	B103974	25.5	250	09/02/14
14H1382-07 [EB-307 (2-6)]	B103974	25.3	250	09/02/14
14H1382-09 [EB-309 (4-8)]	B103974	25.5	250	09/02/14

SW-846 9030A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14H1382-01 [EB-301 (4-10)]	B104272	25.8	250	09/05/14
14H1382-03 [EB-304 (5-10)]	B104272	25.4	250	09/05/14

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
14H1382-01 [EB-301 (4-10)]	B104027	20.0	08/29/14
14H1382-03 [EB-304 (5-10)]	B104027	20.0	08/29/14
14H1382-05 [EB-306 (0-3)]	B104027	20.0	08/29/14
14H1382-07 [EB-307 (2-6)]	B104027	20.0	08/29/14
14H1382-09 [EB-309 (4-8)]	B104027	20.0	08/29/14

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B103970 - SW-846 5035										
Blank (B103970-BLK1)				Prepared & Analyzed: 09/02/14						
Acetone	ND	0.10	mg/Kg wet							V-05
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.010	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.020	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.010	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.010	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.010	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							V-16
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methylene Chloride	ND	0.010	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.010	mg/Kg wet							V-05

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B103970 - SW-846 5035											
Blank (B103970-BLK1)				Prepared & Analyzed: 09/02/14							
n-Propylbenzene	ND	0.0020	mg/Kg wet								
Styrene	ND	0.0020	mg/Kg wet								
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet								
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet								
Tetrachloroethylene	ND	0.0020	mg/Kg wet								
Tetrahydrofuran	ND	0.010	mg/Kg wet								
Toluene	ND	0.0020	mg/Kg wet								
1,2,3-Trichlorobenzene	ND	0.010	mg/Kg wet								
1,2,4-Trichlorobenzene	ND	0.0040	mg/Kg wet								
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet								
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet								
Trichloroethylene	ND	0.0020	mg/Kg wet								
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet								
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet								
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet								
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet								
Vinyl Chloride	ND	0.010	mg/Kg wet							L-04	
m+p Xylene	ND	0.0040	mg/Kg wet								
o-Xylene	ND	0.0020	mg/Kg wet								
Surrogate: 1,2-Dichloroethane-d4	*0.0501*		mg/Kg wet	0.0500		100	70-130				
Surrogate: Toluene-d8	*0.0480*		mg/Kg wet	0.0500		95.9	70-130				
Surrogate: 4-Bromofluorobenzene	*0.0477*		mg/Kg wet	0.0500		95.4	70-130				
LCS (B103970-BS1)				Prepared & Analyzed: 09/02/14							
Acetone	0.176	0.10	mg/Kg wet	0.200		88.1	40-160			V-05	†
tert-Amyl Methyl Ether (TAME)	0.0171	0.0010	mg/Kg wet	0.0200		85.6	70-130				
Benzene	0.0178	0.0020	mg/Kg wet	0.0200		89.0	70-130				
Bromobenzene	0.0178	0.0020	mg/Kg wet	0.0200		89.2	70-130				
Bromochloromethane	0.0183	0.0020	mg/Kg wet	0.0200		91.7	70-130				
Bromodichloromethane	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130				
Bromoform	0.0203	0.010	mg/Kg wet	0.0200		102	70-130				
Bromomethane	0.0122	0.010	mg/Kg wet	0.0200		60.9	40-160			L-14	†
2-Butanone (MEK)	0.183	0.040	mg/Kg wet	0.200		91.3	40-160				†
n-Butylbenzene	0.0188	0.0020	mg/Kg wet	0.0200		94.0	70-130				
sec-Butylbenzene	0.0193	0.0020	mg/Kg wet	0.0200		96.4	70-130				
tert-Butylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130				
tert-Butyl Ethyl Ether (TBEE)	0.0180	0.0010	mg/Kg wet	0.0200		89.9	70-130				
Carbon Disulfide	0.0182	0.020	mg/Kg wet	0.0200		90.8	70-130				
Carbon Tetrachloride	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130				
Chlorobenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.3	70-130				
Chlorodibromomethane	0.0207	0.0010	mg/Kg wet	0.0200		103	70-130				
Chloroethane	0.0183	0.010	mg/Kg wet	0.0200		91.6	70-130				
Chloroform	0.0191	0.0040	mg/Kg wet	0.0200		95.3	70-130				
Chloromethane	0.0128	0.010	mg/Kg wet	0.0200		63.8	40-160			L-14	†
2-Chlorotoluene	0.0193	0.0020	mg/Kg wet	0.0200		96.4	70-130				
4-Chlorotoluene	0.0192	0.0020	mg/Kg wet	0.0200		95.8	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	0.0193	0.0020	mg/Kg wet	0.0200		96.4	70-130				
1,2-Dibromoethane (EDB)	0.0192	0.0010	mg/Kg wet	0.0200		95.9	70-130				
Dibromomethane	0.0193	0.0020	mg/Kg wet	0.0200		96.5	70-130				
1,2-Dichlorobenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.4	70-130				
1,3-Dichlorobenzene	0.0178	0.0020	mg/Kg wet	0.0200		88.8	70-130				
1,4-Dichlorobenzene	0.0175	0.0020	mg/Kg wet	0.0200		87.5	70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B103970 - SW-846 5035												
LCS (B103970-BS1)				Prepared & Analyzed: 09/02/14								
Dichlorodifluoromethane (Freon 12)	0.0112	0.010	mg/Kg wet	0.0200		55.9		40-160			L-14	†
1,1-Dichloroethane	0.0185	0.0020	mg/Kg wet	0.0200		92.7		70-130				
1,2-Dichloroethane	0.0202	0.0020	mg/Kg wet	0.0200		101		70-130				
1,1-Dichloroethylene	0.0191	0.0040	mg/Kg wet	0.0200		95.7		70-130				
cis-1,2-Dichloroethylene	0.0181	0.0020	mg/Kg wet	0.0200		90.5		70-130				
trans-1,2-Dichloroethylene	0.0189	0.0020	mg/Kg wet	0.0200		94.7		70-130				
1,2-Dichloropropane	0.0182	0.0020	mg/Kg wet	0.0200		91.0		70-130				
1,3-Dichloropropane	0.0184	0.0010	mg/Kg wet	0.0200		92.0		70-130				
2,2-Dichloropropane	0.0178	0.0020	mg/Kg wet	0.0200		89.1		70-130				
1,1-Dichloropropene	0.0184	0.0020	mg/Kg wet	0.0200		91.9		70-130				
cis-1,3-Dichloropropene	0.0187	0.0010	mg/Kg wet	0.0200		93.4		70-130				
trans-1,3-Dichloropropene	0.0207	0.0010	mg/Kg wet	0.0200		104		70-130				
Diethyl Ether	0.0195	0.010	mg/Kg wet	0.0200		97.5		70-130				
Diisopropyl Ether (DIPE)	0.0170	0.0010	mg/Kg wet	0.0200		85.0		70-130				
1,4-Dioxane	0.176	0.10	mg/Kg wet	0.200		88.2		40-160			V-16	†
Ethylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.3		70-130				
Hexachlorobutadiene	0.0197	0.0020	mg/Kg wet	0.0200		98.7		70-130				
2-Hexanone (MBK)	0.176	0.020	mg/Kg wet	0.200		88.2		40-160				†
Isopropylbenzene (Cumene)	0.0196	0.0020	mg/Kg wet	0.0200		97.8		70-130				
p-Isopropyltoluene (p-Cymene)	0.0181	0.0020	mg/Kg wet	0.0200		90.6		70-130				
Methyl tert-Butyl Ether (MTBE)	0.0186	0.0040	mg/Kg wet	0.0200		93.1		70-130				
Methylene Chloride	0.0160	0.010	mg/Kg wet	0.0200		79.8		70-130				
4-Methyl-2-pentanone (MIBK)	0.166	0.020	mg/Kg wet	0.200		83.2		40-160				†
Naphthalene	0.0169	0.010	mg/Kg wet	0.0200		84.6		70-130			V-05	
n-Propylbenzene	0.0200	0.0020	mg/Kg wet	0.0200		99.8		70-130				
Styrene	0.0177	0.0020	mg/Kg wet	0.0200		88.5		70-130				
1,1,1,2-Tetrachloroethane	0.0208	0.0020	mg/Kg wet	0.0200		104		70-130				
1,1,2,2-Tetrachloroethane	0.0186	0.0010	mg/Kg wet	0.0200		93.2		70-130				
Tetrachloroethylene	0.0191	0.0020	mg/Kg wet	0.0200		95.4		70-130				
Tetrahydrofuran	0.0192	0.010	mg/Kg wet	0.0200		95.9		70-130				
Toluene	0.0182	0.0020	mg/Kg wet	0.0200		91.0		70-130				
1,2,3-Trichlorobenzene	0.0164	0.010	mg/Kg wet	0.0200		82.1		70-130				
1,2,4-Trichlorobenzene	0.0161	0.0040	mg/Kg wet	0.0200		80.6		70-130				
1,1,1-Trichloroethane	0.0190	0.0020	mg/Kg wet	0.0200		95.2		70-130				
1,1,2-Trichloroethane	0.0187	0.0020	mg/Kg wet	0.0200		93.6		70-130				
Trichloroethylene	0.0201	0.0020	mg/Kg wet	0.0200		100		70-130				
Trichlorofluoromethane (Freon 11)	0.0192	0.010	mg/Kg wet	0.0200		95.8		70-130				
1,2,3-Trichloropropane	0.0195	0.0020	mg/Kg wet	0.0200		97.7		70-130				
1,2,4-Trimethylbenzene	0.0178	0.0020	mg/Kg wet	0.0200		88.9		70-130				
1,3,5-Trimethylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.3		70-130				
Vinyl Chloride	0.0125	0.010	mg/Kg wet	0.0200		**62.5**	*	70-130			L-04	
m+p Xylene	0.0386	0.0040	mg/Kg wet	0.0400		96.6		70-130				
o-Xylene	0.0191	0.0020	mg/Kg wet	0.0200		95.4		70-130				
Surrogate: 1,2-Dichloroethane-d4	*0.0495*		mg/Kg wet	0.0500		99.1		70-130				
Surrogate: Toluene-d8	*0.0478*		mg/Kg wet	0.0500		95.6		70-130				
Surrogate: 4-Bromofluorobenzene	*0.0496*		mg/Kg wet	0.0500		99.2		70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B103970 - SW-846 5035											
LCS Dup (B103970-BSD1)				Prepared & Analyzed: 09/02/14							
Acetone	0.173	0.10	mg/Kg wet	0.200		86.7	40-160	1.61	20	V-05	†
tert-Amyl Methyl Ether (TAME)	0.0186	0.0010	mg/Kg wet	0.0200		93.1	70-130	8.39	20		
Benzene	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130	7.46	20		
Bromobenzene	0.0188	0.0020	mg/Kg wet	0.0200		94.0	70-130	5.24	20		
Bromochloromethane	0.0198	0.0020	mg/Kg wet	0.0200		99.1	70-130	7.76	20		
Bromodichloromethane	0.0217	0.0020	mg/Kg wet	0.0200		109	70-130	7.85	20		
Bromoform	0.0213	0.010	mg/Kg wet	0.0200		106	70-130	4.71	20		
Bromomethane	0.0139	0.010	mg/Kg wet	0.0200		69.3	40-160	12.9	20	L-14	†
2-Butanone (MEK)	0.184	0.040	mg/Kg wet	0.200		92.1	40-160	0.873	20		†
n-Butylbenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.6	70-130	3.76	20		
sec-Butylbenzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	4.66	20		
tert-Butylbenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.1	70-130	3.74	20		
tert-Butyl Ethyl Ether (TBEE)	0.0190	0.0010	mg/Kg wet	0.0200		95.0	70-130	5.52	20		
Carbon Disulfide	0.0191	0.020	mg/Kg wet	0.0200		95.4	70-130	4.94	20		
Carbon Tetrachloride	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130	4.95	20		
Chlorobenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130	3.54	20		
Chlorodibromomethane	0.0224	0.0010	mg/Kg wet	0.0200		112	70-130	8.16	20		
Chloroethane	0.0197	0.010	mg/Kg wet	0.0200		98.4	70-130	7.16	20		
Chloroform	0.0203	0.0040	mg/Kg wet	0.0200		102	70-130	6.50	20		
Chloromethane	0.0137	0.010	mg/Kg wet	0.0200		68.3	40-160	6.81	20	L-14	†
2-Chlorotoluene	0.0203	0.0020	mg/Kg wet	0.0200		101	70-130	4.96	20		
4-Chlorotoluene	0.0203	0.0020	mg/Kg wet	0.0200		101	70-130	5.68	20		
1,2-Dibromo-3-chloropropane (DBCP)	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130	10.3	20		
1,2-Dibromoethane (EDB)	0.0210	0.0010	mg/Kg wet	0.0200		105	70-130	8.87	20		
Dibromomethane	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130	8.91	20		
1,2-Dichlorobenzene	0.0191	0.0020	mg/Kg wet	0.0200		95.4	70-130	4.28	20		
1,3-Dichlorobenzene	0.0188	0.0020	mg/Kg wet	0.0200		93.9	70-130	5.58	20		
1,4-Dichlorobenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.7	70-130	7.90	20		
Dichlorodifluoromethane (Freon 12)	0.0117	0.010	mg/Kg wet	0.0200		58.5	40-160	4.55	20	L-14	†
1,1-Dichloroethane	0.0197	0.0020	mg/Kg wet	0.0200		98.3	70-130	5.86	20		
1,2-Dichloroethane	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130	9.42	20		
1,1-Dichloroethylene	0.0197	0.0040	mg/Kg wet	0.0200		98.6	70-130	2.99	20		
cis-1,2-Dichloroethylene	0.0191	0.0020	mg/Kg wet	0.0200		95.3	70-130	5.17	20		
trans-1,2-Dichloroethylene	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130	5.44	20		
1,2-Dichloropropane	0.0192	0.0020	mg/Kg wet	0.0200		96.1	70-130	5.45	20		
1,3-Dichloropropane	0.0197	0.0010	mg/Kg wet	0.0200		98.6	70-130	6.93	20		
2,2-Dichloropropane	0.0190	0.0020	mg/Kg wet	0.0200		94.9	70-130	6.30	20		
1,1-Dichloropropene	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130	6.12	20		
cis-1,3-Dichloropropene	0.0199	0.0010	mg/Kg wet	0.0200		99.6	70-130	6.42	20		
trans-1,3-Dichloropropene	0.0221	0.0010	mg/Kg wet	0.0200		111	70-130	6.72	20		
Diethyl Ether	0.0202	0.010	mg/Kg wet	0.0200		101	70-130	3.43	20		
Diisopropyl Ether (DIPE)	0.0179	0.0010	mg/Kg wet	0.0200		89.7	70-130	5.38	20		
1,4-Dioxane	0.211	0.10	mg/Kg wet	0.200		106	40-160	17.9	20	V-16	†
Ethylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130	4.26	20		
Hexachlorobutadiene	0.0209	0.0020	mg/Kg wet	0.0200		105	70-130	5.80	20		
2-Hexanone (MBK)	0.179	0.020	mg/Kg wet	0.200		89.6	40-160	1.47	20		†
Isopropylbenzene (Cumene)	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	6.34	20		
p-Isopropyltoluene (p-Cymene)	0.0192	0.0020	mg/Kg wet	0.0200		96.2	70-130	6.00	20		
Methyl tert-Butyl Ether (MTBE)	0.0200	0.0040	mg/Kg wet	0.0200		100	70-130	7.25	20		
Methylene Chloride	0.0167	0.010	mg/Kg wet	0.0200		83.4	70-130	4.41	20		
4-Methyl-2-pentanone (MIBK)	0.184	0.020	mg/Kg wet	0.200		92.2	40-160	10.3	20		†
Naphthalene	0.0183	0.010	mg/Kg wet	0.0200		91.6	70-130	7.95	20	V-05	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B103970 - SW-846 5035											
LCS Dup (B103970-BSD1)				Prepared & Analyzed: 09/02/14							
n-Propylbenzene	0.0209	0.0020	mg/Kg wet	0.0200		104		70-130	4.51	20	
Styrene	0.0185	0.0020	mg/Kg wet	0.0200		92.7		70-130	4.64	20	
1,1,1,2-Tetrachloroethane	0.0219	0.0020	mg/Kg wet	0.0200		110		70-130	5.25	20	
1,1,2,2-Tetrachloroethane	0.0202	0.0010	mg/Kg wet	0.0200		101		70-130	8.23	20	
Tetrachloroethylene	0.0205	0.0020	mg/Kg wet	0.0200		102		70-130	6.98	20	
Tetrahydrofuran	0.0201	0.010	mg/Kg wet	0.0200		101		70-130	4.88	20	
Toluene	0.0196	0.0020	mg/Kg wet	0.0200		98.0		70-130	7.41	20	
1,2,3-Trichlorobenzene	0.0176	0.010	mg/Kg wet	0.0200		87.9		70-130	6.82	20	
1,2,4-Trichlorobenzene	0.0172	0.0040	mg/Kg wet	0.0200		86.1		70-130	6.60	20	
1,1,1-Trichloroethane	0.0206	0.0020	mg/Kg wet	0.0200		103		70-130	7.97	20	
1,1,2-Trichloroethane	0.0202	0.0020	mg/Kg wet	0.0200		101		70-130	7.80	20	
Trichloroethylene	0.0214	0.0020	mg/Kg wet	0.0200		107		70-130	6.08	20	
Trichlorofluoromethane (Freon 11)	0.0200	0.010	mg/Kg wet	0.0200		100		70-130	4.49	20	
1,2,3-Trichloropropane	0.0203	0.0020	mg/Kg wet	0.0200		101		70-130	3.62	20	
1,2,4-Trimethylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.3		70-130	4.83	20	
1,3,5-Trimethylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.5		70-130	4.36	20	
Vinyl Chloride	0.0132	0.010	mg/Kg wet	0.0200		**65.8**	*	70-130	5.14	20	L-04
m+p Xylene	0.0404	0.0040	mg/Kg wet	0.0400		101		70-130	4.40	20	
o-Xylene	0.0202	0.0020	mg/Kg wet	0.0200		101		70-130	5.90	20	
Surrogate: 1,2-Dichloroethane-d4	*0.0498*		mg/Kg wet	0.0500		99.5		70-130			
Surrogate: Toluene-d8	*0.0490*		mg/Kg wet	0.0500		98.0		70-130			
Surrogate: 4-Bromofluorobenzene	*0.0493*		mg/Kg wet	0.0500		98.7		70-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104013 - SW-846 3546										
Blank (B104013-BLK1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Aniline	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether	ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.34	mg/Kg wet							
4-Chloroaniline	ND	0.66	mg/Kg wet							
2-Chloronaphthalene	ND	0.34	mg/Kg wet							
2-Chlorophenol	ND	0.34	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.66	mg/Kg wet							V-04, V-05
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.67	mg/Kg wet							
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene	ND	0.34	mg/Kg wet							
Hexachloroethane	ND	0.34	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.34	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylphenol	ND	0.34	mg/Kg wet							
3/4-Methylphenol	ND	0.34	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
Nitrobenzene	ND	0.34	mg/Kg wet							
2-Nitrophenol	ND	0.34	mg/Kg wet							
4-Nitrophenol	ND	0.66	mg/Kg wet							V-05
Pentachlorophenol	ND	0.34	mg/Kg wet							
Phenanthrene	ND	0.17	mg/Kg wet							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B104013 - SW-846 3546											
Blank (B104013-BLK1)				Prepared: 09/02/14 Analyzed: 09/03/14							
Phenol	ND	0.34	mg/Kg wet								
Pyrene	ND	0.17	mg/Kg wet								
1,2,4-Trichlorobenzene	ND	0.34	mg/Kg wet								
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet								
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet								
Surrogate: 2-Fluorophenol	*5.13*		mg/Kg wet	6.67		77.0	30-130				
Surrogate: Phenol-d6	*6.21*		mg/Kg wet	6.67		93.2	30-130				
Surrogate: Nitrobenzene-d5	*5.27*		mg/Kg wet	6.67		79.1	30-130				
Surrogate: 2-Fluorobiphenyl	*2.69*		mg/Kg wet	3.33		80.8	30-130				
Surrogate: 2,4,6-Tribromophenol	*7.26*		mg/Kg wet	6.67		109	30-130				
Surrogate: p-Terphenyl-d14	*2.92*		mg/Kg wet	3.33		87.5	30-130				
LCS (B104013-BS1)				Prepared: 09/02/14 Analyzed: 09/03/14							
Acenaphthene	1.59	0.17	mg/Kg wet	1.67		95.4	40-140				
Acenaphthylene	1.58	0.17	mg/Kg wet	1.67		94.8	40-140				
Acetophenone	1.11	0.34	mg/Kg wet	1.33		83.2	40-140				
Aniline	1.17	0.34	mg/Kg wet	1.67		70.3	40-140				
Anthracene	1.64	0.17	mg/Kg wet	1.67		98.6	40-140				
Benzo(a)anthracene	1.64	0.17	mg/Kg wet	1.67		98.5	40-140				
Benzo(a)pyrene	1.66	0.17	mg/Kg wet	1.67		99.4	40-140				
Benzo(b)fluoranthene	1.66	0.17	mg/Kg wet	1.67		99.7	40-140				
Benzo(g,h,i)perylene	1.48	0.17	mg/Kg wet	1.67		88.7	40-140				
Benzo(k)fluoranthene	1.66	0.17	mg/Kg wet	1.67		99.9	40-140				
Bis(2-chloroethoxy)methane	1.61	0.34	mg/Kg wet	1.67		96.8	40-140				
Bis(2-chloroethyl)ether	1.32	0.34	mg/Kg wet	1.67		79.4	40-140				
Bis(2-chloroisopropyl)ether	1.34	0.34	mg/Kg wet	1.67		80.3	40-140				
Bis(2-Ethylhexyl)phthalate	1.81	0.34	mg/Kg wet	1.67		108	40-140				
4-Bromophenylphenylether	1.71	0.34	mg/Kg wet	1.67		103	40-140				
Butylbenzylphthalate	1.80	0.34	mg/Kg wet	1.67		108	40-140				
4-Chloroaniline	1.48	0.66	mg/Kg wet	1.67		88.9	15-140				†
2-Chloronaphthalene	1.35	0.34	mg/Kg wet	1.67		80.8	40-140				
2-Chlorophenol	1.37	0.34	mg/Kg wet	1.67		82.3	30-130				
Chrysene	1.62	0.17	mg/Kg wet	1.67		97.2	40-140				
Dibenz(a,h)anthracene	1.51	0.17	mg/Kg wet	1.67		90.8	40-140				
Dibenzofuran	1.65	0.34	mg/Kg wet	1.67		99.2	40-140				
Di-n-butylphthalate	1.85	0.34	mg/Kg wet	1.67		111	40-140				
1,2-Dichlorobenzene	1.18	0.34	mg/Kg wet	1.67		70.9	40-140				
1,3-Dichlorobenzene	1.11	0.34	mg/Kg wet	1.67		66.3	40-140				
1,4-Dichlorobenzene	1.11	0.34	mg/Kg wet	1.67		66.8	40-140				
3,3-Dichlorobenzidine	1.51	0.17	mg/Kg wet	1.67		90.8	40-140				
2,4-Dichlorophenol	1.56	0.34	mg/Kg wet	1.67		93.3	30-130				
Diethylphthalate	1.74	0.34	mg/Kg wet	1.67		104	40-140				
2,4-Dimethylphenol	1.52	0.34	mg/Kg wet	1.67		91.2	30-130				
Dimethylphthalate	1.69	0.34	mg/Kg wet	1.67		101	40-140				
2,4-Dinitrophenol	1.03	0.66	mg/Kg wet	1.67		61.7	15-140			V-04, V-05	†
2,4-Dinitrotoluene	1.70	0.34	mg/Kg wet	1.67		102	40-140				
2,6-Dinitrotoluene	1.80	0.34	mg/Kg wet	1.67		108	40-140				
Di-n-octylphthalate	1.93	0.67	mg/Kg wet	1.67		116	40-140				
1,2-Diphenylhydrazine (as Azobenzene)	1.52	0.34	mg/Kg wet	1.67		91.3	40-140				
Fluoranthene	1.73	0.17	mg/Kg wet	1.67		104	40-140				
Fluorene	1.65	0.17	mg/Kg wet	1.67		99.1	40-140				
Hexachlorobenzene	1.74	0.34	mg/Kg wet	1.67		104	40-140				

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B104013 - SW-846 3546											
LCS (B104013-BS1)				Prepared: 09/02/14 Analyzed: 09/03/14							
Hexachlorobutadiene	1.44	0.34	mg/Kg wet	1.67		86.4	40-140				
Hexachloroethane	1.21	0.34	mg/Kg wet	1.67		72.6	40-140				
Indeno(1,2,3-cd)pyrene	1.52	0.17	mg/Kg wet	1.67		91.5	40-140				
Isophorone	1.65	0.34	mg/Kg wet	1.67		99.3	40-140				
2-Methylnaphthalene	1.61	0.17	mg/Kg wet	1.67		96.7	40-140				
2-Methylphenol	1.51	0.34	mg/Kg wet	1.67		90.7	30-130				
3/4-Methylphenol	1.50	0.34	mg/Kg wet	1.67		90.0	30-130				
Naphthalene	1.44	0.17	mg/Kg wet	1.67		86.6	40-140				
Nitrobenzene	1.47	0.34	mg/Kg wet	1.67		88.2	40-140				
2-Nitrophenol	1.45	0.34	mg/Kg wet	1.67		87.3	30-130				
4-Nitrophenol	1.33	0.66	mg/Kg wet	1.67		79.7	15-140			V-05	†
Pentachlorophenol	1.56	0.34	mg/Kg wet	1.67		93.9	30-130				
Phenanthrene	1.64	0.17	mg/Kg wet	1.67		98.1	40-140				
Phenol	1.36	0.34	mg/Kg wet	1.67		81.8	15-140				†
Pyrene	1.60	0.17	mg/Kg wet	1.67		96.2	40-140				
1,2,4-Trichlorobenzene	1.38	0.34	mg/Kg wet	1.67		82.8	40-140				
2,4,5-Trichlorophenol	1.47	0.34	mg/Kg wet	1.67		88.3	30-130				
2,4,6-Trichlorophenol	1.52	0.34	mg/Kg wet	1.67		91.4	30-130				
Surrogate: 2-Fluorophenol	*5.45*		mg/Kg wet	6.67		81.7	30-130				
Surrogate: Phenol-d6	*6.60*		mg/Kg wet	6.67		99.1	30-130				
Surrogate: Nitrobenzene-d5	*5.55*		mg/Kg wet	6.67		83.2	30-130				
Surrogate: 2-Fluorobiphenyl	*2.84*		mg/Kg wet	3.33		85.2	30-130				
Surrogate: 2,4,6-Tribromophenol	*8.36*		mg/Kg wet	6.67		125	30-130				
Surrogate: p-Terphenyl-d14	*3.21*		mg/Kg wet	3.33		96.2	30-130				
LCS Dup (B104013-BSD1)				Prepared: 09/02/14 Analyzed: 09/03/14							
Acenaphthene	1.57	0.17	mg/Kg wet	1.67		94.2	40-140	1.27	30		
Acenaphthylene	1.55	0.17	mg/Kg wet	1.67		92.8	40-140	2.11	30		
Acetophenone	1.03	0.34	mg/Kg wet	1.33		77.2	40-140	7.45	30		
Aniline	1.11	0.34	mg/Kg wet	1.67		66.6	40-140	5.41	30		
Anthracene	1.62	0.17	mg/Kg wet	1.67		97.4	40-140	1.22	30		
Benzo(a)anthracene	1.64	0.17	mg/Kg wet	1.67		98.4	40-140	0.0406	30		
Benzo(a)pyrene	1.62	0.17	mg/Kg wet	1.67		97.5	40-140	1.93	30		
Benzo(b)fluoranthene	1.63	0.17	mg/Kg wet	1.67		97.9	40-140	1.80	30		
Benzo(g,h,i)perylene	1.47	0.17	mg/Kg wet	1.67		88.4	40-140	0.271	30		
Benzo(k)fluoranthene	1.63	0.17	mg/Kg wet	1.67		97.7	40-140	2.19	30		
Bis(2-chloroethoxy)methane	1.50	0.34	mg/Kg wet	1.67		90.1	40-140	7.08	30		
Bis(2-chloroethyl)ether	1.30	0.34	mg/Kg wet	1.67		77.9	40-140	1.93	30		
Bis(2-chloroisopropyl)ether	1.23	0.34	mg/Kg wet	1.67		73.7	40-140	8.52	30		
Bis(2-Ethylhexyl)phthalate	1.81	0.34	mg/Kg wet	1.67		108	40-140	0.0184	30		
4-Bromophenylphenylether	1.76	0.34	mg/Kg wet	1.67		106	40-140	2.89	30		
Butylbenzylphthalate	1.75	0.34	mg/Kg wet	1.67		105	40-140	2.61	30		
4-Chloroaniline	1.44	0.66	mg/Kg wet	1.67		86.2	15-140	3.08	30		†
2-Chloronaphthalene	1.32	0.34	mg/Kg wet	1.67		78.9	40-140	2.30	30		
2-Chlorophenol	1.24	0.34	mg/Kg wet	1.67		74.7	30-130	9.63	30		
Chrysene	1.62	0.17	mg/Kg wet	1.67		97.3	40-140	0.165	30		
Dibenz(a,h)anthracene	1.49	0.17	mg/Kg wet	1.67		89.4	40-140	1.60	30		
Dibenzofuran	1.63	0.34	mg/Kg wet	1.67		97.8	40-140	1.42	30		
Di-n-butylphthalate	1.76	0.34	mg/Kg wet	1.67		106	40-140	4.80	30		
1,2-Dichlorobenzene	1.10	0.34	mg/Kg wet	1.67		66.0	40-140	7.13	30		
1,3-Dichlorobenzene	1.07	0.34	mg/Kg wet	1.67		64.1	40-140	3.50	30		
1,4-Dichlorobenzene	1.07	0.34	mg/Kg wet	1.67		64.2	40-140	4.06	30		

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B104013 - SW-846 3546											
LCS Dup (B104013-BSD1)				Prepared: 09/02/14 Analyzed: 09/03/14							
3,3-Dichlorobenzidine	1.52	0.17	mg/Kg wet	1.67		91.3	40-140	0.483	30		
2,4-Dichlorophenol	1.50	0.34	mg/Kg wet	1.67		90.1	30-130	3.47	30		
Diethylphthalate	1.68	0.34	mg/Kg wet	1.67		101	40-140	3.22	30		
2,4-Dimethylphenol	1.47	0.34	mg/Kg wet	1.67		88.1	30-130	3.44	30		
Dimethylphthalate	1.67	0.34	mg/Kg wet	1.67		99.9	40-140	1.31	30		
2,4-Dinitrophenol	1.01	0.66	mg/Kg wet	1.67		60.7	15-140	1.64	30	V-04, V-05	†
2,4-Dinitrotoluene	1.62	0.34	mg/Kg wet	1.67		97.2	40-140	5.06	30		
2,6-Dinitrotoluene	1.76	0.34	mg/Kg wet	1.67		106	40-140	2.08	30		
Di-n-octylphthalate	1.90	0.67	mg/Kg wet	1.67		114	40-140	1.76	30		
1,2-Diphenylhydrazine (as Azobenzene)	1.56	0.34	mg/Kg wet	1.67		93.4	40-140	2.27	30		
Fluoranthene	1.65	0.17	mg/Kg wet	1.67		98.7	40-140	5.17	30		
Fluorene	1.61	0.17	mg/Kg wet	1.67		96.4	40-140	2.76	30		
Hexachlorobenzene	1.75	0.34	mg/Kg wet	1.67		105	40-140	0.364	30		
Hexachlorobutadiene	1.35	0.34	mg/Kg wet	1.67		81.1	40-140	6.23	30		
Hexachloroethane	1.17	0.34	mg/Kg wet	1.67		70.2	40-140	3.39	30		
Indeno(1,2,3-cd)pyrene	1.52	0.17	mg/Kg wet	1.67		91.2	40-140	0.241	30		
Isophorone	1.54	0.34	mg/Kg wet	1.67		92.2	40-140	7.40	30		
2-Methylnaphthalene	1.50	0.17	mg/Kg wet	1.67		90.0	40-140	7.11	30		
2-Methylphenol	1.41	0.34	mg/Kg wet	1.67		84.3	30-130	7.31	30		
3/4-Methylphenol	1.41	0.34	mg/Kg wet	1.67		84.5	30-130	6.30	30		
Naphthalene	1.34	0.17	mg/Kg wet	1.67		80.6	40-140	7.11	30		
Nitrobenzene	1.28	0.34	mg/Kg wet	1.67		77.1	40-140	13.5	30		
2-Nitrophenol	1.35	0.34	mg/Kg wet	1.67		81.1	30-130	7.32	30		
4-Nitrophenol	1.22	0.66	mg/Kg wet	1.67		73.4	15-140	8.21	30	V-05	†
Pentachlorophenol	1.47	0.34	mg/Kg wet	1.67		88.4	30-130	5.99	30		
Phenanthrene	1.62	0.17	mg/Kg wet	1.67		97.3	40-140	0.778	30		
Phenol	1.28	0.34	mg/Kg wet	1.67		76.9	15-140	6.22	30		†
Pyrene	1.62	0.17	mg/Kg wet	1.67		97.1	40-140	0.890	30		
1,2,4-Trichlorobenzene	1.26	0.34	mg/Kg wet	1.67		75.4	40-140	9.38	30		
2,4,5-Trichlorophenol	1.50	0.34	mg/Kg wet	1.67		90.0	30-130	1.86	30		
2,4,6-Trichlorophenol	1.51	0.34	mg/Kg wet	1.67		90.4	30-130	1.17	30		
Surrogate: 2-Fluorophenol	*4.84*		mg/Kg wet	6.67		72.6	30-130				
Surrogate: Phenol-d6	*5.93*		mg/Kg wet	6.67		88.9	30-130				
Surrogate: Nitrobenzene-d5	*4.98*		mg/Kg wet	6.67		74.8	30-130				
Surrogate: 2-Fluorobiphenyl	*2.69*		mg/Kg wet	3.33		80.7	30-130				
Surrogate: 2,4,6-Tribromophenol	*7.76*		mg/Kg wet	6.67		116	30-130				
Surrogate: p-Terphenyl-d14	*3.12*		mg/Kg wet	3.33		93.6	30-130				
Matrix Spike (B104013-MS1)		**Source: 14H1382-03**		Prepared: 09/02/14 Analyzed: 09/05/14							
Acenaphthene	1.53	0.19	mg/Kg dry	1.86	ND	82.3	40-140				
Acenaphthylene	1.52	0.19	mg/Kg dry	1.86	ND	81.9	40-140				
Acetophenone	1.02	0.38	mg/Kg dry	1.48	ND	68.9	40-140				
Aniline	1.03	0.38	mg/Kg dry	1.86	ND	55.4	40-140				
Anthracene	1.58	0.19	mg/Kg dry	1.86	ND	85.2	40-140				
Benzo(a)anthracene	1.59	0.19	mg/Kg dry	1.86	ND	85.5	40-140				
Benzo(a)pyrene	1.56	0.19	mg/Kg dry	1.86	ND	84.2	40-140				
Benzo(b)fluoranthene	1.55	0.19	mg/Kg dry	1.86	ND	83.7	40-140				
Benzo(g,h,i)perylene	1.41	0.19	mg/Kg dry	1.86	ND	76.1	40-140				
Benzo(k)fluoranthene	1.53	0.19	mg/Kg dry	1.86	ND	82.2	40-140				
Bis(2-chloroethoxy)methane	1.45	0.38	mg/Kg dry	1.86	ND	78.3	40-140				
Bis(2-chloroethyl)ether	1.16	0.38	mg/Kg dry	1.86	ND	62.4	40-140				
Bis(2-chloroisopropyl)ether	1.20	0.38	mg/Kg dry	1.86	ND	64.9	40-140				

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104013 - SW-846 3546										
Matrix Spike (B104013-MS1)		**Source: 14H1382-03**		Prepared: 09/02/14 Analyzed: 09/05/14						
Bis(2-Ethylhexyl)phthalate	1.66	0.38	mg/Kg dry	1.86	ND	89.3	40-140			
4-Bromophenylphenylether	1.62	0.38	mg/Kg dry	1.86	ND	87.5	40-140			
Butylbenzylphthalate	1.65	0.38	mg/Kg dry	1.86	ND	88.8	40-140			
4-Chloroaniline	1.44	0.74	mg/Kg dry	1.86	ND	77.5	40-140			
2-Chloronaphthalene	1.31	0.38	mg/Kg dry	1.86	ND	70.8	40-140			
2-Chlorophenol	1.23	0.38	mg/Kg dry	1.86	ND	66.2	30-130			
Chrysene	1.58	0.19	mg/Kg dry	1.86	ND	85.3	40-140			
Dibenz(a,h)anthracene	1.40	0.19	mg/Kg dry	1.86	ND	75.7	40-140			
Dibenzofuran	1.62	0.38	mg/Kg dry	1.86	ND	87.1	40-140			
Di-n-butylphthalate	1.65	0.38	mg/Kg dry	1.86	ND	89.1	40-140			
1,2-Dichlorobenzene	1.08	0.38	mg/Kg dry	1.86	ND	58.2	40-140			
1,3-Dichlorobenzene	0.998	0.38	mg/Kg dry	1.86	ND	53.8	40-140			
1,4-Dichlorobenzene	1.01	0.38	mg/Kg dry	1.86	ND	54.3	40-140			
3,3-Dichlorobenzidine	1.52	0.19	mg/Kg dry	1.86	ND	82.1	40-140			
2,4-Dichlorophenol	1.48	0.38	mg/Kg dry	1.86	ND	79.7	30-130			
Diethylphthalate	1.57	0.38	mg/Kg dry	1.86	ND	84.4	40-140			
2,4-Dimethylphenol	1.47	0.38	mg/Kg dry	1.86	ND	79.3	30-130			
Dimethylphthalate	1.57	0.38	mg/Kg dry	1.86	ND	84.5	40-140			
2,4-Dinitrophenol	1.72	0.74	mg/Kg dry	1.86	ND	92.4	30-130			V-04
2,4-Dinitrotoluene	1.57	0.38	mg/Kg dry	1.86	ND	84.7	40-140			
2,6-Dinitrotoluene	1.66	0.38	mg/Kg dry	1.86	ND	89.4	40-140			
Di-n-octylphthalate	1.58	0.75	mg/Kg dry	1.86	ND	84.9	40-140			V-06
1,2-Diphenylhydrazine (as Azobenzene)	1.43	0.38	mg/Kg dry	1.86	ND	76.9	40-140			
Fluoranthene	1.66	0.19	mg/Kg dry	1.86	ND	89.4	40-140			
Fluorene	1.57	0.19	mg/Kg dry	1.86	ND	84.5	40-140			
Hexachlorobenzene	1.64	0.38	mg/Kg dry	1.86	ND	88.1	40-140			
Hexachlorobutadiene	1.30	0.38	mg/Kg dry	1.86	ND	70.1	40-140			V-06
Hexachloroethane	1.06	0.38	mg/Kg dry	1.86	ND	56.9	40-140			
Indeno(1,2,3-cd)pyrene	1.45	0.19	mg/Kg dry	1.86	ND	78.2	40-140			
Isophorone	1.52	0.38	mg/Kg dry	1.86	ND	82.1	40-140			
2-Methylnaphthalene	1.48	0.19	mg/Kg dry	1.86	ND	79.8	40-140			
2-Methylphenol	1.43	0.38	mg/Kg dry	1.86	ND	77.1	30-130			
3/4-Methylphenol	1.45	0.38	mg/Kg dry	1.86	ND	78.2	30-130			
Naphthalene	1.29	0.19	mg/Kg dry	1.86	ND	69.6	40-140			
Nitrobenzene	1.29	0.38	mg/Kg dry	1.86	ND	69.4	40-140			
2-Nitrophenol	1.29	0.38	mg/Kg dry	1.86	ND	69.2	30-130			
4-Nitrophenol	1.48	0.74	mg/Kg dry	1.86	ND	79.6	30-130			
Pentachlorophenol	1.66	0.38	mg/Kg dry	1.86	ND	89.2	30-130			
Phenanthrene	1.56	0.19	mg/Kg dry	1.86	ND	84.1	40-140			
Phenol	1.32	0.38	mg/Kg dry	1.86	ND	71.0	30-130			
Pyrene	1.58	0.19	mg/Kg dry	1.86	ND	85.4	40-140			
1,2,4-Trichlorobenzene	1.21	0.38	mg/Kg dry	1.86	ND	65.2	40-140			
2,4,5-Trichlorophenol	1.47	0.38	mg/Kg dry	1.86	ND	79.1	30-130			
2,4,6-Trichlorophenol	1.47	0.38	mg/Kg dry	1.86	ND	79.1	30-130			
Surrogate: 2-Fluorophenol	*4.68*		mg/Kg dry	7.42		63.0	30-130			
Surrogate: Phenol-d6	*6.11*		mg/Kg dry	7.42		82.4	30-130			
Surrogate: Nitrobenzene-d5	*4.67*		mg/Kg dry	7.42		62.8	30-130			
Surrogate: 2-Fluorobiphenyl	*2.72*		mg/Kg dry	3.71		73.3	30-130			
Surrogate: 2,4,6-Tribromophenol	*7.86*		mg/Kg dry	7.42		106	30-130			
Surrogate: p-Terphenyl-d14	*2.99*		mg/Kg dry	3.71		80.5	30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104013 - SW-846 3546										
Matrix Spike Dup (B104013-MSD1)		**Source: 14H1382-03**		Prepared: 09/02/14 Analyzed: 09/05/14						
Acenaphthene	1.58	0.19	mg/Kg dry	1.86	ND	84.9	40-140	3.18	30	
Acenaphthylene	1.57	0.19	mg/Kg dry	1.86	ND	84.6	40-140	3.27	30	
Acetophenone	0.947	0.38	mg/Kg dry	1.48	ND	63.8	40-140	7.76	30	
Aniline	1.11	0.38	mg/Kg dry	1.86	ND	59.7	40-140	7.61	30	
Anthracene	1.67	0.19	mg/Kg dry	1.86	ND	89.9	40-140	5.37	30	
Benzo(a)anthracene	1.66	0.19	mg/Kg dry	1.86	ND	89.4	40-140	4.44	30	
Benzo(a)pyrene	1.67	0.19	mg/Kg dry	1.86	ND	89.9	40-140	6.62	30	
Benzo(b)fluoranthene	1.67	0.19	mg/Kg dry	1.86	ND	90.2	40-140	7.50	30	
Benzo(g,h,i)perylene	1.62	0.19	mg/Kg dry	1.86	ND	87.5	40-140	13.9	30	
Benzo(k)fluoranthene	1.64	0.19	mg/Kg dry	1.86	ND	88.6	40-140	7.54	30	
Bis(2-chloroethoxy)methane	1.43	0.38	mg/Kg dry	1.86	ND	77.1	40-140	1.65	30	
Bis(2-chloroethyl)ether	1.24	0.38	mg/Kg dry	1.86	ND	66.7	40-140	6.66	30	
Bis(2-chloroisopropyl)ether	1.19	0.38	mg/Kg dry	1.86	ND	64.3	40-140	0.805	30	
Bis(2-Ethylhexyl)phthalate	1.72	0.38	mg/Kg dry	1.86	ND	92.9	40-140	3.97	30	
4-Bromophenylphenylether	1.74	0.38	mg/Kg dry	1.86	ND	93.7	40-140	6.89	30	
Butylbenzylphthalate	1.70	0.38	mg/Kg dry	1.86	ND	91.6	40-140	3.17	30	
4-Chloroaniline	1.36	0.74	mg/Kg dry	1.86	ND	73.3	40-140	5.54	30	
2-Chloronaphthalene	1.40	0.38	mg/Kg dry	1.86	ND	75.3	40-140	6.21	30	
2-Chlorophenol	1.22	0.38	mg/Kg dry	1.86	ND	66.0	30-130	0.303	30	
Chrysene	1.65	0.19	mg/Kg dry	1.86	ND	88.7	40-140	3.98	30	
Dibenz(a,h)anthracene	1.63	0.19	mg/Kg dry	1.86	ND	88.1	40-140	15.1	30	
Dibenzofuran	1.64	0.38	mg/Kg dry	1.86	ND	88.5	40-140	1.53	30	
Di-n-butylphthalate	1.76	0.38	mg/Kg dry	1.86	ND	94.8	40-140	6.22	30	
1,2-Dichlorobenzene	1.09	0.38	mg/Kg dry	1.86	ND	58.7	40-140	0.855	30	
1,3-Dichlorobenzene	1.02	0.38	mg/Kg dry	1.86	ND	54.8	40-140	1.84	30	
1,4-Dichlorobenzene	1.03	0.38	mg/Kg dry	1.86	ND	55.3	40-140	1.90	30	
3,3-Dichlorobenzidine	1.71	0.19	mg/Kg dry	1.86	ND	92.0	40-140	11.4	30	
2,4-Dichlorophenol	1.40	0.38	mg/Kg dry	1.86	ND	75.2	30-130	5.73	30	
Diethylphthalate	1.64	0.38	mg/Kg dry	1.86	ND	88.6	40-140	4.88	30	
2,4-Dimethylphenol	1.40	0.38	mg/Kg dry	1.86	ND	75.4	30-130	5.07	30	
Dimethylphthalate	1.63	0.38	mg/Kg dry	1.86	ND	87.6	40-140	3.58	30	
2,4-Dinitrophenol	1.89	0.74	mg/Kg dry	1.86	ND	102	30-130	9.74	30	V-04
2,4-Dinitrotoluene	1.66	0.38	mg/Kg dry	1.86	ND	89.3	40-140	5.29	30	
2,6-Dinitrotoluene	1.73	0.38	mg/Kg dry	1.86	ND	93.0	40-140	3.99	30	
Di-n-octylphthalate	1.82	0.75	mg/Kg dry	1.86	ND	98.0	40-140	14.4	30	V-06
1,2-Diphenylhydrazine (as Azobenzene)	1.50	0.38	mg/Kg dry	1.86	ND	80.8	40-140	4.90	30	
Fluoranthene	1.70	0.19	mg/Kg dry	1.86	ND	91.6	40-140	2.52	30	
Fluorene	1.62	0.19	mg/Kg dry	1.86	ND	87.2	40-140	3.07	30	
Hexachlorobenzene	1.79	0.38	mg/Kg dry	1.86	ND	96.4	40-140	8.93	30	
Hexachlorobutadiene	1.45	0.38	mg/Kg dry	1.86	ND	78.3	40-140	11.1	30	V-06
Hexachloroethane	1.10	0.38	mg/Kg dry	1.86	ND	59.3	40-140	4.17	30	
Indeno(1,2,3-cd)pyrene	1.65	0.19	mg/Kg dry	1.86	ND	89.0	40-140	12.9	30	
Isophorone	1.45	0.38	mg/Kg dry	1.86	ND	78.4	40-140	4.69	30	
2-Methylnaphthalene	1.39	0.19	mg/Kg dry	1.86	ND	75.1	40-140	6.07	30	
2-Methylphenol	1.22	0.38	mg/Kg dry	1.86	ND	65.8	30-130	15.9	30	
3/4-Methylphenol	1.20	0.38	mg/Kg dry	1.86	ND	64.7	30-130	18.8	30	
Naphthalene	1.35	0.19	mg/Kg dry	1.86	ND	72.6	40-140	4.16	30	
Nitrobenzene	1.35	0.38	mg/Kg dry	1.86	ND	72.9	40-140	4.89	30	
2-Nitrophenol	1.37	0.38	mg/Kg dry	1.86	ND	73.6	30-130	6.08	30	
4-Nitrophenol	1.47	0.74	mg/Kg dry	1.86	ND	79.2	30-130	0.504	30	
Pentachlorophenol	1.80	0.38	mg/Kg dry	1.86	ND	97.0	30-130	8.35	30	
Phenanthrene	1.65	0.19	mg/Kg dry	1.86	ND	89.1	40-140	5.77	30	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104013 - SW-846 3546										
Matrix Spike Dup (B104013-MSD1)		**Source: 14H1382-03**		Prepared: 09/02/14 Analyzed: 09/05/14						
Phenol	1.21	0.38	mg/Kg dry	1.86	ND	65.2	30-130	8.49	30	
Pyrene	1.59	0.19	mg/Kg dry	1.86	ND	85.9	40-140	0.584	30	
1,2,4-Trichlorobenzene	1.32	0.38	mg/Kg dry	1.86	ND	71.2	40-140	8.80	30	
2,4,5-Trichlorophenol	1.49	0.38	mg/Kg dry	1.86	ND	80.1	30-130	1.21	30	
2,4,6-Trichlorophenol	1.52	0.38	mg/Kg dry	1.86	ND	82.1	30-130	3.72	30	
Surrogate: 2-Fluorophenol	*4.95*		mg/Kg dry	7.42		66.7	30-130			
Surrogate: Phenol-d6	*5.46*		mg/Kg dry	7.42		73.5	30-130			
Surrogate: Nitrobenzene-d5	*5.06*		mg/Kg dry	7.42		68.1	30-130			
Surrogate: 2-Fluorobiphenyl	*2.77*		mg/Kg dry	3.71		74.6	30-130			
Surrogate: 2,4,6-Tribromophenol	*8.32*		mg/Kg dry	7.42		112	30-130			
Surrogate: p-Terphenyl-d14	*2.97*		mg/Kg dry	3.71		80.1	30-130			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104009 - SW-846 3546										
Blank (B104009-BLK1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.221*		mg/Kg wet	0.200		110	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.204*		mg/Kg wet	0.200		102	30-150			
Surrogate: Tetrachloro-m-xylene	*0.216*		mg/Kg wet	0.200		108	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.198*		mg/Kg wet	0.200		99.1	30-150			
LCS (B104009-BS1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Aroclor-1016	0.21	0.10	mg/Kg wet	0.200		106	40-140			
Aroclor-1016 [2C]	0.19	0.10	mg/Kg wet	0.200		96.8	40-140			
Aroclor-1260	0.21	0.10	mg/Kg wet	0.200		105	40-140			
Aroclor-1260 [2C]	0.19	0.10	mg/Kg wet	0.200		94.2	40-140			
Surrogate: Decachlorobiphenyl	*0.217*		mg/Kg wet	0.200		108	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.202*		mg/Kg wet	0.200		101	30-150			
Surrogate: Tetrachloro-m-xylene	*0.212*		mg/Kg wet	0.200		106	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.196*		mg/Kg wet	0.200		98.2	30-150			
LCS Dup (B104009-BSD1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Aroclor-1016	0.22	0.10	mg/Kg wet	0.200		109	40-140	1.93	30	
Aroclor-1016 [2C]	0.20	0.10	mg/Kg wet	0.200		99.2	40-140	2.45	30	
Aroclor-1260	0.21	0.10	mg/Kg wet	0.200		107	40-140	1.48	30	
Aroclor-1260 [2C]	0.20	0.10	mg/Kg wet	0.200		98.5	40-140	4.46	30	
Surrogate: Decachlorobiphenyl	*0.214*		mg/Kg wet	0.200		107	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.198*		mg/Kg wet	0.200		99.0	30-150			
Surrogate: Tetrachloro-m-xylene	*0.212*		mg/Kg wet	0.200		106	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.197*		mg/Kg wet	0.200		98.4	30-150			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104003 - SW-846 3546										
Blank (B104003-BLK1)				Prepared: 09/02/14 Analyzed: 09/03/14						
TPH (C9-C36)	ND	8.3	mg/Kg wet							
Surrogate: o-Terphenyl	*2.85*		mg/Kg wet	3.37		84.5	40-140			
LCS (B104003-BS1)				Prepared: 09/02/14 Analyzed: 09/03/14						
TPH (C9-C36)	27.2	8.3	mg/Kg wet	33.3		81.5	40-140			
Surrogate: o-Terphenyl	*3.03*		mg/Kg wet	3.37		90.1	40-140			
LCS Dup (B104003-BSD1)				Prepared: 09/02/14 Analyzed: 09/03/14						
TPH (C9-C36)	26.6	8.3	mg/Kg wet	33.3		79.8	40-140	2.18	30	
Surrogate: o-Terphenyl	*2.90*		mg/Kg wet	3.37		86.1	40-140			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B103996 - SW-846 3050B										
Blank (B103996-BLK1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Arsenic	ND	2.5	mg/Kg wet							
Barium	ND	2.5	mg/Kg wet							
Cadmium	ND	0.25	mg/Kg wet							
Chromium	ND	0.50	mg/Kg wet							
Lead	ND	0.75	mg/Kg wet							
Selenium	ND	2.5	mg/Kg wet							
Silver	ND	0.50	mg/Kg wet							
LCS (B103996-BS1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Arsenic	141	5.0	mg/Kg wet	122		116	77.8-122.1			
Barium	182	5.0	mg/Kg wet	167		109	82-117.4			
Cadmium	96.7	0.50	mg/Kg wet	88.0		110	81.9-118.2			
Chromium	114	0.99	mg/Kg wet	102		111	78.7-120.6			
Lead	104	1.5	mg/Kg wet	94.5		110	82.4-117.8			
Selenium	173	5.0	mg/Kg wet	157		110	77.1-122.3			
Silver	32.5	0.99	mg/Kg wet	34.2		95.2	74.3-125.4			
LCS Dup (B103996-BSD1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Arsenic	143	5.0	mg/Kg wet	122		117	77.8-122.1	1.21	30	
Barium	181	5.0	mg/Kg wet	167		108	82-117.4	0.720	30	
Cadmium	96.8	0.50	mg/Kg wet	88.0		110	81.9-118.2	0.0724	30	
Chromium	114	0.99	mg/Kg wet	102		111	78.7-120.6	0.0987	30	
Lead	101	1.5	mg/Kg wet	94.5		107	82.4-117.8	2.59	30	
Selenium	177	5.0	mg/Kg wet	157		113	77.1-122.3	2.21	30	
Silver	32.0	0.99	mg/Kg wet	34.2		93.7	74.3-125.4	1.55	30	
MRL Check (B103996-MRL1)				Prepared: 09/02/14 Analyzed: 09/04/14						
Lead	0.767	0.71	mg/Kg wet	0.712		108	80-120			
Batch B104104 - SW-846 7471										
Blank (B104104-BLK1)				Prepared: 09/03/14 Analyzed: 09/04/14						
Mercury	ND	0.025	mg/Kg wet							
LCS (B104104-BS1)				Prepared: 09/03/14 Analyzed: 09/04/14						
Mercury	5.77	0.36	mg/Kg wet	5.76		100	71.2-128.6			
LCS Dup (B104104-BSD1)				Prepared: 09/03/14 Analyzed: 09/04/14						
Mercury	6.07	0.38	mg/Kg wet	5.76		105	71.2-128.6	4.96	30	
Batch B104186 - SW-846 7471										
Blank (B104186-BLK1)				Prepared: 09/04/14 Analyzed: 09/05/14						
Mercury	ND	0.025	mg/Kg wet							

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104186 - SW-846 7471										
LCS (B104186-BS1)				Prepared: 09/04/14 Analyzed: 09/05/14						
Mercury	5.93	0.41	mg/Kg wet	5.76		103	71.2-128.6			
LCS Dup (B104186-BSD1)				Prepared: 09/04/14 Analyzed: 09/05/14						
Mercury	5.96	0.39	mg/Kg wet	5.76		104	71.2-128.6	0.584	30	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B103973 - SW-846 9014										
Blank (B103973-BLK1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Reactive Cyanide	ND	0.40	mg/Kg							
LCS (B103973-BS1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Reactive Cyanide	9.4	0.40	mg/Kg	10.0		94.4	81.3-113			
Batch B103974 - SW-846 9030A										
Blank (B103974-BLK1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Reactive Sulfide	ND	2.0	mg/Kg							
LCS (B103974-BS1)				Prepared: 09/02/14 Analyzed: 09/03/14						
Reactive Sulfide	16	2.0	mg/Kg	14.4		108	24.3-135			
Batch B104027 - SW-846 9045C										
LCS (B104027-BS1)				Prepared & Analyzed: 08/29/14						
pH	6.04		pH Units	6.00		101	98.5-102			
LCS (B104027-BS2)				Prepared & Analyzed: 08/29/14						
pH	6.02		pH Units	6.00		100	98.5-102			
Duplicate (B104027-DUP1)	**Source: 14H1382-09**			Prepared & Analyzed: 08/29/14						
pH	8.0		pH Units		8.0			0.124	5.72	
Batch B104172 - % Solids										
Duplicate (B104172-DUP2)	**Source: 14H1382-05**			Prepared & Analyzed: 09/04/14						
% Solids	79.5		% Wt		80.1			0.752	20	
Batch B104241 - SW-846 9014										
Blank (B104241-BLK1)				Prepared & Analyzed: 09/05/14						
Reactive Cyanide	ND	0.40	mg/Kg							
LCS (B104241-BS1)				Prepared & Analyzed: 09/05/14						
Reactive Cyanide	9.4	0.40	mg/Kg	10.0		94.4	81.3-113			
Batch B104272 - SW-846 9030A										
Blank (B104272-BLK1)				Prepared & Analyzed: 09/05/14						
Reactive Sulfide	ND	2.0	mg/Kg							

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104272 - SW-846 9030A										
LCS (B104272-BS1)				Prepared & Analyzed: 09/05/14						
Reactive Sulfide	14	2.0	mg/Kg	14.8		94.6	24.3-135			
Batch B104388 - SM18-20 2510B										
Blank (B104388-BLK1)				Prepared & Analyzed: 09/08/14						
Specific conductance	ND	2.0	µmhos/cm							
LCS (B104388-BS1)				Prepared & Analyzed: 09/08/14						
Specific conductance	150	2.0	µmhos/cm	147		99.7	86.9-106			

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-306 (0-3)

Lab Sample ID: 14H1382-05 Date(s) Analyzed: 09/04/2014 09/04/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	39	
	2	0.00	0.00	0.00	36	9.0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-307 (2-6)

Lab Sample ID: 14H1382-07 Date(s) Analyzed: 09/04/2014 09/04/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	8.8	
	2	0.00	0.00	0.00	8.8	0.2

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-309 (4-8)

Lab Sample ID: 14H1382-09 Date(s) Analyzed: 09/04/2014 09/04/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1248	1	0.00	0.00	0.00	0.50	
	2	0.00	0.00	0.00	0.77	43.3
Aroclor-1254	1	0.00	0.00	0.00	0.71	
	2	0.00	0.00	0.00	0.60	17.1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B104009-BS1 Date(s) Analyzed: 09/03/2014 09/03/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.21	
	2	0.00	0.00	0.00	0.19	11
Aroclor-1260	1	0.00	0.00	0.00	0.21	
	2	0.00	0.00	0.00	0.19	10

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B104009-BSD1 Date(s) Analyzed: 09/03/2014 09/03/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.20	8
Aroclor-1260	1	0.00	0.00	0.00	0.21	
	2	0.00	0.00	0.00	0.20	6

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-14	Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.
O-32	A five times dilution was performed as part of the standard analytical procedure.
P-02	Sample RPD between primary and confirmatory analysis exceeded 40%. Per EPA method 8000, the lower value was reported due to obvious chromatographic interference on the column with the higher result.
P-04	Due to continuing calibration non-conformance on the confirmatory detector, the lower of two results was reported.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-06	Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 1030 in Soil	
Ignitability	NY,NH,CT,NC,ME,VA,NJ
SW-846 6010C in Soil	
Arsenic	CT,NH,NY,ME,NC,VA,NJ
Barium	CT,NH,NY,ME,NC,VA,NJ
Cadmium	CT,NH,NY,ME,NC,VA,NJ
Chromium	CT,NH,NY,ME,NC,VA,NJ
Lead	CT,NH,NY,AIHA,ME,NC,VA,NJ
Selenium	CT,NH,NY,ME,NC,VA,NJ
Silver	CT,NH,NY,ME,NC,VA,NJ
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA,NJ
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC
SW-846 8260C in Soil	
Acetone	CT,NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NH,NY,ME
Bromochloromethane	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Soil	
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	CT,NH,NY,ME
4-Chlorotoluene	CT,NH,NY,ME
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NH,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	CT,NH,NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NH,NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	CT,NH,NY,ME
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl tert-Butyl Ether (MTBE)	NY
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY
Naphthalene	NH,NY,ME
n-Propylbenzene	NH,NY
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
Tetrachloroethylene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,2,4-Trimethylbenzene	CT,NH,NY,ME
1,3,5-Trimethylbenzene	CT,NH,NY,ME
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Soil	
o-Xylene	CT,NH,NY,ME
SW-846 8270D in Soil	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Acetophenone	NY,NH
Aniline	NY,NH
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	NY,NH
1,3-Dichlorobenzene	NY,NH
1,4-Dichlorobenzene	NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
1,2-Diphenylhydrazine (as Azobenzene)	NY,NH
Fluoranthene	CT,NY,NH
Fluorene	NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachloroethane	CT,NY,NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270D in Soil	
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

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www.contestlabs.com
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East longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

14H1382

Rev 04.05.12

Page 1 of 1

Company Name: EBI Consulting
Address: 21 B Street
Burlington, MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St, Woburn, MA
Sampled By: Daniel Bellucci

Telephone: 781-418-2344
Project #
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ◉ PDF ◉ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	VOCs (826)	SVOCs (8270)	TPH (8100M)	RCRA 8 Metals (6010)	PCBs (8082)	pH (9045c)	Conductivity (2510B)	Ignitibility (1030)	Reactivity (9030A/9014)	TCLP/Hex Cr as needed	based on 20x rule/CR>30, g/kg
							# of Containers	3	1	2								
							** Preservation	I	M	B								
							***Container Code	A	V	V								
01	EB-301 (4-10')	08/29/14	08:30	X		S	U	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
02	EB-301 (0')		08:30		X	S	U	X										
03	EB-304 (5-10')		09:30	X		S	U		X	X	X	X	X	X	X	X	X	X
04	EB-304 (7')		09:30		X	S	U	X										
05	EB-306 (0-3')		09:50	X	X	S	U		X	X	X	X	X	X	X	X	X	X
06	EB-306 (2')		09:50		X	S	U	X										
07	EB-307 (2-6')		10:15	X		S	U		X	X	X	X	X	X	X	X	X	X
08	EB-307 (3')		10:15		X	S	U	X										
09	EB-309 (4-8')		11:00	X		S	U		X	X	X	X	X	X	X	X	X	X
10	EB-309 (6')		11:00		X	S	U	X										

Comments: * TCLP Cr total, III Cr, IV Cr, Antimony on standby *

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

*Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Relinquished by: (signature)	Date/Time: 08/29/14	
Received by: (signature)	Date/Time: 8/29/14 16:10	
Relinquished by: (signature)	Date/Time: 8/29/14 1915	
Received by: (signature) Cassie Cates 3.9° 8.29.14	Date/Time: 1915	

Turnaround ††
☐ 7-Day
☐ 10-Day
☑ Other 5-day

RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: Com 97
Connecticut:
Other:

Is your project MCP or RCP ?
◉ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

AIHA LAP, LLC ACCREDITED LABORATORY
ACCREDITED IN ACCORDANCE WITH nelac

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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East Longmeadow, MA. 01028
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F: 413-525-6405
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Sample Receipt Checklist

CLIENT NAME: EBI **RECEIVED BY:** CC **DATE:** 8·29·14

1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included

2) Does the chain agree with the samples? Yes No

If not, explain:

3) Are all the samples in good condition? Yes No

If not, explain:

4) How were the samples received:

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 3.9°

5) Are there Dissolved samples for the lab to filter? Yes No

Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes No

Who was notified David Date 8·29·14 Time 1915

7) Location where samples are stored: 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No N/A _____

9) Do all samples have the proper Base pH: Yes No N/A _____

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	15A
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	15	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol 5

Bisulfate 10 # DI Water _____

Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	T	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** CC **Date/Time:** 8.29.14 1915

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory	Project #: 14H1382
Project Location: 1071 Main St., Woburn, MA	RTN:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

14H1382-01 thru 14H1382-10

Matrices: Soil

CAM Protocol (check all that below)

8260 VOC CAM II A (X)	7470/7471 Hg CAM IIIB (X)	MassDEP VPH CAM IV A ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassDEP APH CAM IX A ( )
8270 SVOC CAM II B (X)	7010 Metals CAM III C ( )	MassDEP EPH CAM IV A ( )	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )
6010 Metals CAM III A (X)	6020 Metals CAM III D ( )	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )	

Affirmative response to Questions A throughF is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No[1]
B	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?	☑ Yes	☐ No[1]
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No[1]
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?	☑ Yes	☐ No[1]
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☐ Yes	☐ No[1]
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes	☐ No[1]
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?	☑ Yes	☐ No[1]

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC perfomance standards specified in the CAM protocol(s) achieved?	☐ Yes	☑ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes	☑ No[1]

[1] *All Negative responses must be addressed in an attached Environmental Laboratory case narrative.*

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

Signature: _____ Position: Laboratory Manager

Printed Name: Daren J. Damboragian Date: 09/08/14

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

September 16, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St. Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14I0321

Enclosed are results of analyses for samples received by the laboratory on September 9, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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con-test® ANALYTICAL LABORATORY

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EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 9/16/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14I0321

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St. Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-308 (2-5)	14I0321-01	Soil		SW-846 1311 SW-846 6010C	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 6010, only TCLP Cr was requested and reported.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski
Laboratory Director

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14I0321
Date Received: 9/9/2014
Field Sample #: EB-308 (2-5)
Sampled: 8/29/2014 10:50
Sample ID: 14I0321-01
Sample Matrix: Soil

TCLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chromium	0.36	0.010	mg/L	1		SW-846 6010C	9/11/14	9/11/14 14:24	OP

con-test® ANALYTICAL LABORATORY

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Sample Extraction Data

Prep Method: SW-846 3010A-SW-846 6010C **Leachates were extracted on 9/10/2014 per SW-846 1311 in Batch B104541**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14I0321-01 [EB-308 (2-5)]	B104634	50.0	50.0	09/11/14

con-test® ANALYTICAL LABORATORY

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QUALITY CONTROL

TCLP - Metals Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104634 - SW-846 3010A										
Blank (B104634-BLK1)				Prepared & Analyzed: 09/11/14						
Chromium	ND	0.010	mg/L							
LCS (B104634-BS1)				Prepared & Analyzed: 09/11/14						
Chromium	0.482	0.010	mg/L	0.500		96.3	80-120			
LCS Dup (B104634-BSD1)				Prepared & Analyzed: 09/11/14						
Chromium	0.479	0.010	mg/L	0.500		95.9	80-120	0.505	20	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010C in Water	
Chromium	NY,CT,ME,NC,NH,VA,NJ

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

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CHAIN OF CUSTODY RECORD

14H1387 (MK)

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Page 1 of 1

Company Name: EBI Consulting
Address: 21 B St
Burlington MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St, Woburn, MA
Sampled By: Dan Bellucci

Telephone: 14I0321
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ○ PDF ○ EXCEL ○ GIS ○ OTHER ○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	Total Chromium	Trivalent Chromium	Hex Chromium	Antimony
01	EB-302 (2-5')	08/29/14	09:00		X	X	U	X	X	X	X
02	EB-303 (1-4')		09:15		X	X	U	X	X	X	X
03	EB-305 (2-5')		09:40		X	X	U	X	X	X	X
-01 ⊛ 04 (MK)	EB-308 (2-5')		10:50		X	X	U	V	X	X	X

# of Containers
** Preservation
***Container Code

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other

Comments:
⊛ Reactivate for TCIP Cr per attached email MEK 9/9/14

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
[signature]	08/29/14
Received by: (signature) [signature] 8/29/14	Date/Time: 1610
Relinquished by: (signature) [signature] 8/29/14	Date/Time: 1915
Received by: (signature) [signature] 3.9° 8.29.14	Date/Time: 1915

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: RCS-1
Connecticut:
Other:

Is your project MCP or RCP ?
◉ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

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Sample Receipt Checklist

CLIENT NAME: EBI RECEIVED BY: CC DATE: 8·29·14

1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included

2) Does the chain agree with the samples? Yes No
If not, explain:

3) Are all the samples in good condition? Yes No
If not, explain:

4) How were the samples received:
On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 3.9°

5) Are there Dissolved samples for the lab to filter? Yes No
Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes No
Who was notified David Date 8·29·14 Time 1915

7) Location where samples are stored: 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No N/A _____

9) Do all samples have the proper Base pH: Yes No N/A _____

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	4A
500 mL Amber		4 oz amber/clear jar	4C
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below		Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Doc# 277
Rev. 4 August 2013

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	T	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? Date/Time:

Doc #277 Rev. 4 August 2013 Log-In Technician Initials: CC Date/Time: 8·29·14 1915

MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Con-Test Analytical Laboratory	Project #:	14I0321
Project Location:	1071 Main St. Woburn, MA	RTN:	

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

14I0321-01

Matrices: Soil

CAM Protocol (check all that below)

8260 VOC CAM II A ( )	7470/7471 Hg CAM IIIB ( )	MassDEP VPH CAM IV A ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassDEP APH CAM IX A ( )
8270 SVOC CAM II B ( )	7010 Metals CAM III C ( )	MassDEP EPH CAM IV A ( )	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )
6010 Metals CAM III A ( )	6020 Metals CAM III D ( )	8082 PCB CAM V A ( )	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )	

Affirmative response to Questions A throughF is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No[1]
B	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?	☑ Yes	☐ No[1]
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No[1]
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?	☑ Yes	☐ No[1]
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☐ Yes	☐ No[1]
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes	☐ No[1]
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?	☑ Yes	☐ No[1]

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC perfomance standards specified in the CAM protocol(s) achieved?	☑ Yes	☐ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes	☑ No[1]

[1] *All Negative responses must be addressed in an attached Environmental Laboratory case narrative.*

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

Signature: Tod Kopyscinski Position: Laboratory Director

Printed Name: Tod E. Kopyscinski Date: 09/16/14

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September 16, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St. Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14I0340

Enclosed are results of analyses for samples received by the laboratory on September 9, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 9/16/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14I0340

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St. Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-303 (1-4)	14I0340-01	Soil		SM 2540G	
				SW-846 8082A	
EB-308 (2-5)	14I0340-02	Soil		SM 2540G	
				SW-846 8082A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski
Laboratory Director

con-test® ANALYTICAL LABORATORY

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Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14I0340

Date Received: 9/9/2014

Field Sample #: EB-303 (1-4)
Sampled: 8/29/2014 09:15

Sample ID: 14I0340-01

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1254 [2]	0.26	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	81.8	30-150		9/12/14 15:07
Decachlorobiphenyl [2]	84.8	30-150		9/12/14 15:07
Tetrachloro-m-xylene [1]	81.7	30-150		9/12/14 15:07
Tetrachloro-m-xylene [2]	88.5	30-150		9/12/14 15:07

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Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14I0340
Date Received: 9/9/2014
Field Sample #: EB-303 (1-4)
Sampled: 8/29/2014 09:15
Sample ID: 14I0340-01
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	94.0		% Wt	1		SM 2540G	9/10/14	9/11/14 7:34	MRL

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Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14I0340

Date Received: 9/9/2014

Field Sample #: EB-308 (2-5)
Sampled: 8/29/2014 10:50

Sample ID: 14I0340-02

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1254 [2]	0.30	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	73.4	30-150		9/12/14 15:19
Decachlorobiphenyl [2]	75.6	30-150		9/12/14 15:19
Tetrachloro-m-xylene [1]	73.9	30-150		9/12/14 15:19
Tetrachloro-m-xylene [2]	80.5	30-150		9/12/14 15:19

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Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14I0340
Date Received: 9/9/2014
Field Sample #: EB-308 (2-5)
Sampled: 8/29/2014 10:50
Sample ID: 14I0340-02
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.4		% Wt	1		SM 2540G	9/10/14	9/11/14 7:34	MRL

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Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14I0340-01 [EB-303 (1-4)]	B104578	09/10/14
14I0340-02 [EB-308 (2-5)]	B104578	09/10/14

Prep Method: SW-846 3546-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14I0340-01 [EB-303 (1-4)]	B104573	10.1	10.0	09/10/14
14I0340-02 [EB-308 (2-5)]	B104573	10.2	10.0	09/10/14

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104573 - SW-846 3546										
Blank (B104573-BLK1)				Prepared: 09/10/14 Analyzed: 09/12/14						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.217*		mg/Kg wet	0.200		109	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.213*		mg/Kg wet	0.200		107	30-150			
Surrogate: Tetrachloro-m-xylene	*0.195*		mg/Kg wet	0.200		97.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.199*		mg/Kg wet	0.200		99.6	30-150			
LCS (B104573-BS1)				Prepared: 09/10/14 Analyzed: 09/12/14						
Aroclor-1016	0.20	0.10	mg/Kg wet	0.200		98.8	40-140			
Aroclor-1016 [2C]	0.20	0.10	mg/Kg wet	0.200		102	40-140			
Aroclor-1260	0.20	0.10	mg/Kg wet	0.200		99.0	40-140			
Aroclor-1260 [2C]	0.21	0.10	mg/Kg wet	0.200		106	40-140			
Surrogate: Decachlorobiphenyl	*0.205*		mg/Kg wet	0.200		103	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.207*		mg/Kg wet	0.200		103	30-150			
Surrogate: Tetrachloro-m-xylene	*0.183*		mg/Kg wet	0.200		91.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.197*		mg/Kg wet	0.200		98.5	30-150			
LCS Dup (B104573-BSD1)				Prepared: 09/10/14 Analyzed: 09/12/14						
Aroclor-1016	0.21	0.10	mg/Kg wet	0.200		103	40-140	4.52	30	
Aroclor-1016 [2C]	0.22	0.10	mg/Kg wet	0.200		108	40-140	5.73	30	
Aroclor-1260	0.21	0.10	mg/Kg wet	0.200		104	40-140	4.85	30	
Aroclor-1260 [2C]	0.22	0.10	mg/Kg wet	0.200		111	40-140	4.02	30	
Surrogate: Decachlorobiphenyl	*0.215*		mg/Kg wet	0.200		108	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.217*		mg/Kg wet	0.200		108	30-150			
Surrogate: Tetrachloro-m-xylene	*0.194*		mg/Kg wet	0.200		97.1	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.209*		mg/Kg wet	0.200		104	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104573 - SW-846 3546										
Matrix Spike (B104573-MS1)		**Source: 14I0340-02**		Prepared: 09/10/14 Analyzed: 09/12/14						
Aroclor-1016	0.17	0.11	mg/Kg dry	0.224	ND	75.6	40-140			
Aroclor-1016 [2C]	0.21	0.11	mg/Kg dry	0.224	ND	91.7	40-140			
Aroclor-1260	0.19	0.11	mg/Kg dry	0.224	ND	86.3	40-140			
Aroclor-1260 [2C]	0.23	0.11	mg/Kg dry	0.224	ND	102	40-140			
Surrogate: Decachlorobiphenyl	*0.153*		mg/Kg dry	0.224		68.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.156*		mg/Kg dry	0.224		69.6	30-150			
Surrogate: Tetrachloro-m-xylene	*0.157*		mg/Kg dry	0.224		70.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.172*		mg/Kg dry	0.224		76.8	30-150			
Matrix Spike Dup (B104573-MSD1)		**Source: 14I0340-02**		Prepared: 09/10/14 Analyzed: 09/12/14						
Aroclor-1016	0.17	0.11	mg/Kg dry	0.222	ND	78.3	40-140	2.46	30	
Aroclor-1016 [2C]	0.22	0.11	mg/Kg dry	0.222	ND	100	40-140	7.58	30	
Aroclor-1260	0.22	0.11	mg/Kg dry	0.222	ND	97.7	40-140	11.4	30	
Aroclor-1260 [2C]	0.25	0.11	mg/Kg dry	0.222	ND	115	40-140	11.2	30	
Surrogate: Decachlorobiphenyl	*0.172*		mg/Kg dry	0.222		77.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.174*		mg/Kg dry	0.222		78.7	30-150			
Surrogate: Tetrachloro-m-xylene	*0.159*		mg/Kg dry	0.222		71.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.174*		mg/Kg dry	0.222		78.3	30-150			

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-303 (1-4)

Lab Sample ID: 14I0340-01

Date(s) Analyzed: 09/12/2014 09/12/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	0.21	
	2	0.00	0.00	0.00	0.26	22.2

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-308 (2-5)

Lab Sample ID: 14I0340-02 Date(s) Analyzed: 09/12/2014 09/12/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	0.25	
	2	0.00	0.00	0.00	0.30	19.8

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B104573-BS1

Date(s) Analyzed: 09/12/2014 09/12/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.20	
	2	0.00	0.00	0.00	0.20	1
Aroclor-1260	1	0.00	0.00	0.00	0.20	
	2	0.00	0.00	0.00	0.21	6

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B104573-BSD1 Date(s) Analyzed: 09/12/2014 09/12/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.21	
	2	0.00	0.00	0.00	0.22	6
Aroclor-1260	1	0.00	0.00	0.00	0.21	
	2	0.00	0.00	0.00	0.22	6

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B104573-MS1 Date(s) Analyzed: 09/12/2014 09/12/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.17	
	2	0.00	0.00	0.00	0.21	22
Aroclor-1260	1	0.00	0.00	0.00	0.19	
	2	0.00	0.00	0.00	0.23	18

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike Dup

Lab Sample ID: B104573-MSD1

Date(s) Analyzed: 09/12/2014 09/12/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.17	
	2	0.00	0.00	0.00	0.22	23
Aroclor-1260	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.25	14

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

CHAIN OF CUSTODY RECORD

con-test ANALYTICAL LABORATORY
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Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

39 Spruce Street
East longmeadow, MA 01028

Page 1 of 1

~~1411387~~ 1410340

Rev 04.05.12

Company Name: EBI Consulting
Address: 21 B St
Burlington MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St, Woburn, MA
Sampled By: Don Bellucci

Telephone:
Project # 1214C0078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ○ PDF ○ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	Total Chromium	Trivalent Chromium	Hex Chromium	Antimony	PCBs	# of Containers	** Preservation	***Container Code
01	EB-302 (2-5')	08/29/14	09:00		X	X	U	X	X	X	X				
01 (R) 02	EB-303 (1-4')		09:15		X	X	U	X	X	X	X	X			
03	EB-305 (2-5')		09:40		X	X	U	X	X	X	X				
02 (R) 04 (MP)	EB-308 (2-5')		10:50		X	X	U	X	X	X	X	X			

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V=vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Comments:
(R) Activate per attached email. MP 9/9/14

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time: 08/29/14
Received by: (signature)	Date/Time: 8/29/14 1610
Relinquished by: (signature)	Date/Time: 8/29/14 1915
Received by: (signature) Coffee Cats 3.9° 8.29.14	Date/Time: 1915

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: RCS-1
Connecticut:
Other:

Is your project MCP or RCP ?
● MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

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Sample Receipt Checklist

CLIENT NAME: EBI RECEIVED BY: CC DATE: 8.29.14

1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included
2) Does the chain agree with the samples? Yes No
   If not, explain:
3) Are all the samples in good condition? Yes No
   If not, explain:
4) How were the samples received:

On Ice ☑ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☑

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 3.9°

5) Are there Dissolved samples for the lab to filter? Yes No
   Who was notified _____ Date _____ Time _____
6) Are there any RUSH or SHORT HOLDING TIME samples? Yes No
   Who was notified David Date 8.29.14 Time 1915
7) Location where samples are stored: 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No N/A _____
9) Do all samples have the proper Base pH: Yes No N/A _____
10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	4A
500 mL Amber		4 oz amber/clear jar	4C
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below		Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Doc# 277
Rev. 4 August 2013

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	T	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? Date/Time:

Doc #277 Rev. 4 August 2013 Log-In Technician Initials: CC Date/Time: 8·29·14 1915

Meghan Kelley

From: Daniel Bellucci [dbellucci@ebiconsulting.com]
Sent: Tuesday, September 09, 2014 3:11 PM
To: Meghan Kelley
Cc: Ed Giordano; Brian Kilcoyne
Subject: FW: Con-Test Analytical Laboratory 1071 Main St., Woburn, MA: 12140078
Attachments: 14H1387_1 Contest MAMCP 09 08 14 1324.zip; 14H1387_1 Contest_Final 09 08 14 1324.pdf

Hi Meghan,

Could we also run EB-303 (1-4') and EB-308 (2-5') for PCBs 8082?

Also, what is the hold time for PCBs for the remaining samples?

Thanks,
Dan

Daniel Bellucci
Environmental Scientist
P: 781.418.2344
21 B Street | Burlington, MA 01803
dbellucci@ebiconsulting.com
Visit our new website: www.ebiconsulting.com

Please consider the environment before printing this email

-----Original Message-----
From: Con-Test Reports (Unattended Mailbox) [mailto:reports@contestlabs.com]
Sent: Monday, September 08, 2014 1:31 PM
To: Daniel Bellucci
Subject: Con-Test Analytical Laboratory 1071 Main St., Woburn, MA: 12140078

This is an automated email message from the Element DataSystem(r) LIMS at Con-Test Analytical Laboratory. It includes one or more file attachments. If you have any questions about this email or if this email has been sent to you in error, please contact:

Con-Test Analytical Laboratory
39 Spruce Street
East Longmeadow, MA 01028
413.525.2332 Phone
413.525.6405 Fax

Submitting Client: EBI Consultants
Project Name: 1071 Main St., Woburn, MA

MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Con-Test Analytical Laboratory	Project #:	14I0340
Project Location:	1071 Main St. Woburn, MA	RTN:	

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

14I0340-01 thru 14I0340-02

Matrices: Soil

CAM Protocol (check all that below)

8260 VOC CAM II A ( )	7470/7471 Hg CAM IIIB ( )	MassDEP VPH CAM IV A ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassDEP APH CAM IX A ( )
8270 SVOC CAM II B ( )	7010 Metals CAM III C ( )	MassDEP EPH CAM IV A ( )	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )
6010 Metals CAM III A ( )	6020 Metals CAM III D ( )	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )	

Affirmative response to Questions A throughF is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No[1]
B	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?	☑ Yes	☐ No[1]
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No[1]
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?	☑ Yes	☐ No[1]
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☐ Yes	☐ No[1]
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes	☐ No[1]
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?	☑ Yes	☐ No[1]

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC perfomance standards specified in the CAM protocol(s) achieved?	☑ Yes	☐ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

[1] *All Negative responses must be addressed in an attached Environmental Laboratory case narrative.*

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

Signature: Tod Kopyscinski Position: Laboratory Director

Printed Name: Tod E. Kopyscinski Date: 09/16/14

con-test® ANALYTICAL LABORATORY
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September 16, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St. Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14I0340

Enclosed are results of analyses for samples received by the laboratory on September 9, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 9/16/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14I0340

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St. Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-303 (1-4)	14I0340-01	Soil		SM 2540G	
				SW-846 8082A	
EB-308 (2-5)	14I0340-02	Soil		SM 2540G	
				SW-846 8082A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski
Laboratory Director

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14I0340

Date Received: 9/9/2014

Field Sample #: EB-303 (1-4)
Sampled: 8/29/2014 09:15

Sample ID: 14I0340-01

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1254 [2]	0.26	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:07	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	81.8	30-150		9/12/14 15:07
Decachlorobiphenyl [2]	84.8	30-150		9/12/14 15:07
Tetrachloro-m-xylene [1]	81.7	30-150		9/12/14 15:07
Tetrachloro-m-xylene [2]	88.5	30-150		9/12/14 15:07

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Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14I0340
Date Received: 9/9/2014
Field Sample #: EB-303 (1-4)
Sampled: 8/29/2014 09:15
Sample ID: 14I0340-01
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	94.0		% Wt	1		SM 2540G	9/10/14	9/11/14 7:34	MRL

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14I0340

Date Received: 9/9/2014

Field Sample #: EB-308 (2-5)
Sampled: 8/29/2014 10:50

Sample ID: 14I0340-02

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1254 [2]	0.30	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/10/14	9/12/14 15:19	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	73.4	30-150		9/12/14 15:19
Decachlorobiphenyl [2]	75.6	30-150		9/12/14 15:19
Tetrachloro-m-xylene [1]	73.9	30-150		9/12/14 15:19
Tetrachloro-m-xylene [2]	80.5	30-150		9/12/14 15:19

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Project Location: 1071 Main St. Woburn, MA
Sample Description:
Work Order: 14I0340
Date Received: 9/9/2014
Field Sample #: EB-308 (2-5)
Sampled: 8/29/2014 10:50
Sample ID: 14I0340-02
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.4		% Wt	1		SM 2540G	9/10/14	9/11/14 7:34	MRL

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Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14I0340-01 [EB-303 (1-4)]	B104578	09/10/14
14I0340-02 [EB-308 (2-5)]	B104578	09/10/14

Prep Method: SW-846 3546-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14I0340-01 [EB-303 (1-4)]	B104573	10.1	10.0	09/10/14
14I0340-02 [EB-308 (2-5)]	B104573	10.2	10.0	09/10/14

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104573 - SW-846 3546										
Blank (B104573-BLK1)				Prepared: 09/10/14 Analyzed: 09/12/14						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.217*		mg/Kg wet	0.200		109	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.213*		mg/Kg wet	0.200		107	30-150			
Surrogate: Tetrachloro-m-xylene	*0.195*		mg/Kg wet	0.200		97.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.199*		mg/Kg wet	0.200		99.6	30-150			
LCS (B104573-BS1)				Prepared: 09/10/14 Analyzed: 09/12/14						
Aroclor-1016	0.20	0.10	mg/Kg wet	0.200		98.8	40-140			
Aroclor-1016 [2C]	0.20	0.10	mg/Kg wet	0.200		102	40-140			
Aroclor-1260	0.20	0.10	mg/Kg wet	0.200		99.0	40-140			
Aroclor-1260 [2C]	0.21	0.10	mg/Kg wet	0.200		106	40-140			
Surrogate: Decachlorobiphenyl	*0.205*		mg/Kg wet	0.200		103	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.207*		mg/Kg wet	0.200		103	30-150			
Surrogate: Tetrachloro-m-xylene	*0.183*		mg/Kg wet	0.200		91.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.197*		mg/Kg wet	0.200		98.5	30-150			
LCS Dup (B104573-BSD1)				Prepared: 09/10/14 Analyzed: 09/12/14						
Aroclor-1016	0.21	0.10	mg/Kg wet	0.200		103	40-140	4.52	30	
Aroclor-1016 [2C]	0.22	0.10	mg/Kg wet	0.200		108	40-140	5.73	30	
Aroclor-1260	0.21	0.10	mg/Kg wet	0.200		104	40-140	4.85	30	
Aroclor-1260 [2C]	0.22	0.10	mg/Kg wet	0.200		111	40-140	4.02	30	
Surrogate: Decachlorobiphenyl	*0.215*		mg/Kg wet	0.200		108	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.217*		mg/Kg wet	0.200		108	30-150			
Surrogate: Tetrachloro-m-xylene	*0.194*		mg/Kg wet	0.200		97.1	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.209*		mg/Kg wet	0.200		104	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104573 - SW-846 3546										
Matrix Spike (B104573-MS1)		**Source: 14I0340-02**		Prepared: 09/10/14 Analyzed: 09/12/14						
Aroclor-1016	0.17	0.11	mg/Kg dry	0.224	ND	75.6	40-140			
Aroclor-1016 [2C]	0.21	0.11	mg/Kg dry	0.224	ND	91.7	40-140			
Aroclor-1260	0.19	0.11	mg/Kg dry	0.224	ND	86.3	40-140			
Aroclor-1260 [2C]	0.23	0.11	mg/Kg dry	0.224	ND	102	40-140			
Surrogate: Decachlorobiphenyl	*0.153*		mg/Kg dry	0.224		68.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.156*		mg/Kg dry	0.224		69.6	30-150			
Surrogate: Tetrachloro-m-xylene	*0.157*		mg/Kg dry	0.224		70.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.172*		mg/Kg dry	0.224		76.8	30-150			
Matrix Spike Dup (B104573-MSD1)		**Source: 14I0340-02**		Prepared: 09/10/14 Analyzed: 09/12/14						
Aroclor-1016	0.17	0.11	mg/Kg dry	0.222	ND	78.3	40-140	2.46	30	
Aroclor-1016 [2C]	0.22	0.11	mg/Kg dry	0.222	ND	100	40-140	7.58	30	
Aroclor-1260	0.22	0.11	mg/Kg dry	0.222	ND	97.7	40-140	11.4	30	
Aroclor-1260 [2C]	0.25	0.11	mg/Kg dry	0.222	ND	115	40-140	11.2	30	
Surrogate: Decachlorobiphenyl	*0.172*		mg/Kg dry	0.222		77.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.174*		mg/Kg dry	0.222		78.7	30-150			
Surrogate: Tetrachloro-m-xylene	*0.159*		mg/Kg dry	0.222		71.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.174*		mg/Kg dry	0.222		78.3	30-150			

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-303 (1-4)

Lab Sample ID: 14I0340-01

Date(s) Analyzed: 09/12/2014 09/12/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	0.21	
	2	0.00	0.00	0.00	0.26	22.2

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-308 (2-5)

Lab Sample ID: 14I0340-02 Date(s) Analyzed: 09/12/2014 09/12/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	0.25	
	2	0.00	0.00	0.00	0.30	19.8

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B104573-BS1

Date(s) Analyzed: 09/12/2014 09/12/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.20	
	2	0.00	0.00	0.00	0.20	1
Aroclor-1260	1	0.00	0.00	0.00	0.20	
	2	0.00	0.00	0.00	0.21	6

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B104573-BSD1 Date(s) Analyzed: 09/12/2014 09/12/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.21	
	2	0.00	0.00	0.00	0.22	6
Aroclor-1260	1	0.00	0.00	0.00	0.21	
	2	0.00	0.00	0.00	0.22	6

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B104573-MS1 Date(s) Analyzed: 09/12/2014 09/12/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.17	
	2	0.00	0.00	0.00	0.21	22
Aroclor-1260	1	0.00	0.00	0.00	0.19	
	2	0.00	0.00	0.00	0.23	18

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike Dup

Lab Sample ID: B104573-MSD1

Date(s) Analyzed: 09/12/2014 09/12/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.17	
	2	0.00	0.00	0.00	0.22	23
Aroclor-1260	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.25	14

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

CHAIN OF CUSTODY RECORD

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

39 Spruce Street
East longmeadow, MA 01028

Page 1 of 1

~~1411387~~ 1410340

Rev 04.05.12

Company Name: EBI Consulting
Address: 21 B St
Burlington MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St, Woburn, MA
Sampled By: Don Bellucci

Telephone:
Project # 1214C0078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ○ PDF ○ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	Total Chromium	Trivalent Chromium	Hex Chromium	Antimony	PCBs	# of Containers	** Preservation	***Container Code
01	EB-302 (2-5')	08/29/14	09:00		X	X	U	X	X	X	X				
01 (R) 02	EB-303 (1-4')		09:15		X	X	U	X	X	X	X	X			
03	EB-305 (2-5')		09:40		X	X	U	X	X	X	X				
02 (R) 04 (MP)	EB-308 (2-5')		10:50		X	X	U	X	X	X	X	X			

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V=vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Comments:
(R) Activate per attached email. MP 9/9/14

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time: 08/29/14
Received by: (signature)	Date/Time: 8/29/14 1610
Relinquished by: (signature)	Date/Time: 8/29/14 1915
Received by: (signature) Coffee Cats 3.9° 8.29.14	Date/Time: 1915

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: RCS-1
Connecticut:
Other:

Is your project MCP or RCP ?
● MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

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Sample Receipt Checklist

CLIENT NAME: EBI RECEIVED BY: CC DATE: 8.29.14

1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included
2) Does the chain agree with the samples? Yes No
   If not, explain:
3) Are all the samples in good condition? Yes No
   If not, explain:
4) How were the samples received:

On Ice ☑ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☑

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 3.9°

5) Are there Dissolved samples for the lab to filter? Yes No
   Who was notified _____ Date _____ Time _____
6) Are there any RUSH or SHORT HOLDING TIME samples? Yes No
   Who was notified David Date 8.29.14 Time 1915
7) Location where samples are stored: 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No N/A _____
9) Do all samples have the proper Base pH: Yes No N/A _____
10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	4A
500 mL Amber		4 oz amber/clear jar	4C
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below		Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Doc# 277
Rev. 4 August 2013

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	T	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? Date/Time:

Doc #277 Rev. 4 August 2013 Log-In Technician Initials: CC Date/Time: 8·29·14 1915

Meghan Kelley

From: Daniel Bellucci [dbellucci@ebiconsulting.com]
Sent: Tuesday, September 09, 2014 3:11 PM
To: Meghan Kelley
Cc: Ed Giordano; Brian Kilcoyne
Subject: FW: Con-Test Analytical Laboratory 1071 Main St., Woburn, MA: 12140078
Attachments: 14H1387_1 Contest MAMCP 09 08 14 1324.zip; 14H1387_1 Contest_Final 09 08 14 1324.pdf

Hi Meghan,

Could we also run EB-303 (1-4') and EB-308 (2-5') for PCBs 8082?

Also, what is the hold time for PCBs for the remaining samples?

Thanks,
Dan

Daniel Bellucci
Environmental Scientist
P: 781.418.2344
21 B Street | Burlington, MA 01803
dbellucci@ebiconsulting.com
Visit our new website: www.ebiconsulting.com

Please consider the environment before printing this email

-----Original Message-----
From: Con-Test Reports (Unattended Mailbox) [mailto:reports@contestlabs.com]
Sent: Monday, September 08, 2014 1:31 PM
To: Daniel Bellucci
Subject: Con-Test Analytical Laboratory 1071 Main St., Woburn, MA: 12140078

This is an automated email message from the Element DataSystem(r) LIMS at Con-Test Analytical Laboratory. It includes one or more file attachments. If you have any questions about this email or if this email has been sent to you in error, please contact:

Con-Test Analytical Laboratory
39 Spruce Street
East Longmeadow, MA 01028
413.525.2332 Phone
413.525.6405 Fax

Submitting Client: EBI Consultants
Project Name: 1071 Main St., Woburn, MA

MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Con-Test Analytical Laboratory	Project #:	14I0340
Project Location:	1071 Main St. Woburn, MA	RTN:	

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

14I0340-01 thru 14I0340-02

Matrices: Soil

CAM Protocol (check all that below)

8260 VOC CAM II A ( )	7470/7471 Hg CAM IIIB ( )	MassDEP VPH CAM IV A ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassDEP APH CAM IX A ( )
8270 SVOC CAM II B ( )	7010 Metals CAM III C ( )	MassDEP EPH CAM IV A ( )	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )
6010 Metals CAM III A ( )	6020 Metals CAM III D ( )	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )	

Affirmative response to Questions A throughF is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No[1]
B	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?	☑ Yes	☐ No[1]
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No[1]
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?	☑ Yes	☐ No[1]
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☐ Yes	☐ No[1]
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes	☐ No[1]
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?	☑ Yes	☐ No[1]

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC perfomance standards specified in the CAM protocol(s) achieved?	☑ Yes	☐ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

[1] *All Negative responses must be addressed in an attached Environmental Laboratory case narrative.*

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

Signature: Tod Kopyscinski Position: Laboratory Director

Printed Name: Tod E. Kopyscinski Date: 09/16/14

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

September 18, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St., Woburn, MA
Client Job Number:
Project Number: [none]
Laboratory Work Order Number: 14I0418

Enclosed are results of analyses for samples received by the laboratory on September 10, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 9/18/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: [none]

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14I0418

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-306 (0-3)	14I0418-01	Soil		SM 2540G	
				SM2580 A	
				SW-846 1311	
				SW-846 6010C	
				SW-846 7196A	
				SW-846 9045C	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 6010, only Cr was requested and reported.

SM2580 A

Qualifications:

H-10

Analysis was requested after the recommended holding time had passed.

Analyte & Samples(s) Qualified:

Oxidation/Reduction Potential
14I0418-01[EB-306 (0-3)], B104624-DUP1

SW-846 7196A

Qualifications:

MS-16

For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.

Analyte & Samples(s) Qualified:

Hexavalent Chromium
14I0418-01[EB-306 (0-3)], B104858-MS3

SW-846 9045C

Qualifications:

H-10

Analysis was requested after the recommended holding time had passed.

Analyte & Samples(s) Qualified:

pH
14I0418-01[EB-306 (0-3)], B104626-DUP1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damboragian
Laboratory Manager

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I0418

Date Received: 9/10/2014

Field Sample #: EB-306 (0-3)
Sampled: 8/29/2014 09:50

Sample ID: 14I0418-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	6.1	0.96	mg/Kg dry	5	MS-16	SW-846 7196A	9/15/14	9/16/14 12:00	LL
Oxidation/Reduction Potential	58		mV	1	H-10	SM2580 A	9/11/14	9/11/14 8:45	LL
pH @21.1°C	7.5		pH Units	1	H-10	SW-846 9045C	9/11/14	9/11/14 8:45	LL
% Solids	80.1		% Wt	1		SM 2540G	9/17/14	9/17/14 14:14	FWD

con-test® ANALYTICAL LABORATORY

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I0418

Date Received: 9/10/2014

Field Sample #: EB-306 (0-3)
Sampled: 8/29/2014 09:50

Sample ID: 14I0418-01

Sample Matrix: Soil

TCLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chromium	0.26	0.010	mg/L	1		SW-846 6010C	9/12/14	9/12/14 18:48	AMP

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Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14I0418-01 [EB-306 (0-3)]	B105121	09/17/14

SM2580 A

Lab Number [Field ID]	Batch	Initial [g]	Date
14I0418-01 [EB-306 (0-3)]	B104624	20.0	09/11/14

Prep Method: SW-846 3010A-SW-846 6010C **Leachates were extracted on 9/11/2014 per SW-846 1311 in Batch B104673**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14I0418-01 [EB-306 (0-3)]	B104740	50.0	50.0	09/12/14

SW-846 7196A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14I0418-01 [EB-306 (0-3)]	B104858	2.60	100	09/15/14

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
14I0418-01 [EB-306 (0-3)]	B104626	20.0	09/11/14

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B104624 - SM2580 A											
Duplicate (B104624-DUP1)		**Source: 14I0418-01**		Prepared & Analyzed: 09/11/14							
Oxidation/Reduction Potential	66.0		mV		58				12.9	20.6	H-10
Batch B104626 - SW-846 9045C											
LCS (B104626-BS1)				Prepared & Analyzed: 09/11/14							
pH	6.05		pH Units	6.00		101		98.5-102			
Duplicate (B104626-DUP1)		**Source: 14I0418-01**		Prepared & Analyzed: 09/11/14							
pH	7.7		pH Units		7.5				3.15	5.72	H-10
Batch B104858 - SW-846 7196A											
Blank (B104858-BLK1)				Prepared: 09/15/14 Analyzed: 09/16/14							
Hexavalent Chromium	ND	0.16	mg/Kg wet								
LCS (B104858-BS1)				Prepared: 09/15/14 Analyzed: 09/16/14							
Hexavalent Chromium	67	1.8	mg/Kg wet	57.9		115		80-120			
LCS Dup (B104858-BSD1)				Prepared: 09/15/14 Analyzed: 09/16/14							
Hexavalent Chromium	69	1.9	mg/Kg wet	59.6		117		80-120	4.29	20	
Matrix Spike (B104858-MS1) Soluble MS		**Source: 14I0418-01**		Prepared: 09/15/14 Analyzed: 09/16/14							
Hexavalent Chromium	53	2.0	mg/Kg dry	49.5	6.1	94.4		75-125			
Matrix Spike (B104858-MS2) PDMS		**Source: 14I0418-01**		Prepared: 09/15/14 Analyzed: 09/16/14							
Hexavalent Chromium	57	2.0	mg/Kg dry	49.5	6.1	103		75-125			
Matrix Spike (B104858-MS3) Insoluble MS		**Source: 14I0418-01**		Prepared: 09/15/14 Analyzed: 09/16/14							
Hexavalent Chromium	350	19	mg/Kg dry	760	6.1	**45.1**	*	75-125			MS-16
Matrix Spike Dup (B104858-MSD1) Soluble MS Dup		**Source: 14I0418-01**		Prepared: 09/15/14 Analyzed: 09/16/14							
Hexavalent Chromium	56	2.0	mg/Kg dry	48.9	6.1	103		75-125	6.44	35	

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QUALITY CONTROL

TCLP - Metals Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B104740 - SW-846 3010A										
Blank (B104740-BLK1)				Prepared & Analyzed: 09/12/14						
Chromium	ND	0.010	mg/L							
LCS (B104740-BS1)				Prepared & Analyzed: 09/12/14						
Chromium	0.497	0.010	mg/L	0.500		99.3	80-120			
LCS Dup (B104740-BSD1)				Prepared & Analyzed: 09/12/14						
Chromium	0.512	0.010	mg/L	0.500		102	80-120	3.11	20	
Matrix Spike (B104740-MS1)		**Source: 14I0418-01**		Prepared & Analyzed: 09/12/14						
Chromium	0.774	0.010	mg/L	0.500	0.260	103	75-125			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-10	Analysis was requested after the recommended holding time had passed.
MS-16	For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010C in Water	
Chromium	NY,CT,ME,NC,NH,VA,NJ
SW-846 7196A in Soil	
Hexavalent Chromium	NY,CT,NH,NC,ME,VA,NJ

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

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Email: info@contestlabs.com
www.contestlabs.com
39 Spruce Street
East Longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

~~14H1382~~ 14I0418

Rev 04.05.12

Page 1 of 1

Company Name: EBI Consulting
Address: 21 B Street
Burlington, MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St, Woburn, MA
Sampled By: Daniel Bellucci

Telephone: 781-418-2344
Project #
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ◉ PDF ◉ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	VOCs (826)	SVOCs (8270)	TPH (8100M)	RCRA 8 Metals (6010)	PCBs (8082)	pH (9045C)	Conductivity (2510B)	Ignitibility (1030)	Reactivity (9030A/9014)	TCLP/Hex Cr as needed	based on 20x rule/CR>30,g/kg
							# of Containers	3	1	2								
							** Preservation	I	M	B								
							***Container Code	A	V	V								
01	EB-301 (4-10')	08/28/14	08:30	X		S	U		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
02	EB-301 (6')		08:30		X	S	U	X										
03	EB-304 (5-10')		09:30	X		S	U		X	X	X	X	X	X	X	X	X	X
04	EB-304 (7')		09:30		X	S	U	X										
05-01	EB-306 (0-3')		09:50	X	X	S	U		X	X	X	X	X	X	X	X	X	X
06	EB-306 (2')		09:50		X	S	U	X										
07	EB-307 (2-6')		10:15	X		S	U		X	X	X	X	X	X	X	X	X	X
08	EB-307 (3')		10:15		X	S	U	X										
09	EB-309 (4-8')		11:00	X		S	U		X	X	X	X	X	X	X	X	X	X
10 (MP)	EB-309 (6')		11:00		X	S	U	X										

ANALYSIS REQUESTED

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Comments: * TCLP Cr total, III Cr, IV Cr, Antimony, Cd
@ Reactivity per 20x rule. MCP 9/10/14 *

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time: 08/29/14	
Received by: (signature)	Date/Time: 8/29/14 16:10	
Relinquished by: (signature)	Date/Time: 8/29/14 19:15	
Received by: (signature) Cassie Cates 3.9°	Date/Time: 8.29.14 19:15	

Turnaround ††
☐ 7-Day
☐ 10-Day
☑ Other 5-day
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: Comm 97
Connecticut:
Other:

Is your project MCP or RCP ?
◉ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

AIHA LAP, LLC ACCREDITED LABORATORY
ACCREDITED IN ACCORDANCE WITH nelac
NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

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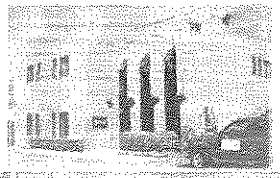

Sample Receipt Checklist

CLIENT NAME: EBI RECEIVED BY: CC DATE: 8·29·14

1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included
2) Does the chain agree with the samples? Yes No
   If not, explain:
3) Are all the samples in good condition? Yes No
   If not, explain:
4) How were the samples received:

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 3.9°

5) Are there Dissolved samples for the lab to filter? Yes No
   Who was notified _____ Date _____ Time _____
6) Are there any RUSH or SHORT HOLDING TIME samples? Yes No
   Who was notified David Date 8·29·14 Time 1915
7) Location where samples are stored: 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No N/A _____
9) Do all samples have the proper Base pH: Yes No N/A _____
10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	15A
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	15	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol 5
Bisulfate 10 # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Doc# 277
Rev. 4 August 2013

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	T	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? Date/Time:

Doc #277 Rev. 4 August 2013 Log-In Technician Initials: CC Date/Time: 8.29.14 1915

Meghan Kelley

From: Andrea Palpini [apalpini@contestlabs.com]
Sent: Monday, September 08, 2014 12:11 PM
To: 'Meghan Kelley'
Subject: 14H1382 Activation Needed

Due to >20x rule, please activate:
14H1382-05 TCLP Cr

Due to total Cr>30mg/kg **per comment on COC***, please activate:
14H1382-05 Cr6 (this is also >100mg/kg if we are using new limit for this one)
14H1382-07 Cr6 (this s NOT >100mg/kg)

Andrea M. Palpini
Inorganic Laboratory Supervisor
Con-Test Analytical Laboratory
39 Spruce Street
East Longmeadow, MA 01028
Tel: (413) 525-2332 x56
Fax: (413) 525-6405
Email: apalpini@contestlabs.com

Table of Contents

MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Con-Test Analytical Laboratory	Project #:	14I0418
Project Location:	1071 Main St., Woburn, MA	RTN:	

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

14I0418-01

Matrices: Soil

CAM Protocol (check all that below)

8260 VOC CAM II A ( )	7470/7471 Hg CAM IIIB ( )	MassDEP VPH CAM IV A ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B (X)	MassDEP APH CAM IX A ( )
8270 SVOC CAM II B ( )	7010 Metals CAM III C ( )	MassDEP EPH CAM IV A ( )	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )
6010 Metals CAM III A ( )	6020 Metals CAM III D ( )	8082 PCB CAM V A ( )	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )	

Affirmative response to Questions A throughF is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☐ Yes	☑ No[1]
B	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?	☑ Yes	☐ No[1]
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No[1]
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?	☑ Yes	☐ No[1]
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☐ Yes	☐ No[1]
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes	☐ No[1]
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?	☑ Yes	☐ No[1]

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC perfomance standards specified in the CAM protocol(s) achieved?	☐ Yes	☑ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

[1] *All Negative responses must be addressed in an attached Environmental Laboratory case narrative.*

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

Signature: _____ Position: Laboratory Manager

Printed Name: Daren J. Damboragian Date: 09/17/14

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

September 30, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St., Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14I1051

Enclosed are results of analyses for samples received by the laboratory on September 23, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 9/30/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14I1051

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-401 (3-6)	14I1051-01	Soil		SM 2540G	
				SW-846 8082A	
EB-403 (0-4)	14I1051-02	Soil		SM 2540G	
				SW-846 8082A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski
Laboratory Director

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1051

Date Received: 9/23/2014

Field Sample #: EB-401 (3-6)
Sampled: 9/22/2014 12:20

Sample ID: 14I1051-01

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 16:49	JMB
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 16:49	JMB
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 16:49	JMB
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 16:49	JMB
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 16:49	JMB
Aroclor-1254 [2]	0.22	0.12	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 16:49	JMB
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 16:49	JMB
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 16:49	JMB
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 16:49	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	79.6	30-150		9/29/14 16:49
Decachlorobiphenyl [2]	84.1	30-150		9/29/14 16:49
Tetrachloro-m-xylene [1]	88.7	30-150		9/29/14 16:49
Tetrachloro-m-xylene [2]	96.9	30-150		9/29/14 16:49

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1051

Date Received: 9/23/2014

Field Sample #: EB-401 (3-6)
Sampled: 9/22/2014 12:20

Sample ID: 14I1051-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	85.8		% Wt	1		SM 2540G	9/25/14	9/26/14 10:27	MRL

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1051

Date Received: 9/23/2014

Field Sample #: EB-403 (0-4)
Sampled: 9/22/2014 13:10

Sample ID: 14I1051-02

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 17:01	JMB
Aroclor-1221 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 17:01	JMB
Aroclor-1232 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 17:01	JMB
Aroclor-1242 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 17:01	JMB
Aroclor-1248 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 17:01	JMB
Aroclor-1254 [2]	1.6	0.14	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 17:01	JMB
Aroclor-1260 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 17:01	JMB
Aroclor-1262 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 17:01	JMB
Aroclor-1268 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	9/24/14	9/29/14 17:01	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	57.3	30-150		9/29/14 17:01
Decachlorobiphenyl [2]	61.7	30-150		9/29/14 17:01
Tetrachloro-m-xylene [1]	68.7	30-150		9/29/14 17:01
Tetrachloro-m-xylene [2]	74.3	30-150		9/29/14 17:01

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1051

Date Received: 9/23/2014

Field Sample #: EB-403 (0-4)
Sampled: 9/22/2014 13:10

Sample ID: 14I1051-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	72.7		% Wt	1		SM 2540G	9/25/14	9/26/14 10:27	MRL

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Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14I1051-01 [EB-401 (3-6)]	B105801	09/25/14
14I1051-02 [EB-403 (0-4)]	B105801	09/25/14

Prep Method: SW-846 3546-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14I1051-01 [EB-401 (3-6)]	B105610	10.1	10.0	09/24/14
14I1051-02 [EB-403 (0-4)]	B105610	10.1	10.0	09/24/14

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B105610 - SW-846 3546										
Blank (B105610-BLK1)				Prepared: 09/24/14 Analyzed: 09/29/14						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.196*		mg/Kg wet	0.200		98.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.208*		mg/Kg wet	0.200		104	30-150			
Surrogate: Tetrachloro-m-xylene	*0.189*		mg/Kg wet	0.200		94.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.199*		mg/Kg wet	0.200		99.4	30-150			
LCS (B105610-BS1)				Prepared: 09/24/14 Analyzed: 09/29/14						
Aroclor-1016	0.22	0.10	mg/Kg wet	0.200		108	40-140			
Aroclor-1016 [2C]	0.21	0.10	mg/Kg wet	0.200		105	40-140			
Aroclor-1260	0.21	0.10	mg/Kg wet	0.200		104	40-140			
Aroclor-1260 [2C]	0.21	0.10	mg/Kg wet	0.200		103	40-140			
Surrogate: Decachlorobiphenyl	*0.200*		mg/Kg wet	0.200		99.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.204*		mg/Kg wet	0.200		102	30-150			
Surrogate: Tetrachloro-m-xylene	*0.213*		mg/Kg wet	0.200		107	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.220*		mg/Kg wet	0.200		110	30-150			
LCS Dup (B105610-BSD1)				Prepared: 09/24/14 Analyzed: 09/29/14						
Aroclor-1016	0.22	0.10	mg/Kg wet	0.200		109	40-140	0.382	30	
Aroclor-1016 [2C]	0.22	0.10	mg/Kg wet	0.200		108	40-140	2.83	30	
Aroclor-1260	0.22	0.10	mg/Kg wet	0.200		109	40-140	3.92	30	
Aroclor-1260 [2C]	0.22	0.10	mg/Kg wet	0.200		109	40-140	5.80	30	
Surrogate: Decachlorobiphenyl	*0.203*		mg/Kg wet	0.200		102	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.209*		mg/Kg wet	0.200		105	30-150			
Surrogate: Tetrachloro-m-xylene	*0.195*		mg/Kg wet	0.200		97.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.206*		mg/Kg wet	0.200		103	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B105610 - SW-846 3546										
Matrix Spike (B105610-MS1)		**Source: 14I1051-01**		Prepared: 09/24/14 Analyzed: 09/29/14						
Aroclor-1016	0.24	0.12	mg/Kg dry	0.231	ND	103	40-140			
Aroclor-1016 [2C]	0.23	0.12	mg/Kg dry	0.231	ND	99.8	40-140			
Aroclor-1260	0.27	0.12	mg/Kg dry	0.231	ND	118	40-140			
Aroclor-1260 [2C]	0.27	0.12	mg/Kg dry	0.231	ND	118	40-140			
Surrogate: Decachlorobiphenyl	*0.180*		mg/Kg dry	0.231		77.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.184*		mg/Kg dry	0.231		79.6	30-150			
Surrogate: Tetrachloro-m-xylene	*0.204*		mg/Kg dry	0.231		88.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.219*		mg/Kg dry	0.231		95.0	30-150			
Matrix Spike Dup (B105610-MSD1)		**Source: 14I1051-01**		Prepared: 09/24/14 Analyzed: 09/29/14						
Aroclor-1016	0.22	0.12	mg/Kg dry	0.231	ND	93.9	40-140	8.77	30	
Aroclor-1016 [2C]	0.21	0.12	mg/Kg dry	0.231	ND	89.2	40-140	11.2	30	
Aroclor-1260	0.25	0.12	mg/Kg dry	0.231	ND	107	40-140	9.24	30	
Aroclor-1260 [2C]	0.25	0.12	mg/Kg dry	0.231	ND	108	40-140	9.51	30	
Surrogate: Decachlorobiphenyl	*0.161*		mg/Kg dry	0.231		69.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.168*		mg/Kg dry	0.231		72.9	30-150			
Surrogate: Tetrachloro-m-xylene	*0.176*		mg/Kg dry	0.231		76.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.196*		mg/Kg dry	0.231		84.8	30-150			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B105801 - % Solids										
Duplicate (B105801-DUP2)		**Source: 14I1051-01**		Prepared: 09/25/14 Analyzed: 09/26/14						
% Solids	85.8		% Wt		85.8			0.00	20	

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-401 (3-6)

Lab Sample ID: 14I1051-01

Date(s) Analyzed: 09/29/2014 09/29/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.22	1.8

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-403 (0-4)

Lab Sample ID: 14I1051-02 Date(s) Analyzed: 09/29/2014 09/29/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	1.4	
	2	0.00	0.00	0.00	1.6	11.9

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B105610-BS1

Date(s) Analyzed: 09/29/2014 09/29/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.21	3
Aroclor-1260	1	0.00	0.00	0.00	0.21	
	2	0.00	0.00	0.00	0.21	0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B105610-BSD1 Date(s) Analyzed: 09/29/2014 09/29/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.22	1
Aroclor-1260	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.22	1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B105610-MS1 Date(s) Analyzed: 09/29/2014 09/29/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.24	
	2	0.00	0.00	0.00	0.23	3
Aroclor-1260	1	0.00	0.00	0.00	0.27	
	2	0.00	0.00	0.00	0.27	1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike Dup

Lab Sample ID: B105610-MSD1 Date(s) Analyzed: 09/29/2014 09/29/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.21	3
Aroclor-1260	1	0.00	0.00	0.00	0.25	
	2	0.00	0.00	0.00	0.25	1

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

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CHAIN OF CUSTODY RECORD

H1051

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Company Name: EBI Consulting
Address: 21 B Street
Burlington, MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St., Woburn, MA
Sampled By: Daniel Bellucci

Telephone: 845-803-4347
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ◉ PDF ◉ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	PCBS 8082
01	EB-401 (3-6')	09/22/14	12:20		X	S	U	X
02	EB-403 (0-4')	09/22/14	13:10		X	S	U	X

	1	I	A
# of Containers			
** Preservation			
***Container Code			

ANALYSIS REQUESTED

Dissolved Metals
○ Field Filtered
○ Lab to Filter

*****Cont. Code:**
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

****Preservation**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

***Matrix Code:**
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Comments:

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

	Date/Time
Relinquished by: (signature)	09/23/14
Received by: (signature)	9/23/14 12:50
Relinquished by: (signature)	9/23/14 12:45
Received by: (signature) 2.5°C	9/23/14 12:45

Turnaround ††
☐ 7-Day
☐ 10-Day
◉ Other 5-day
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
☐ Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other: Vermont

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

AIHA LAP, LLC ACCREDITED LABORATORY
ACCREDITED IN ACCORDANCE WITH nelac

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

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Sample Receipt Checklist

CLIENT NAME: EBI RECEIVED BY: KKM DATE: 9/23/14

1) Was the chain(s) of custody relinquished and signed? (Yes) No No CoC Included

2) Does the chain agree with the samples? (Yes) No

If not, explain:

3) Are all the samples in good condition? (Yes) No

If not, explain:

4) How were the samples received:

On Ice [✓] Direct from Sampling [ ] Ambient [ ] In Cooler(s) [✓]

Were the samples received in Temperature Compliance of (2-6°C)? (Yes) No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 2.8

5) Are there Dissolved samples for the lab to filter? Yes (No)

Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes (No)

Who was notified _____ Date _____ Time _____

7) Location where samples are stored: 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No (N/A) _____

9) Do all samples have the proper Base pH: Yes No (N/A) _____

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No (N/A)

Containers received at Con-Test

	# of containers			# of containers
1 Liter Amber			8 oz amber/clear jar	~~12~~ 2
500 mL Amber			4 oz amber/clear jar	
250 mL Amber (8oz amber)			2 oz amber/clear jar	
1 Liter Plastic			Plastic Bag / Ziploc	
500 mL Plastic			SOC Kit	
250 mL plastic			Non-ConTest Container	
40 mL Vial - type listed below			Perchlorate Kit	
Colisure / bacteria bottle			Flashpoint bottle	
Dissolved Oxygen bottle			Other glass jar	
Encore			Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____

Bisulfate _____ # DI Water _____

Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** KKM **Date/Time:** 9/23/14 12:45

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October 3, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St., Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14I1050

Enclosed are results of analyses for samples received by the laboratory on September 23, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 10/3/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14I1050

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-404 (0-4)	14I1050-04	Soil		SM 2540G	
				SW-846 8082A	
EB-406 (0-4)	14I1050-06	Soil		SM 2540G	
				SW-846 8082A	
EB-407 (0-4)	14I1050-10	Soil		SM 2540G	
				SW-846 8082A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SW-846 8082A

Qualifications:

O-32

A five times dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

14I1050-06[EB-406 (0-4)]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Decachlorobiphenyl
14I1050-10[EB-407 (0-4)]

Decachlorobiphenyl [2C]
14I1050-10[EB-407 (0-4)]

Tetrachloro-m-xylene
14I1050-10[EB-407 (0-4)]

Tetrachloro-m-xylene [2C]
14I1050-10[EB-407 (0-4)]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damboragian
Laboratory Manager

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-404 (0-4)
Sampled: 9/22/2014 13:20

Sample ID: 14I1050-04

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1221 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1232 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1242 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1248 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1254 [2]	1.2	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1260 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1262 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1268 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	45.9	30-150		10/1/14 15:03
Decachlorobiphenyl [2]	63.4	30-150		10/1/14 15:03
Tetrachloro-m-xylene [1]	59.8	30-150		10/1/14 15:03
Tetrachloro-m-xylene [2]	59.0	30-150		10/1/14 15:03

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-404 (0-4)
Sampled: 9/22/2014 13:20

Sample ID: 14I1050-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	82.7		% Wt	1		SM 2540G	10/1/14	10/2/14 10:06	MRL

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-406 (0-4)
Sampled: 9/22/2014 13:45

Sample ID: 14I1050-06

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	66.1	30-150		10/1/14 13:33
Decachlorobiphenyl [2]	87.8	30-150		10/1/14 13:33
Tetrachloro-m-xylene [1]	82.8	30-150		10/1/14 13:33
Tetrachloro-m-xylene [2]	83.4	30-150		10/1/14 13:33

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-406 (0-4)
Sampled: 9/22/2014 13:45

Sample ID: 14I1050-06

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	89.9		% Wt	1		SM 2540G	10/1/14	10/2/14 10:06	MRL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-407 (0-4)
Sampled: 9/22/2014 14:00

Sample ID: 14I1050-10

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1221 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1232 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1242 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1248 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1254 [2]	420	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1260 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1262 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1268 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	10/1/14 15:15
Decachlorobiphenyl [2]	*	30-150	S-01	10/1/14 15:15
Tetrachloro-m-xylene [1]	*	30-150	S-01	10/1/14 15:15
Tetrachloro-m-xylene [2]	*	30-150	S-01	10/1/14 15:15

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-407 (0-4)
Sampled: 9/22/2014 14:00

Sample ID: 14I1050-10

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	84.7		% Wt	1		SM 2540G	10/1/14	10/2/14 10:06	MRL

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Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14I1050-04 [EB-404 (0-4)]	B106293	10/01/14
14I1050-06 [EB-406 (0-4)]	B106293	10/01/14
14I1050-10 [EB-407 (0-4)]	B106293	10/01/14

Prep Method: SW-846 3546-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14I1050-04 [EB-404 (0-4)]	B105610	10.1	10.0	09/24/14
14I1050-06 [EB-406 (0-4)]	B105610	10.3	10.0	09/24/14
14I1050-10 [EB-407 (0-4)]	B105610	10.2	10.0	09/24/14

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B105610 - SW-846 3546										
Blank (B105610-BLK1)				Prepared: 09/24/14 Analyzed: 09/29/14						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.196*		mg/Kg wet	0.200		98.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.208*		mg/Kg wet	0.200		104	30-150			
Surrogate: Tetrachloro-m-xylene	*0.189*		mg/Kg wet	0.200		94.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.199*		mg/Kg wet	0.200		99.4	30-150			
LCS (B105610-BS1)				Prepared: 09/24/14 Analyzed: 09/29/14						
Aroclor-1016	0.22	0.10	mg/Kg wet	0.200		108	40-140			
Aroclor-1016 [2C]	0.21	0.10	mg/Kg wet	0.200		105	40-140			
Aroclor-1260	0.21	0.10	mg/Kg wet	0.200		104	40-140			
Aroclor-1260 [2C]	0.21	0.10	mg/Kg wet	0.200		103	40-140			
Surrogate: Decachlorobiphenyl	*0.200*		mg/Kg wet	0.200		99.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.204*		mg/Kg wet	0.200		102	30-150			
Surrogate: Tetrachloro-m-xylene	*0.213*		mg/Kg wet	0.200		107	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.220*		mg/Kg wet	0.200		110	30-150			
LCS Dup (B105610-BSD1)				Prepared: 09/24/14 Analyzed: 09/29/14						
Aroclor-1016	0.22	0.10	mg/Kg wet	0.200		109	40-140	0.382	30	
Aroclor-1016 [2C]	0.22	0.10	mg/Kg wet	0.200		108	40-140	2.83	30	
Aroclor-1260	0.22	0.10	mg/Kg wet	0.200		109	40-140	3.92	30	
Aroclor-1260 [2C]	0.22	0.10	mg/Kg wet	0.200		109	40-140	5.80	30	
Surrogate: Decachlorobiphenyl	*0.203*		mg/Kg wet	0.200		102	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.209*		mg/Kg wet	0.200		105	30-150			
Surrogate: Tetrachloro-m-xylene	*0.195*		mg/Kg wet	0.200		97.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.206*		mg/Kg wet	0.200		103	30-150			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B106293 - % Solids										
Duplicate (B106293-DUP1)		**Source: 14I1050-04**		Prepared: 10/01/14 Analyzed: 10/02/14						
% Solids	83.6		% Wt		82.7			1.08	20	

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-404 (0-4)

Lab Sample ID: 14I1050-04

Date(s) Analyzed: 10/01/2014 10/01/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	1.2	
	2	0.00	0.00	0.00	1.2	0.8

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-407 (0-4)

Lab Sample ID: 14I1050-10 Date(s) Analyzed: 10/01/2014 10/01/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	400	
	2	0.00	0.00	0.00	420	5.4

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B105610-BS1

Date(s) Analyzed: 09/29/2014 09/29/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.21	3
Aroclor-1260	1	0.00	0.00	0.00	0.21	
	2	0.00	0.00	0.00	0.21	0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B105610-BSD1 Date(s) Analyzed: 09/29/2014 09/29/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.22	1
Aroclor-1260	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.22	1

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
O-32	A five times dilution was performed as part of the standard analytical procedure.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

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CHAIN OF CUSTODY RECORD

14I1050

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Company Name: EBI Consulting
Address: 21 B Street
Burlington, MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St., Woburn, MA
Sampled By: Daniel Bellucci

Telephone: 845-803-4347
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ◉ PDF ◉ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	PCBS 8082 (**Extract & HOLD**)	# of Containers	** Preservation	***Container Code
01	EB-401 (6-9.5')	09/22/14	12:30		X	S	U	X	1	I	A
02	EB-402 (4-8')		13:00		X	S	U	X			
03	~~EB-402~~ EB-403 (4-7')		13:15		X	S	U	X			
04	EB-404 (0-4')		13:20		X	S	U	X			
05	EB-405 (0-2.5')		13:30		X	S	U	X			
06	EB-406 (0-4')		13:45		X	S	U	X			
07	EB-406 (4-8')		13:50		X	S	U	X			
08	EB-402 (2-4')		12:50		X	S	U	X			
09	EB-407 (4-8')		14:10		X	S	U	X			
10	EB-407 (0-4')		14:00		X	S	U	X			

Comments:

EXTRACT AND HOLD ANALYSIS

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:

H - High; M - Medium; L - Low; C - Clean; U - Unknown

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:**
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Relinquished by: (signature)		Date/Time: 09/23/14
Received by: (signature)	9/23/14	Date/Time: 10:30
Relinquished by: (signature)	9/23/14	Date/Time: 12:45
Received by: (signature)	2.8°C 9/23/14	Date/Time: 12:45

Turnaround ††
☐ 7-Day
☐ 10-Day
◉ Other 5-day

RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
☐ Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other: Vermont

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

AIHA LAP, LLC ACCREDITED LABORATORY
ACCREDITED IN ACCORDANCE WITH nelac

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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East Longmeadow, MA. 01028
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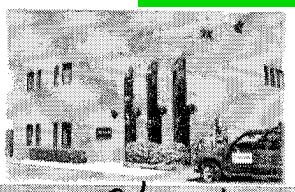

Sample Receipt Checklist

CLIENT NAME: EBI RECEIVED BY: KKM DATE: 9/23/14

1) Was the chain(s) of custody relinquished and signed? (Yes) No No CoC Included
2) Does the chain agree with the samples? (Yes) No
   If not, explain:
3) Are all the samples in good condition? (Yes) No
   If not, explain:
4) How were the samples received:
   On Ice ☑ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☑
   Were the samples received in Temperature Compliance of (2-6°C)? (Yes) No N/A
   Temperature °C by Temp blank _____ Temperature °C by Temp gun 2.8
5) Are there Dissolved samples for the lab to filter? Yes (No)
   Who was notified _____ Date _____ Time _____
6) Are there any RUSH or SHORT HOLDING TIME samples? Yes (No)
   Who was notified _____ Date _____ Time _____
7) Location where samples are stored: 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No (N/A) _____
9) Do all samples have the proper Base pH: Yes No (N/A) _____
10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No (N/A)

Containers received at Con-Test

	# of containers			# of containers
1 Liter Amber			8 oz amber/clear jar	~~12~~ 10
500 mL Amber			4 oz amber/clear jar	
250 mL Amber (8oz amber)			2 oz amber/clear jar	
1 Liter Plastic			Plastic Bag / Ziploc	
500 mL Plastic			SOC Kit	
250 mL plastic			Non-ConTest Container	
40 mL Vial - type listed below			Perchlorate Kit	
Colisure / bacteria bottle			Flashpoint bottle	
Dissolved Oxygen bottle			Other glass jar	
Encore			Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** KKM **Date/Time:** 9/23/14 12:45

Meghan Kelley

From: Daniel Bellucci [dbellucci@ebiconsulting.com]
Sent: Wednesday, October 01, 2014 9:58 AM
To: Meghan Kelley
Cc: Ed Giordano; Brian Kilcoyne
Subject: 14I1050

Good Morning Meghan,

Could we please run the following samples for PCBs EPA 8082?

- **Sample name: EB-404 (0-4) Matrix: Soil Sampled: 9/22/2014 1:20:00 PM Eastern**
- **Sample name: EB-406 (0-4) Matrix: Soil Sampled: 9/22/2014 1:45:00 PM Eastern**
- **Sample name: EB-407 (0-4) Matrix: Soil Sampled: 9/22/2014 2:00:00 PM Eastern**

Can you let us know if we can get these results by Monday (10/06/14) morning?

Daniel Bellucci
Environmental Scientist
P: 781.418.2344
21 B Street | Burlington, MA 01803
dbellucci@ebiconsulting.com
Visit our new website: www.ebiconsulting.com

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October 8, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St., Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14I1050

Enclosed are results of analyses for samples received by the laboratory on September 23, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 10/8/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14I1050

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-404 (0-4)	14I1050-04	Soil		SM 2540G	
				SW-846 8082A	
EB-406 (0-4)	14I1050-06	Soil		SM 2540G	
				SW-846 8082A	
EB-407 (4-8)	14I1050-09	Soil		SM 2540G	
				SW-846 8082A	
EB-407 (0-4)	14I1050-10	Soil		SM 2540G	
				SW-846 8082A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SW-846 8082A

Qualifications:

O-32

A five times dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

14I1050-06[EB-406 (0-4)]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Decachlorobiphenyl
14I1050-10[EB-407 (0-4)]

Decachlorobiphenyl [2C]
14I1050-10[EB-407 (0-4)]

Tetrachloro-m-xylene
14I1050-10[EB-407 (0-4)]

Tetrachloro-m-xylene [2C]
14I1050-10[EB-407 (0-4)]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damboragian
Laboratory Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-404 (0-4)
Sampled: 9/22/2014 13:20

Sample ID: 14I1050-04

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1221 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1232 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1242 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1248 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1254 [2]	1.2	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1260 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1262 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB
Aroclor-1268 [1]	ND	0.24	mg/Kg dry	10		SW-846 8082A	9/24/14	10/1/14 15:03	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	45.9	30-150		10/1/14 15:03
Decachlorobiphenyl [2]	63.4	30-150		10/1/14 15:03
Tetrachloro-m-xylene [1]	59.8	30-150		10/1/14 15:03
Tetrachloro-m-xylene [2]	59.0	30-150		10/1/14 15:03

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-404 (0-4)
Sampled: 9/22/2014 13:20

Sample ID: 14I1050-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	82.7		% Wt	1		SM 2540G	10/1/14	10/2/14 10:06	MRL

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-406 (0-4)
Sampled: 9/22/2014 13:45

Sample ID: 14I1050-06

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	9/24/14	10/1/14 13:33	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	66.1	30-150		10/1/14 13:33
Decachlorobiphenyl [2]	87.8	30-150		10/1/14 13:33
Tetrachloro-m-xylene [1]	82.8	30-150		10/1/14 13:33
Tetrachloro-m-xylene [2]	83.4	30-150		10/1/14 13:33

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-406 (0-4)
Sampled: 9/22/2014 13:45

Sample ID: 14I1050-06

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	89.9		% Wt	1		SM 2540G	10/1/14	10/2/14 10:06	MRL

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-407 (4-8)
Sampled: 9/22/2014 14:10

Sample ID: 14I1050-09

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	9/24/14	10/6/14 14:27	MJC
Aroclor-1221 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	9/24/14	10/6/14 14:27	MJC
Aroclor-1232 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	9/24/14	10/6/14 14:27	MJC
Aroclor-1242 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	9/24/14	10/6/14 14:27	MJC
Aroclor-1248 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	9/24/14	10/6/14 14:27	MJC
Aroclor-1254 [2]	0.13	0.10	mg/Kg dry	5		SW-846 8082A	9/24/14	10/6/14 14:27	MJC
Aroclor-1260 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	9/24/14	10/6/14 14:27	MJC
Aroclor-1262 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	9/24/14	10/6/14 14:27	MJC
Aroclor-1268 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	9/24/14	10/6/14 14:27	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	95.1	30-150		10/6/14 14:27
Decachlorobiphenyl [2]	81.7	30-150		10/6/14 14:27
Tetrachloro-m-xylene [1]	82.7	30-150		10/6/14 14:27
Tetrachloro-m-xylene [2]	94.7	30-150		10/6/14 14:27

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-407 (4-8)
Sampled: 9/22/2014 14:10

Sample ID: 14I1050-09

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	94.6		% Wt	1		SM 2540G	10/6/14	10/7/14 8:19	MRL

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-407 (0-4)
Sampled: 9/22/2014 14:00

Sample ID: 14I1050-10

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1221 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1232 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1242 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1248 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1254 [2]	420	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1260 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1262 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB
Aroclor-1268 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	9/24/14	10/1/14 15:15	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	10/1/14 15:15
Decachlorobiphenyl [2]	*	30-150	S-01	10/1/14 15:15
Tetrachloro-m-xylene [1]	*	30-150	S-01	10/1/14 15:15
Tetrachloro-m-xylene [2]	*	30-150	S-01	10/1/14 15:15

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14I1050

Date Received: 9/23/2014

Field Sample #: EB-407 (0-4)
Sampled: 9/22/2014 14:00

Sample ID: 14I1050-10

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	84.7		% Wt	1		SM 2540G	10/1/14	10/2/14 10:06	MRL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14I1050-04 [EB-404 (0-4)]	B106293	10/01/14
14I1050-06 [EB-406 (0-4)]	B106293	10/01/14
14I1050-10 [EB-407 (0-4)]	B106293	10/01/14

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14I1050-09 [EB-407 (4-8)]	B106608	10/06/14

Prep Method: SW-846 3546-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14I1050-04 [EB-404 (0-4)]	B105610	10.1	10.0	09/24/14
14I1050-06 [EB-406 (0-4)]	B105610	10.3	10.0	09/24/14
14I1050-09 [EB-407 (4-8)]	B105610	10.2	10.0	09/24/14
14I1050-10 [EB-407 (0-4)]	B105610	10.2	10.0	09/24/14

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B105610 - SW-846 3546										
Blank (B105610-BLK1)				Prepared: 09/24/14 Analyzed: 09/29/14						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.196*		mg/Kg wet	0.200		98.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.208*		mg/Kg wet	0.200		104	30-150			
Surrogate: Tetrachloro-m-xylene	*0.189*		mg/Kg wet	0.200		94.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.199*		mg/Kg wet	0.200		99.4	30-150			
LCS (B105610-BS1)				Prepared: 09/24/14 Analyzed: 09/29/14						
Aroclor-1016	0.22	0.10	mg/Kg wet	0.200		108	40-140			
Aroclor-1016 [2C]	0.21	0.10	mg/Kg wet	0.200		105	40-140			
Aroclor-1260	0.21	0.10	mg/Kg wet	0.200		104	40-140			
Aroclor-1260 [2C]	0.21	0.10	mg/Kg wet	0.200		103	40-140			
Surrogate: Decachlorobiphenyl	*0.200*		mg/Kg wet	0.200		99.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.204*		mg/Kg wet	0.200		102	30-150			
Surrogate: Tetrachloro-m-xylene	*0.213*		mg/Kg wet	0.200		107	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.220*		mg/Kg wet	0.200		110	30-150			
LCS Dup (B105610-BSD1)				Prepared: 09/24/14 Analyzed: 09/29/14						
Aroclor-1016	0.22	0.10	mg/Kg wet	0.200		109	40-140	0.382	30	
Aroclor-1016 [2C]	0.22	0.10	mg/Kg wet	0.200		108	40-140	2.83	30	
Aroclor-1260	0.22	0.10	mg/Kg wet	0.200		109	40-140	3.92	30	
Aroclor-1260 [2C]	0.22	0.10	mg/Kg wet	0.200		109	40-140	5.80	30	
Surrogate: Decachlorobiphenyl	*0.203*		mg/Kg wet	0.200		102	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.209*		mg/Kg wet	0.200		105	30-150			
Surrogate: Tetrachloro-m-xylene	*0.195*		mg/Kg wet	0.200		97.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.206*		mg/Kg wet	0.200		103	30-150			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B106293 - % Solids										
Duplicate (B106293-DUP1)		**Source: 14I1050-04**		Prepared: 10/01/14 Analyzed: 10/02/14						
% Solids	83.6		% Wt		82.7			1.08	20	

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-404 (0-4)

Lab Sample ID: 14I1050-04

Date(s) Analyzed: 10/01/2014 10/01/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	1.2	
	2	0.00	0.00	0.00	1.2	0.8

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-407 (4-8)

Lab Sample ID: 14I1050-09 Date(s) Analyzed: 10/06/2014 10/06/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	0.10	
	2	0.00	0.00	0.00	0.13	21.3

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-407 (0-4)

Lab Sample ID: 14I1050-10 Date(s) Analyzed: 10/01/2014 10/01/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	400	
	2	0.00	0.00	0.00	420	5.4

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B105610-BS1

Date(s) Analyzed: 09/29/2014 09/29/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.21	3
Aroclor-1260	1	0.00	0.00	0.00	0.21	
	2	0.00	0.00	0.00	0.21	0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B105610-BSD1 Date(s) Analyzed: 09/29/2014 09/29/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.22	1
Aroclor-1260	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.22	1

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
O-32	A five times dilution was performed as part of the standard analytical procedure.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

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Phone: 413-525-2332
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www.contestlabs.com

CHAIN OF CUSTODY RECORD

14I1050

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Company Name: EBI Consulting
Telephone: 845-803-4347
Address: 21 B Street
Burlington, MA 01803
Project # 12140078
Client PO#
Attention: Meghan Kelley
Project Location: 1071 Main St., Woburn, MA
Sampled By: Daniel Bellucci

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ◉ PDF ◉ EXCEL ○ GIS
○ OTHER _____
○ "Enhanced Data Package"

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	PCBS 8082 (**Extract & HOLD**)
01	EB-401 (6-9.5')	09/22/14	12:30		X	S	U	X
02	EB-402 (4-8')		13:00		X	S	U	X
03	~~EB-402~~ EB-403 (4-7')		13:15		X	S	U	X
04	EB-404 (0-4')		13:20		X	S	U	X
05	EB-405 (0-2.5')		13:30		X	S	U	X
06	EB-406 (0-4')		13:45		X	S	U	X
07	EB-406 (4-8')		13:50		X	S	U	X
08	EB-402 (2-4')		12:50		X	S	U	X
09	EB-407 (4-8')		14:10		X	S	U	X
10	EB-407 (0-4')		14:00		X	S	U	X

ANALYSIS REQUESTED

1	# of Containers
I	** Preservation
A	***Container Code

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Comments:

EXTRACT AND HOLD ANALYSIS

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:

H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) [signature]	Date/Time: 09/23/14
Received by: (signature) [signature] 9/23/14	Date/Time: 10:50
Relinquished by: (signature) [signature] 9/23/14	Date/Time: 12:45
Received by: (signature) [signature] 2.8°C 9/23/14	Date/Time: 12:45

Turnaround ††
☐ 7-Day
☐ 10-Day
◉ Other 5-day

RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other: Vermont

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

AIHA LAP, LLC ACCREDITED LABORATORY
ACCREDITED IN ACCORDANCE WITH nelac

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

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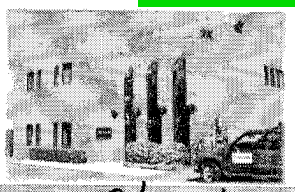

Sample Receipt Checklist

CLIENT NAME: EBI RECEIVED BY: KKM DATE: 9/23/14

1) Was the chain(s) of custody relinquished and signed? (Yes) No No CoC Included
2) Does the chain agree with the samples? (Yes) No
   If not, explain:
3) Are all the samples in good condition? (Yes) No
   If not, explain:
4) How were the samples received:
   On Ice ☑ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☑
   Were the samples received in Temperature Compliance of (2-6°C)? (Yes) No N/A
   Temperature °C by Temp blank _____ Temperature °C by Temp gun 2.8
5) Are there Dissolved samples for the lab to filter? Yes (No)
   Who was notified _____ Date _____ Time _____
6) Are there any RUSH or SHORT HOLDING TIME samples? Yes (No)
   Who was notified _____ Date _____ Time _____
7) Location where samples are stored: 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No (N/A) _____
9) Do all samples have the proper Base pH: Yes No (N/A) _____
10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No (N/A)

Containers received at Con-Test

	# of containers			# of containers
1 Liter Amber			8 oz amber/clear jar	~~12~~ 10
500 mL Amber			4 oz amber/clear jar	
250 mL Amber (8oz amber)			2 oz amber/clear jar	
1 Liter Plastic			Plastic Bag / Ziploc	
500 mL Plastic			SOC Kit	
250 mL plastic			Non-ConTest Container	
40 mL Vial - type listed below			Perchlorate Kit	
Colisure / bacteria bottle			Flashpoint bottle	
Dissolved Oxygen bottle			Other glass jar	
Encore			Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:**

Log-In Technician Initials: KKM **Date/Time:** 9/23/14 12:45

Doc #277 Rev. 4 August 2013

Meghan Kelley

From: Daniel Bellucci [dbellucci@ebiconsulting.com]
Sent: Wednesday, October 01, 2014 9:58 AM
To: Meghan Kelley
Cc: Ed Giordano; Brian Kilcoyne
Subject: 14I1050

Good Morning Meghan,

Could we please run the following samples for PCBs EPA 8082?

- **Sample name: EB-404 (0-4) Matrix: Soil Sampled: 9/22/2014 1:20:00 PM Eastern**
- **Sample name: EB-406 (0-4) Matrix: Soil Sampled: 9/22/2014 1:45:00 PM Eastern**
- **Sample name: EB-407 (0-4) Matrix: Soil Sampled: 9/22/2014 2:00:00 PM Eastern**

Can you let us know if we can get these results by Monday (10/06/14) morning?

Daniel Bellucci
Environmental Scientist
P: 781.418.2344
21 B Street | Burlington, MA 01803
dbellucci@ebiconsulting.com
Visit our new website: www.ebiconsulting.com

EBI Consulting
environmental | engineering | due diligence
25 CELEBRATING YEARS

Please consider the environment before printing this email

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October 28, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St, Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14J1044

Enclosed are results of analyses for samples received by the laboratory on October 21, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 10/28/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14J1044

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St, Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
EB-502 (2-4)	14J1044-01	Soil		SM 2540G	
				SW-846 8082A	
EB-509 (0-2)	14J1044-02	Soil		SM 2540G	
				SW-846 8082A	
EB-503 (0-2)	14J1044-03	Soil		SM 2540G	
				SW-846 8082A	
EB-505 (2-4)	14J1044-04	Soil		SM 2540G	
				SW-846 8082A	
EB-506 (0-2)	14J1044-05	Soil		SM 2540G	
				SW-846 8082A	
EB-513 (0-2)	14J1044-06	Soil		SM 2540G	
				SW-846 8082A	
EB-508 (2-4)	14J1044-07	Soil		SM 2540G	
				SW-846 8082A	
EB-510 (0-2)	14J1044-08	Soil		SM 2540G	
				SW-846 8082A	
EB-512 (0-2)	14J1044-09	Soil		SM 2540G	
				SW-846 8082A	
EB-512 (2-4)	14J1044-10	Soil		SM 2540G	
				SW-846 8082A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SW-846 8082A

Qualifications:

MS-21

Matrix spike and/or spike duplicate recovery bias high due to contribution of other Aroclors present in the source sample.

Analyte & Samples(s) Qualified:

Aroclor-1016
B107941-MS1, B107941-MSD1

Aroclor-1016 [2C]
B107941-MS1, B107941-MSD1

Aroclor-1260
B107941-MS1, B107941-MSD1

Aroclor-1260 [2C]
B107941-MS1, B107941-MSD1

O-03

Sample contains two incompletely resolved aroclors. Aroclor with the closest matching pattern is reported.

Analyte & Samples(s) Qualified:

Aroclor-1254
14J1044-01[EB-502 (2-4)], 14J1044-04[EB-505 (2-4)]

Aroclor-1254 [2C]
14J1044-01[EB-502 (2-4)], 14J1044-04[EB-505 (2-4)]

O-32

A five times dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

14J1044-10[EB-512 (2-4)]

P-01

Result was confirmed using a dissimilar column. Relative percent difference between the two results was >40%. In accordance with the method, the higher result was reported.

Analyte & Samples(s) Qualified:

Aroclor-1260 [2C]
14J1044-03[EB-503 (0-2)]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Decachlorobiphenyl
14J1044-02[EB-509 (0-2)], 14J1044-05[EB-506 (0-2)], 14J1044-06[EB-513 (0-2)], 14J1044-08[EB-510 (0-2)], 14J1044-09[EB-512 (0-2)]

Decachlorobiphenyl [2C]
14J1044-02[EB-509 (0-2)], 14J1044-05[EB-506 (0-2)], 14J1044-06[EB-513 (0-2)], 14J1044-08[EB-510 (0-2)], 14J1044-09[EB-512 (0-2)]

Tetrachloro-m-xylene
14J1044-02[EB-509 (0-2)], 14J1044-05[EB-506 (0-2)], 14J1044-06[EB-513 (0-2)], 14J1044-08[EB-510 (0-2)], 14J1044-09[EB-512 (0-2)]

Tetrachloro-m-xylene [2C]
14J1044-02[EB-509 (0-2)], 14J1044-05[EB-506 (0-2)], 14J1044-06[EB-513 (0-2)], 14J1044-08[EB-510 (0-2)], 14J1044-09[EB-512 (0-2)]

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The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski
Laboratory Director

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-502 (2-4)
Sampled: 10/20/2014 10:05

Sample ID: 14J1044-01

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	10/24/14	10/28/14 11:14	MJC
Aroclor-1221 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	10/24/14	10/28/14 11:14	MJC
Aroclor-1232 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	10/24/14	10/28/14 11:14	MJC
Aroclor-1242 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	10/24/14	10/28/14 11:14	MJC
Aroclor-1248 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	10/24/14	10/28/14 11:14	MJC
Aroclor-1254 [1]	3.8	0.52	mg/Kg dry	20	O-03	SW-846 8082A	10/24/14	10/28/14 11:14	MJC
Aroclor-1260 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	10/24/14	10/28/14 11:14	MJC
Aroclor-1262 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	10/24/14	10/28/14 11:14	MJC
Aroclor-1268 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	10/24/14	10/28/14 11:14	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	112	30-150		10/28/14 11:14
Decachlorobiphenyl [2]	124	30-150		10/28/14 11:14
Tetrachloro-m-xylene [1]	102	30-150		10/28/14 11:14
Tetrachloro-m-xylene [2]	98.0	30-150		10/28/14 11:14

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Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-502 (2-4)
Sampled: 10/20/2014 10:05

Sample ID: 14J1044-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	75.2		% Wt	1		SM 2540G	10/23/14	10/24/14 15:06	MRL

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Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-509 (0-2)
Sampled: 10/20/2014 11:10

Sample ID: 14J1044-02

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	2.2	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:27	MJC
Aroclor-1221 [1]	ND	2.2	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:27	MJC
Aroclor-1232 [1]	ND	2.2	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:27	MJC
Aroclor-1242 [1]	ND	2.2	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:27	MJC
Aroclor-1248 [1]	ND	2.2	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:27	MJC
Aroclor-1254 [2]	17	2.2	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:27	MJC
Aroclor-1260 [2]	3.6	2.2	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:27	MJC
Aroclor-1262 [1]	ND	2.2	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:27	MJC
Aroclor-1268 [1]	ND	2.2	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:27	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	10/28/14 11:27
Decachlorobiphenyl [2]	*	30-150	S-01	10/28/14 11:27
Tetrachloro-m-xylene [1]	*	30-150	S-01	10/28/14 11:27
Tetrachloro-m-xylene [2]	*	30-150	S-01	10/28/14 11:27

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Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-509 (0-2)
Sampled: 10/20/2014 11:10

Sample ID: 14J1044-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.1		% Wt	1		SM 2540G	10/23/14	10/24/14 15:06	MRL

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Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-503 (0-2)
Sampled: 10/20/2014 10:10

Sample ID: 14J1044-03

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/27/14 20:49	MJC
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/27/14 20:49	MJC
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/27/14 20:49	MJC
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/27/14 20:49	MJC
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/27/14 20:49	MJC
Aroclor-1254 [2]	1.0	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/27/14 20:49	MJC
Aroclor-1260 [2]	0.17	0.11	mg/Kg dry	5	P-01	SW-846 8082A	10/24/14	10/27/14 20:49	MJC
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/27/14 20:49	MJC
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/27/14 20:49	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	97.1	30-150		10/27/14 20:49
Decachlorobiphenyl [2]	110	30-150		10/27/14 20:49
Tetrachloro-m-xylene [1]	101	30-150		10/27/14 20:49
Tetrachloro-m-xylene [2]	94.5	30-150		10/27/14 20:49

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-503 (0-2)
Sampled: 10/20/2014 10:10

Sample ID: 14J1044-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	86.3		% Wt	1		SM 2540G	10/23/14	10/24/14 15:06	MRL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-505 (2-4)
Sampled: 10/20/2014 10:35

Sample ID: 14J1044-04

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	10/24/14	10/28/14 11:40	MJC
Aroclor-1221 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	10/24/14	10/28/14 11:40	MJC
Aroclor-1232 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	10/24/14	10/28/14 11:40	MJC
Aroclor-1242 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	10/24/14	10/28/14 11:40	MJC
Aroclor-1248 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	10/24/14	10/28/14 11:40	MJC
Aroclor-1254 [2]	2.1	0.23	mg/Kg dry	10	O-03	SW-846 8082A	10/24/14	10/28/14 11:40	MJC
Aroclor-1260 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	10/24/14	10/28/14 11:40	MJC
Aroclor-1262 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	10/24/14	10/28/14 11:40	MJC
Aroclor-1268 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	10/24/14	10/28/14 11:40	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	105	30-150		10/28/14 11:40
Decachlorobiphenyl [2]	120	30-150		10/28/14 11:40
Tetrachloro-m-xylene [1]	111	30-150		10/28/14 11:40
Tetrachloro-m-xylene [2]	105	30-150		10/28/14 11:40

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Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-505 (2-4)
Sampled: 10/20/2014 10:35

Sample ID: 14J1044-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	84.8		% Wt	1		SM 2540G	10/23/14	10/24/14 15:06	MRL

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Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-506 (0-2)
Sampled: 10/20/2014 10:40

Sample ID: 14J1044-05

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:53	MJC
Aroclor-1221 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:53	MJC
Aroclor-1232 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:53	MJC
Aroclor-1242 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:53	MJC
Aroclor-1248 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:53	MJC
Aroclor-1254 [2]	13	2.1	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:53	MJC
Aroclor-1260 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:53	MJC
Aroclor-1262 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:53	MJC
Aroclor-1268 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	10/24/14	10/28/14 11:53	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	10/28/14 11:53
Decachlorobiphenyl [2]	*	30-150	S-01	10/28/14 11:53
Tetrachloro-m-xylene [1]	*	30-150	S-01	10/28/14 11:53
Tetrachloro-m-xylene [2]	*	30-150	S-01	10/28/14 11:53

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-506 (0-2)
Sampled: 10/20/2014 10:40

Sample ID: 14J1044-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.8		% Wt	1		SM 2540G	10/23/14	10/24/14 15:06	MRL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-513 (0-2)
Sampled: 10/20/2014 11:50

Sample ID: 14J1044-06

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:06	MJC
Aroclor-1221 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:06	MJC
Aroclor-1232 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:06	MJC
Aroclor-1242 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:06	MJC
Aroclor-1248 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:06	MJC
Aroclor-1254 [2]	9.6	1.1	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:06	MJC
Aroclor-1260 [2]	1.3	1.1	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:06	MJC
Aroclor-1262 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:06	MJC
Aroclor-1268 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:06	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	10/28/14 12:06
Decachlorobiphenyl [2]	*	30-150	S-01	10/28/14 12:06
Tetrachloro-m-xylene [1]	*	30-150	S-01	10/28/14 12:06
Tetrachloro-m-xylene [2]	*	30-150	S-01	10/28/14 12:06

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-513 (0-2)
Sampled: 10/20/2014 11:50

Sample ID: 14J1044-06

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.7		% Wt	1		SM 2540G	10/23/14	10/24/14 15:06	MRL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA Sample Description: Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-508 (2-4) Sampled: 10/20/2014 11:05

Sample ID: 14J1044-07

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 12:19	MJC
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 12:19	MJC
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 12:19	MJC
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 12:19	MJC
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 12:19	MJC
Aroclor-1254 [2]	0.46	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 12:19	MJC
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 12:19	MJC
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 12:19	MJC
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 12:19	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	102	30-150		10/28/14 12:19
Decachlorobiphenyl [2]	115	30-150		10/28/14 12:19
Tetrachloro-m-xylene [1]	99.6	30-150		10/28/14 12:19
Tetrachloro-m-xylene [2]	94.1	30-150		10/28/14 12:19

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-508 (2-4)
Sampled: 10/20/2014 11:05

Sample ID: 14J1044-07

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.1		% Wt	1		SM 2540G	10/23/14	10/24/14 15:06	MRL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA Sample Description: Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-510 (0-2) Sampled: 10/20/2014 11:20

Sample ID: 14J1044-08

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	1.0	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:32	MJC
Aroclor-1221 [1]	ND	1.0	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:32	MJC
Aroclor-1232 [1]	ND	1.0	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:32	MJC
Aroclor-1242 [1]	ND	1.0	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:32	MJC
Aroclor-1248 [1]	ND	1.0	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:32	MJC
Aroclor-1254 [2]	8.9	1.0	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:32	MJC
Aroclor-1260 [2]	1.9	1.0	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:32	MJC
Aroclor-1262 [1]	ND	1.0	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:32	MJC
Aroclor-1268 [1]	ND	1.0	mg/Kg dry	50		SW-846 8082A	10/24/14	10/28/14 12:32	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	10/28/14 12:32
Decachlorobiphenyl [2]	*	30-150	S-01	10/28/14 12:32
Tetrachloro-m-xylene [1]	*	30-150	S-01	10/28/14 12:32
Tetrachloro-m-xylene [2]	*	30-150	S-01	10/28/14 12:32

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-510 (0-2)
Sampled: 10/20/2014 11:20

Sample ID: 14J1044-08

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.7		% Wt	1		SM 2540G	10/23/14	10/24/14 15:06	MRL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-512 (0-2)
Sampled: 10/20/2014 11:40

Sample ID: 14J1044-09

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	21	mg/Kg dry	1000		SW-846 8082A	10/24/14	10/28/14 12:45	MJC
Aroclor-1221 [1]	ND	21	mg/Kg dry	1000		SW-846 8082A	10/24/14	10/28/14 12:45	MJC
Aroclor-1232 [1]	ND	21	mg/Kg dry	1000		SW-846 8082A	10/24/14	10/28/14 12:45	MJC
Aroclor-1242 [1]	ND	21	mg/Kg dry	1000		SW-846 8082A	10/24/14	10/28/14 12:45	MJC
Aroclor-1248 [1]	ND	21	mg/Kg dry	1000		SW-846 8082A	10/24/14	10/28/14 12:45	MJC
Aroclor-1254 [1]	220	21	mg/Kg dry	1000		SW-846 8082A	10/24/14	10/28/14 12:45	MJC
Aroclor-1260 [2]	26	21	mg/Kg dry	1000		SW-846 8082A	10/24/14	10/28/14 12:45	MJC
Aroclor-1262 [1]	ND	21	mg/Kg dry	1000		SW-846 8082A	10/24/14	10/28/14 12:45	MJC
Aroclor-1268 [1]	ND	21	mg/Kg dry	1000		SW-846 8082A	10/24/14	10/28/14 12:45	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	10/28/14 12:45
Decachlorobiphenyl [2]	*	30-150	S-01	10/28/14 12:45
Tetrachloro-m-xylene [1]	*	30-150	S-01	10/28/14 12:45
Tetrachloro-m-xylene [2]	*	30-150	S-01	10/28/14 12:45

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-512 (0-2)
Sampled: 10/20/2014 11:40

Sample ID: 14J1044-09

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	93.4		% Wt	1		SM 2540G	10/23/14	10/24/14 15:06	MRL

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA Sample Description: Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-512 (2-4) Sampled: 10/20/2014 11:45

Sample ID: 14J1044-10

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 11:01	MJC
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 11:01	MJC
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 11:01	MJC
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 11:01	MJC
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 11:01	MJC
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 11:01	MJC
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 11:01	MJC
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 11:01	MJC
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/24/14	10/28/14 11:01	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	85.1	30-150		10/28/14 11:01
Decachlorobiphenyl [2]	97.4	30-150		10/28/14 11:01
Tetrachloro-m-xylene [1]	88.9	30-150		10/28/14 11:01
Tetrachloro-m-xylene [2]	80.8	30-150		10/28/14 11:01

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St, Woburn, MA
Sample Description:
Work Order: 14J1044

Date Received: 10/21/2014

Field Sample #: EB-512 (2-4)
Sampled: 10/20/2014 11:45

Sample ID: 14J1044-10

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.4		% Wt	1		SM 2540G	10/23/14	10/24/14 15:06	MRL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14J1044-01 [EB-502 (2-4)]	B107936	10/23/14
14J1044-02 [EB-509 (0-2)]	B107936	10/23/14
14J1044-03 [EB-503 (0-2)]	B107936	10/23/14
14J1044-04 [EB-505 (2-4)]	B107936	10/23/14
14J1044-05 [EB-506 (0-2)]	B107936	10/23/14
14J1044-06 [EB-513 (0-2)]	B107936	10/23/14
14J1044-07 [EB-508 (2-4)]	B107936	10/23/14
14J1044-08 [EB-510 (0-2)]	B107936	10/23/14
14J1044-09 [EB-512 (0-2)]	B107936	10/23/14
14J1044-10 [EB-512 (2-4)]	B107936	10/23/14

Prep Method: SW-846 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14J1044-01 [EB-502 (2-4)]	B107941	10.3	10.0	10/24/14
14J1044-02 [EB-509 (0-2)]	B107941	10.0	10.0	10/24/14
14J1044-03 [EB-503 (0-2)]	B107941	10.4	10.0	10/24/14
14J1044-04 [EB-505 (2-4)]	B107941	10.3	10.0	10/24/14
14J1044-05 [EB-506 (0-2)]	B107941	10.3	10.0	10/24/14
14J1044-06 [EB-513 (0-2)]	B107941	10.1	10.0	10/24/14
14J1044-07 [EB-508 (2-4)]	B107941	10.3	10.0	10/24/14
14J1044-08 [EB-510 (0-2)]	B107941	10.3	10.0	10/24/14
14J1044-09 [EB-512 (0-2)]	B107941	10.4	10.0	10/24/14
14J1044-10 [EB-512 (2-4)]	B107941	10.1	10.0	10/24/14

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B107941 - SW-846 3540C										
Blank (B107941-BLK1)				Prepared: 10/24/14 Analyzed: 10/27/14						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.213*		mg/Kg wet	0.200		106	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.202*		mg/Kg wet	0.200		101	30-150			
Surrogate: Tetrachloro-m-xylene	*0.198*		mg/Kg wet	0.200		98.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.166*		mg/Kg wet	0.200		82.9	30-150			
LCS (B107941-BS1)				Prepared: 10/24/14 Analyzed: 10/27/14						
Aroclor-1016	0.19	0.10	mg/Kg wet	0.200		94.6	40-140			
Aroclor-1016 [2C]	0.19	0.10	mg/Kg wet	0.200		92.6	40-140			
Aroclor-1260	0.19	0.10	mg/Kg wet	0.200		95.9	40-140			
Aroclor-1260 [2C]	0.19	0.10	mg/Kg wet	0.200		93.9	40-140			
Surrogate: Decachlorobiphenyl	*0.216*		mg/Kg wet	0.200		108	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.215*		mg/Kg wet	0.200		107	30-150			
Surrogate: Tetrachloro-m-xylene	*0.195*		mg/Kg wet	0.200		97.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.176*		mg/Kg wet	0.200		88.1	30-150			
LCS Dup (B107941-BSD1)				Prepared: 10/24/14 Analyzed: 10/27/14						
Aroclor-1016	0.20	0.10	mg/Kg wet	0.200		101	40-140	6.26	30	
Aroclor-1016 [2C]	0.19	0.10	mg/Kg wet	0.200		92.6	40-140	0.00809	30	
Aroclor-1260	0.20	0.10	mg/Kg wet	0.200		97.5	40-140	1.65	30	
Aroclor-1260 [2C]	0.19	0.10	mg/Kg wet	0.200		96.3	40-140	2.56	30	
Surrogate: Decachlorobiphenyl	*0.207*		mg/Kg wet	0.200		104	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.208*		mg/Kg wet	0.200		104	30-150			
Surrogate: Tetrachloro-m-xylene	*0.176*		mg/Kg wet	0.200		87.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.160*		mg/Kg wet	0.200		79.9	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B107941 - SW-846 3540C											
Matrix Spike (B107941-MS1)		**Source: 14J1044-02**		Prepared: 10/24/14 Analyzed: 10/28/14							
Aroclor-1016	12	0.11	mg/Kg dry	0.220	0.0	**5270**	*	40-140			MS-21
Aroclor-1016 [2C]	20	0.11	mg/Kg dry	0.220	0.0	**9130**	*	40-140			MS-21
Aroclor-1260	9.4	0.11	mg/Kg dry	0.220	3.0	**2900**	*	40-140			MS-21
Aroclor-1260 [2C]	8.8	0.11	mg/Kg dry	0.220	3.6	**2350**	*	40-140			MS-21
Surrogate: Decachlorobiphenyl	*0.232*		mg/Kg dry	0.220		106		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.265*		mg/Kg dry	0.220		121		30-150			
Surrogate: Tetrachloro-m-xylene	*0.261*		mg/Kg dry	0.220		119		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.204*		mg/Kg dry	0.220		93.0		30-150			
Matrix Spike Dup (B107941-MSD1)		**Source: 14J1044-02**		Prepared: 10/24/14 Analyzed: 10/28/14							
Aroclor-1016	7.9	0.11	mg/Kg dry	0.220	0.0	**3610**	*	40-140	37.5	50	MS-21
Aroclor-1016 [2C]	14	0.11	mg/Kg dry	0.220	0.0	**6340**	*	40-140	36.1	50	MS-21
Aroclor-1260	6.8	0.11	mg/Kg dry	0.220	3.0	**1740**	*	40-140	31.5	50	MS-21
Aroclor-1260 [2C]	6.3	0.11	mg/Kg dry	0.220	3.6	**1220**	*	40-140	33.0	50	MS-21
Surrogate: Decachlorobiphenyl	*0.207*		mg/Kg dry	0.220		94.4		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.235*		mg/Kg dry	0.220		107		30-150			
Surrogate: Tetrachloro-m-xylene	*0.241*		mg/Kg dry	0.220		110		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.193*		mg/Kg dry	0.220		88.0		30-150			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B107936 - % Solids										
Duplicate (B107936-DUP8)		**Source: 14J1044-01**		Prepared: 10/23/14 Analyzed: 10/24/14						
% Solids	75.7		% Wt		75.2			0.663	20	

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-502 (2-4)

Lab Sample ID: 14J1044-01 Date(s) Analyzed: 10/28/2014 10/28/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	3.8	
	2	0.00	0.00	0.00	3.8	0.0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-509 (0-2)

Lab Sample ID: 14J1044-02 Date(s) Analyzed: 10/28/2014 10/28/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	17	
	2	0.00	0.00	0.00	17	1.8
Aroclor-1260	1	0.00	0.00	0.00	3.0	
	2	0.00	0.00	0.00	3.6	17.2

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-503 (0-2)

Lab Sample ID: 14J1044-03 Date(s) Analyzed: 10/27/2014 10/27/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	1.0	
	2	0.00	0.00	0.00	1.0	3.9

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-505 (2-4)

Lab Sample ID: 14J1044-04 Date(s) Analyzed: 10/28/2014 10/28/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	2.1	
	2	0.00	0.00	0.00	2.1	1.9

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-506 (0-2)

Lab Sample ID: 14J1044-05 Date(s) Analyzed: 10/28/2014 10/28/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	12	
	2	0.00	0.00	0.00	13	4.7

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-513 (0-2)

Lab Sample ID: 14J1044-06

Date(s) Analyzed: 10/28/2014 10/28/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	9.6	
	2	0.00	0.00	0.00	9.6	0.5

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-508 (2-4)

Lab Sample ID: 14J1044-07 Date(s) Analyzed: 10/28/2014 10/28/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	0.44	
	2	0.00	0.00	0.00	0.46	5.1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-510 (0-2)

Lab Sample ID: 14J1044-08 Date(s) Analyzed: 10/28/2014 10/28/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	8.6	
	2	0.00	0.00	0.00	8.9	3.7
Aroclor-1260	1	0.00	0.00	0.00	1.3	
	2	0.00	0.00	0.00	1.9	34.6

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

EB-512 (0-2)

Lab Sample ID: 14J1044-09 Date(s) Analyzed: 10/28/2014 10/28/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	220	
	2	0.00	0.00	0.00	210	2.8

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B107941-BS1 Date(s) Analyzed: 10/27/2014 10/27/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.19	
	2	0.00	0.00	0.00	0.19	1
Aroclor-1260	1	0.00	0.00	0.00	0.19	
	2	0.00	0.00	0.00	0.19	1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B107941-BSD1 Date(s) Analyzed: 10/27/2014 10/27/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.20	
	2	0.00	0.00	0.00	0.19	6
Aroclor-1260	1	0.00	0.00	0.00	0.20	
	2	0.00	0.00	0.00	0.19	3

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B107941-MS1 Date(s) Analyzed: 10/28/2014 10/28/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	12	
	2	0.00	0.00	0.00	20	53
Aroclor-1260	1	0.00	0.00	0.00	9.4	
	2	0.00	0.00	0.00	8.8	7

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike Dup

Lab Sample ID: B107941-MSD1 Date(s) Analyzed: 10/28/2014 10/28/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	7.9	
	2	0.00	0.00	0.00	14	56
Aroclor-1260	1	0.00	0.00	0.00	6.8	
	2	0.00	0.00	0.00	6.3	8

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
MS-21	Matrix spike and/or spike duplicate recovery bias high due to contribution of other Aroclors present in the source sample.
O-03	Sample contains two incompletely resolved aroclors. Aroclor with the closest matching pattern is reported.
O-32	A five times dilution was performed as part of the standard analytical procedure.
P-01	Result was confirmed using a dissimilar column. Relative percent difference between the two results was >40%. In accordance with the method, the higher result was reported.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1221	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1232	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1242	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1248	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1254	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1260	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,NJ

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

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con-test ANALYTICAL LABORATORY

Phone: 413-525-2332
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Email: info@contestlabs.com
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CHAIN OF CUSTODY RECORD

14J1044

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Company Name: EBI Consulting
Address: 21 B St
Burlington MA 01803
Attention: Meghan Kelley
Project Location: 107 Main St., Woburn, MA
Sampled By: Dan Bellucci

Telephone: (845) 803-4347
Project # T2140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email dbellucci@ebiconsulting.ca
Format ◉ PDF ◉ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	PCBs + SOXHLET	# of Containers	** Preservation	***Container Code
01	EB-502 (2-4')	c 10/20/14	10:05		X	S	U	X			
02	EB-509 (0-2')	c	11:10		X	S	U	X			
03	EB-503 (0-2')	c	10:10		X	S	U	X			
04	EB-505 (2-4')	c	10:35		X	S	U	X			
05	EB-506 (0-2')	c	10:40		X	S	U	X			
06	EB-513 (0-2')	c	11:50		X	S	U	X			
07	EB-508 (2-4')	c	11:05		X	S	U	X			
08	EB-510 (0-2')	c	11:20		X	S	U	X			
09	EB-512 (0-2')	c	11:40		X	S	U	X			
10	EB-512 (2-4')	c	11:45		X	S	U	X			

Comments:

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:

H - High; M - Medium; L - Low; C - Clean; U - Unknown

Dissolved Metal
○ Field Filtered
○ Lab to Filter

***Cont. Code:**
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfa
X = Na hydroxide
T = Na thiosulfate
O = Other _____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other _____

	Date/Time:
Relinquished by: (signature)	
Received by: (signature) R Dean 10/21/14	14:10
Relinquished by: (signature) R Dean 10/21/14	17:02
Received by: (signature) Paula 10/21/14 4.8	17:02

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: MA EDDs
Connecticut:
Other:

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

AIHA LAP, LLC ACCREDITED LABORATORY
ACCREDITED IN ACCORDANCE WITH nelac

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

39 Spruce St.
East Longmeadow, MA. 01028
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F: 413-525-6405
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Sample Receipt Checklist

CLIENT NAME: EBI **RECEIVED BY:** PB **DATE:** 10-21-14

1) **Was the chain(s) of custody relinquished and signed?** (Yes) No No CoC Included
2) **Does the chain agree with the samples?** (Yes) No
   If not, explain:
3) **Are all the samples in good condition?** (Yes) No
   If not, explain:
4) **How were the samples received:**

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? (Yes) No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 4.8

5) **Are there Dissolved samples for the lab to filter?** Yes (No)
   Who was notified _____ Date _____ Time _____
6) **Are there any RUSH or SHORT HOLDING TIME samples?** Yes (No)
   Who was notified _____ Date _____ Time _____
7) **Location where samples are stored:** Log in

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) **Do all samples have the proper Acid pH:** Yes No (N/A) _____
9) **Do all samples have the proper Base pH:** Yes No (N/A) _____
10) **Was the PC notified of any discrepancies with the CoC vs the samples:** Yes No (N/A)

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	10
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below		Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved

Time and Date Frozen:

Doc# 277
Rev. 4 August 2013

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	NA	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** PB **Date/Time:** 10.21.14 17:02

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MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Con-Test Analytical Laboratory	Project #:	14J1044
Project Location:	1071 Main St, Woburn, MA	RTN:	

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

14J1044-01 thru 14J1044-10

Matrices: Soil

CAM Protocol (check all that below)

8260 VOC CAM II A ( )	7470/7471 Hg CAM IIIB ( )	MassDEP VPH CAM IV A ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassDEP APH CAM IX A ( )
8270 SVOC CAM II B ( )	7010 Metals CAM III C ( )	MassDEP EPH CAM IV A ( )	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )
6010 Metals CAM III A ( )	6020 Metals CAM III D ( )	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )	

Affirmative response to Questions A throughF is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No[1]
B	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?	☑ Yes	☐ No[1]
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No[1]
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?	☑ Yes	☐ No[1]
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☐ Yes	☐ No[1]
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes	☐ No[1]
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?	☑ Yes	☐ No[1]

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC perfomance standards specified in the CAM protocol(s) achieved?	☐ Yes	☑ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☑ Yes	☐ No[1]

[1] *All Negative responses must be addressed in an attached Environmental Laboratory case narrative.*

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

Signature: Tod Kopyscinski Position: Laboratory Director

Printed Name: Tod E. Kopyscinski Date: 10/28/14

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

November 10, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St., Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14K0271

Enclosed are results of analyses for samples received by the laboratory on November 6, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 11/10/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14K0271

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
TP-01-ash-(1ft)	14K0271-01	Soil		SM 2540G	
				SW-846 8082A	
TP-01-Light Brown-(2ft)	14K0271-02	Soil		SM 2540G	
				SW-846 8082A	
TP-01-Brown-(3ft)	14K0271-03	Soil		SM 2540G	
				SW-846 8082A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Johanna K. Harrington
Manager, Laboratory Reporting

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0271

Date Received: 11/6/2014

Field Sample #: TP-01-ash-(1ft)
Sampled: 11/6/2014 11:20

Sample ID: 14K0271-01

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:32	KAL
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:32	KAL
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:32	KAL
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:32	KAL
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:32	KAL
Aroclor-1254 [2]	0.75	0.12	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:32	KAL
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:32	KAL
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:32	KAL
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:32	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	72.1	30-150		11/8/14 22:32
Decachlorobiphenyl [2]	78.0	30-150		11/8/14 22:32
Tetrachloro-m-xylene [1]	76.9	30-150		11/8/14 22:32
Tetrachloro-m-xylene [2]	77.0	30-150		11/8/14 22:32

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0271

Date Received: 11/6/2014

Field Sample #: TP-01-ash-(1ft)
Sampled: 11/6/2014 11:20

Sample ID: 14K0271-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	82.1		% Wt	1		SM 2540G	11/10/14	11/10/14 15:17	MXG

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Project Location: 1071 Main St., Woburn, MA Sample Description: Work Order: 14K0271

Date Received: 11/6/2014

Field Sample #: TP-01-Light Brown-(2ft) Sampled: 11/6/2014 11:25

Sample ID: 14K0271-02

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:44	KAL
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:44	KAL
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:44	KAL
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:44	KAL
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:44	KAL
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:44	KAL
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:44	KAL
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:44	KAL
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:44	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	72.8	30-150		11/8/14 22:44
Decachlorobiphenyl [2]	73.1	30-150		11/8/14 22:44
Tetrachloro-m-xylene [1]	71.7	30-150		11/8/14 22:44
Tetrachloro-m-xylene [2]	71.5	30-150		11/8/14 22:44

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0271

Date Received: 11/6/2014

Field Sample #: TP-01-Light Brown-(2ft)
Sampled: 11/6/2014 11:25

Sample ID: 14K0271-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	94.9		% Wt	1		SM 2540G	11/10/14	11/10/14 15:17	MXG

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Project Location: 1071 Main St., Woburn, MA Sample Description: Work Order: 14K0271

Date Received: 11/6/2014

Field Sample #: TP-01-Brown-(3ft) Sampled: 11/6/2014 11:30

Sample ID: 14K0271-03

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:57	KAL
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:57	KAL
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:57	KAL
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:57	KAL
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:57	KAL
Aroclor-1254 [2]	0.87	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:57	KAL
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:57	KAL
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:57	KAL
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 22:57	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	75.8	30-150		11/8/14 22:57
Decachlorobiphenyl [2]	78.2	30-150		11/8/14 22:57
Tetrachloro-m-xylene [1]	74.4	30-150		11/8/14 22:57
Tetrachloro-m-xylene [2]	73.3	30-150		11/8/14 22:57

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0271

Date Received: 11/6/2014

Field Sample #: TP-01-Brown-(3ft)
Sampled: 11/6/2014 11:30

Sample ID: 14K0271-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.1		% Wt	1		SM 2540G	11/10/14	11/10/14 15:17	MXG

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Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14K0271-01 [TP-01-ash-(1ft)]	B109266	11/10/14
14K0271-02 [TP-01-Light Brown-(2ft)]	B109266	11/10/14
14K0271-03 [TP-01-Brown-(3ft)]	B109266	11/10/14

Prep Method: SW-846 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14K0271-01 [TP-01-ash-(1ft)]	B109189	10.0	10.0	11/07/14
14K0271-02 [TP-01-Light Brown-(2ft)]	B109189	10.0	10.0	11/07/14
14K0271-03 [TP-01-Brown-(3ft)]	B109189	10.1	10.0	11/07/14

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B109189 - SW-846 3540C										
Blank (B109189-BLK1)				Prepared: 11/07/14 Analyzed: 11/09/14						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.180*		mg/Kg wet	0.200		90.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.173*		mg/Kg wet	0.200		86.6	30-150			
Surrogate: Tetrachloro-m-xylene	*0.159*		mg/Kg wet	0.200		79.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.175*		mg/Kg wet	0.200		87.4	30-150			
LCS (B109189-BS1)				Prepared: 11/07/14 Analyzed: 11/09/14						
Aroclor-1016	0.20	0.10	mg/Kg wet	0.200		100	40-140			
Aroclor-1016 [2C]	0.17	0.10	mg/Kg wet	0.200		84.6	40-140			
Aroclor-1260	0.17	0.10	mg/Kg wet	0.200		86.0	40-140			
Aroclor-1260 [2C]	0.15	0.10	mg/Kg wet	0.200		77.4	40-140			
Surrogate: Decachlorobiphenyl	*0.167*		mg/Kg wet	0.200		83.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.147*		mg/Kg wet	0.200		73.4	30-150			
Surrogate: Tetrachloro-m-xylene	*0.146*		mg/Kg wet	0.200		72.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.149*		mg/Kg wet	0.200		74.3	30-150			
LCS Dup (B109189-BSD1)				Prepared: 11/07/14 Analyzed: 11/09/14						
Aroclor-1016	0.18	0.10	mg/Kg wet	0.200		91.2	40-140	9.24	30	
Aroclor-1016 [2C]	0.19	0.10	mg/Kg wet	0.200		93.5	40-140	9.99	30	
Aroclor-1260	0.19	0.10	mg/Kg wet	0.200		94.4	40-140	9.27	30	
Aroclor-1260 [2C]	0.17	0.10	mg/Kg wet	0.200		86.4	40-140	11.0	30	
Surrogate: Decachlorobiphenyl	*0.179*		mg/Kg wet	0.200		89.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.160*		mg/Kg wet	0.200		80.2	30-150			
Surrogate: Tetrachloro-m-xylene	*0.149*		mg/Kg wet	0.200		74.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.155*		mg/Kg wet	0.200		77.7	30-150			

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

TP-01-ash-(1ft)

Lab Sample ID: 14K0271-01 Date(s) Analyzed: 11/08/2014 11/08/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	0.64	
	2	0.00	0.00	0.00	0.75	15.5

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

TP-01-Brown-(3ft)

Lab Sample ID: 14K0271-03

Date(s) Analyzed: 11/08/2014 11/08/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	0.75	
	2	0.00	0.00	0.00	0.87	15.3

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B109189-BS1

Date(s) Analyzed: 11/09/2014 11/09/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.20	
	2	0.00	0.00	0.00	0.17	16
Aroclor-1260	1	0.00	0.00	0.00	0.17	
	2	0.00	0.00	0.00	0.15	14

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B109189-BSD1 Date(s) Analyzed: 11/09/2014 11/09/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.18	
	2	0.00	0.00	0.00	0.19	4
Aroclor-1260	1	0.00	0.00	0.00	0.19	
	2	0.00	0.00	0.00	0.17	11

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1221	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1232	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1242	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1248	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1254	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1260	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,NJ

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East longmeadow, MA 01028

Rev 04.05.12

14K0271

Company Name: EBI Consulting
Address: 21 B Street
Burlington, MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main Street, Woburn, MA
Sampled By: Daniel Bellucci

Telephone: 845-803-4347
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ◉ PDF ◉ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	PCBs 8082 + SOXHLET
01	TP-01-ash-(1')	11/06/14	11:20			S	U	✓
02	TP-01-Light Brown-(2')	11/06/14	11:25			S	U	✓
03	TP-01-Brown-(3')	11/06/14	11:30			S	U	✓

# of Containers
** Preservation
***Container Code

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:**
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Comments:

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

	Date/Time
Relinquished by: (signature)	11/06/14
Received by: (signature)	11/6/14 1:20 pm
Relinquished by: (signature)	11/6/14 4:20 pm
Received by: (signature)	11/6/14 16:30

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5-day
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other: Vermont

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

AIHA LAP, LLC ACCREDITED LABORATORY
ACCREDITED IN ACCORDANCE WITH nelac
NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

con-test® ANALYTICAL LABORATORY

Sample Receipt Checklist

CLIENT NAME: EBI RECEIVED BY: KB DATE: 11/6/14

1) **Was the chain(s) of custody relinquished and signed?** (Yes) No No CoC Included
2) **Does the chain agree with the samples?** (Yes) No
   If not, explain:
3) **Are all the samples in good condition?** (Yes) No
   If not, explain:
4) **How were the samples received:**
   On Ice ☑ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☑
   Were the samples received in Temperature Compliance of (2-6°C)? (Yes) No N/A
   Temperature °C by Temp blank _____ Temperature °C by Temp gun 2.1°
5) **Are there Dissolved samples for the lab to filter?** Yes (No)
   Who was notified _____ Date _____ Time _____
6) **Are there any RUSH or SHORT HOLDING TIME samples?** (Yes) No
   Who was notified _____ Date _____ Time _____
7) **Location where samples are stored:** 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) **Do all samples have the proper Acid pH:** Yes No (N/A) _____
9) **Do all samples have the proper Base pH:** Yes No (N/A) _____
10) **Was the PC notified of any discrepancies with the CoC vs the samples:** Yes No (N/A)

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	3
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below		Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:** 11/6/14

Log-In Technician Initials: KB **Date/Time:** 16:30

Doc #277 Rev. 4 August 2013

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

November 10, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St., Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14K0270

Enclosed are results of analyses for samples received by the laboratory on November 6, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 11/10/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14K0270

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
TP-01 (4-5ft)	14K0270-01	Soil		SM 2540G	
				SW-846 8082A	
TP-02 (1-3ft)	14K0270-02	Soil		SM 2540G	
				SW-846 8082A	
TP-03 (0.5-3ft)	14K0270-04	Soil		SM 2540G	
				SW-846 8082A	
TP-04 (0.5-3ft)	14K0270-06	Soil		SM 2540G	
				SW-846 8082A	
TP-05 (0.5-3ft)	14K0270-08	Soil		SM 2540G	
				SW-846 8082A	
TP-06 (0.5-3ft)	14K0270-10	Soil		SM 2540G	
				SW-846 8082A	
TP-07 (0.5-3ft)	14K0270-12	Soil		SM 2540G	
				SW-846 8082A	
TP-08 (0.5-4ft)	14K0270-14	Soil		SM 2540G	
				SW-846 8082A	

con-test® ANALYTICAL LABORATORY

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SW-846 8082A

Qualifications:

O-03

Sample contains two incompletely resolved aroclors. Aroclor with the closest matching pattern is reported.

Analyte & Samples(s) Qualified:

Aroclor-1248
14K0270-14[TP-08 (0.5-4ft)]

Aroclor-1248 [2C]
14K0270-14[TP-08 (0.5-4ft)]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

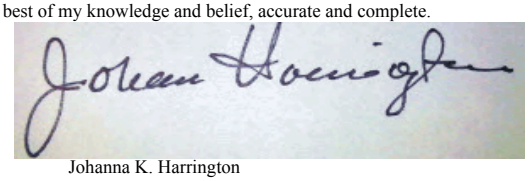
Decachlorobiphenyl
14K0270-02[TP-02 (1-3ft)], 14K0270-04[TP-03 (0.5-3ft)], 14K0270-06[TP-04 (0.5-3ft)], 14K0270-10[TP-06 (0.5-3ft)], 14K0270-14[TP-08 (0.5-4ft)]

Decachlorobiphenyl [2C]
14K0270-02[TP-02 (1-3ft)], 14K0270-04[TP-03 (0.5-3ft)], 14K0270-06[TP-04 (0.5-3ft)], 14K0270-10[TP-06 (0.5-3ft)], 14K0270-14[TP-08 (0.5-4ft)]

Tetrachloro-m-xylene
14K0270-02[TP-02 (1-3ft)], 14K0270-04[TP-03 (0.5-3ft)], 14K0270-06[TP-04 (0.5-3ft)], 14K0270-10[TP-06 (0.5-3ft)], 14K0270-14[TP-08 (0.5-4ft)]

Tetrachloro-m-xylene [2C]
14K0270-02[TP-02 (1-3ft)], 14K0270-04[TP-03 (0.5-3ft)], 14K0270-06[TP-04 (0.5-3ft)], 14K0270-10[TP-06 (0.5-3ft)], 14K0270-14[TP-08 (0.5-4ft)]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Johanna K. Harrington
Manager, Laboratory Reporting

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-01 (4-5ft)
Sampled: 11/6/2014 08:00

Sample ID: 14K0270-01

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 19:20	KAL
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 19:20	KAL
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 19:20	KAL
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 19:20	KAL
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 19:20	KAL
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 19:20	KAL
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 19:20	KAL
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 19:20	KAL
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 19:20	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	73.3	30-150		11/8/14 19:20
Decachlorobiphenyl [2]	72.6	30-150		11/8/14 19:20
Tetrachloro-m-xylene [1]	76.2	30-150		11/8/14 19:20
Tetrachloro-m-xylene [2]	77.6	30-150		11/8/14 19:20

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-01 (4-5ft)
Sampled: 11/6/2014 08:00

Sample ID: 14K0270-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	94.1		% Wt	1		SM 2540G	11/10/14	11/10/14 15:17	MXG

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-02 (1-3ft)
Sampled: 11/6/2014 08:15

Sample ID: 14K0270-02

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	4.5	mg/Kg dry	200		SW-846 8082A	11/7/14	11/9/14 23:27	JMB
Aroclor-1221 [1]	ND	4.5	mg/Kg dry	200		SW-846 8082A	11/7/14	11/9/14 23:27	JMB
Aroclor-1232 [1]	ND	4.5	mg/Kg dry	200		SW-846 8082A	11/7/14	11/9/14 23:27	JMB
Aroclor-1242 [1]	ND	4.5	mg/Kg dry	200		SW-846 8082A	11/7/14	11/9/14 23:27	JMB
Aroclor-1248 [1]	ND	4.5	mg/Kg dry	200		SW-846 8082A	11/7/14	11/9/14 23:27	JMB
Aroclor-1254 [2]	21	4.5	mg/Kg dry	200		SW-846 8082A	11/7/14	11/9/14 23:27	JMB
Aroclor-1260 [1]	ND	4.5	mg/Kg dry	200		SW-846 8082A	11/7/14	11/9/14 23:27	JMB
Aroclor-1262 [1]	ND	4.5	mg/Kg dry	200		SW-846 8082A	11/7/14	11/9/14 23:27	JMB
Aroclor-1268 [1]	ND	4.5	mg/Kg dry	200		SW-846 8082A	11/7/14	11/9/14 23:27	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	11/9/14 23:27
Decachlorobiphenyl [2]	*	30-150	S-01	11/9/14 23:27
Tetrachloro-m-xylene [1]	*	30-150	S-01	11/9/14 23:27
Tetrachloro-m-xylene [2]	*	30-150	S-01	11/9/14 23:27

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-02 (1-3ft)
Sampled: 11/6/2014 08:15

Sample ID: 14K0270-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	89.4		% Wt	1		SM 2540G	11/10/14	11/10/14 15:17	MXG

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-03 (0.5-3ft)
Sampled: 11/6/2014 08:40

Sample ID: 14K0270-04

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	11/7/14	11/9/14 23:40	JMB
Aroclor-1221 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	11/7/14	11/9/14 23:40	JMB
Aroclor-1232 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	11/7/14	11/9/14 23:40	JMB
Aroclor-1242 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	11/7/14	11/9/14 23:40	JMB
Aroclor-1248 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	11/7/14	11/9/14 23:40	JMB
Aroclor-1254 [2]	3.2	0.55	mg/Kg dry	25		SW-846 8082A	11/7/14	11/9/14 23:40	JMB
Aroclor-1260 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	11/7/14	11/9/14 23:40	JMB
Aroclor-1262 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	11/7/14	11/9/14 23:40	JMB
Aroclor-1268 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	11/7/14	11/9/14 23:40	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	11/9/14 23:40
Decachlorobiphenyl [2]	*	30-150	S-01	11/9/14 23:40
Tetrachloro-m-xylene [1]	*	30-150	S-01	11/9/14 23:40
Tetrachloro-m-xylene [2]	*	30-150	S-01	11/9/14 23:40

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-03 (0.5-3ft)
Sampled: 11/6/2014 08:40

Sample ID: 14K0270-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.6		% Wt	1		SM 2540G	11/10/14	11/10/14 15:17	MXG

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-04 (0.5-3ft)
Sampled: 11/6/2014 08:55

Sample ID: 14K0270-06

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	11/7/14	11/9/14 23:52	JMB
Aroclor-1221 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	11/7/14	11/9/14 23:52	JMB
Aroclor-1232 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	11/7/14	11/9/14 23:52	JMB
Aroclor-1242 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	11/7/14	11/9/14 23:52	JMB
Aroclor-1248 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	11/7/14	11/9/14 23:52	JMB
Aroclor-1254 [2]	38	5.4	mg/Kg dry	250		SW-846 8082A	11/7/14	11/9/14 23:52	JMB
Aroclor-1260 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	11/7/14	11/9/14 23:52	JMB
Aroclor-1262 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	11/7/14	11/9/14 23:52	JMB
Aroclor-1268 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	11/7/14	11/9/14 23:52	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	11/9/14 23:52
Decachlorobiphenyl [2]	*	30-150	S-01	11/9/14 23:52
Tetrachloro-m-xylene [1]	*	30-150	S-01	11/9/14 23:52
Tetrachloro-m-xylene [2]	*	30-150	S-01	11/9/14 23:52

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-04 (0.5-3ft)
Sampled: 11/6/2014 08:55

Sample ID: 14K0270-06

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.0		% Wt	1		SM 2540G	11/10/14	11/10/14 15:17	MXG

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA Sample Description: Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-05 (0.5-3ft) Sampled: 11/6/2014 09:20

Sample ID: 14K0270-08

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 20:11	KAL
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 20:11	KAL
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 20:11	KAL
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 20:11	KAL
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 20:11	KAL
Aroclor-1254 [1]	0.41	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 20:11	KAL
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 20:11	KAL
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 20:11	KAL
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/8/14 20:11	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	62.7	30-150		11/8/14 20:11
Decachlorobiphenyl [2]	64.0	30-150		11/8/14 20:11
Tetrachloro-m-xylene [1]	66.2	30-150		11/8/14 20:11
Tetrachloro-m-xylene [2]	66.1	30-150		11/8/14 20:11

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-05 (0.5-3ft)
Sampled: 11/6/2014 09:20

Sample ID: 14K0270-08

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.5		% Wt	1		SM 2540G	11/10/14	11/10/14 15:17	MXG

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-06 (0.5-3ft)
Sampled: 11/6/2014 09:40

Sample ID: 14K0270-10

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	11/7/14	11/10/14 0:04	JMB
Aroclor-1221 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	11/7/14	11/10/14 0:04	JMB
Aroclor-1232 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	11/7/14	11/10/14 0:04	JMB
Aroclor-1242 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	11/7/14	11/10/14 0:04	JMB
Aroclor-1248 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	11/7/14	11/10/14 0:04	JMB
Aroclor-1254 [2]	6.7	1.1	mg/Kg dry	50		SW-846 8082A	11/7/14	11/10/14 0:04	JMB
Aroclor-1260 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	11/7/14	11/10/14 0:04	JMB
Aroclor-1262 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	11/7/14	11/10/14 0:04	JMB
Aroclor-1268 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	11/7/14	11/10/14 0:04	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	11/10/14 0:04
Decachlorobiphenyl [2]	*	30-150	S-01	11/10/14 0:04
Tetrachloro-m-xylene [1]	*	30-150	S-01	11/10/14 0:04
Tetrachloro-m-xylene [2]	*	30-150	S-01	11/10/14 0:04

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-06 (0.5-3ft)
Sampled: 11/6/2014 09:40

Sample ID: 14K0270-10

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.1		% Wt	1		SM 2540G	11/10/14	11/10/14 15:17	MXG

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-07 (0.5-3ft)
Sampled: 11/6/2014 09:50

Sample ID: 14K0270-12

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/10/14 0:17	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/10/14 0:17	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/10/14 0:17	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/10/14 0:17	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/10/14 0:17	JMB
Aroclor-1254 [2]	0.18	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/10/14 0:17	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/10/14 0:17	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/10/14 0:17	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	11/7/14	11/10/14 0:17	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	88.5	30-150		11/10/14 0:17
Decachlorobiphenyl [2]	79.8	30-150		11/10/14 0:17
Tetrachloro-m-xylene [1]	71.7	30-150		11/10/14 0:17
Tetrachloro-m-xylene [2]	72.7	30-150		11/10/14 0:17

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-07 (0.5-3ft)
Sampled: 11/6/2014 09:50

Sample ID: 14K0270-12

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	94.1		% Wt	1		SM 2540G	11/10/14	11/10/14 15:17	MXG

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-08 (0.5-4ft)
Sampled: 11/6/2014 10:10

Sample ID: 14K0270-14

Sample Matrix: Soil

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	4.3	mg/Kg dry	200		SW-846 8082A	11/7/14	11/10/14 0:29	JMB
Aroclor-1221 [1]	ND	4.3	mg/Kg dry	200		SW-846 8082A	11/7/14	11/10/14 0:29	JMB
Aroclor-1232 [1]	ND	4.3	mg/Kg dry	200		SW-846 8082A	11/7/14	11/10/14 0:29	JMB
Aroclor-1242 [1]	ND	4.3	mg/Kg dry	200		SW-846 8082A	11/7/14	11/10/14 0:29	JMB
Aroclor-1248 [2]	11	4.3	mg/Kg dry	200	O-03	SW-846 8082A	11/7/14	11/10/14 0:29	JMB
Aroclor-1254 [2]	25	4.3	mg/Kg dry	200		SW-846 8082A	11/7/14	11/10/14 0:29	JMB
Aroclor-1260 [1]	ND	4.3	mg/Kg dry	200		SW-846 8082A	11/7/14	11/10/14 0:29	JMB
Aroclor-1262 [1]	ND	4.3	mg/Kg dry	200		SW-846 8082A	11/7/14	11/10/14 0:29	JMB
Aroclor-1268 [1]	ND	4.3	mg/Kg dry	200		SW-846 8082A	11/7/14	11/10/14 0:29	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	11/10/14 0:29
Decachlorobiphenyl [2]	*	30-150	S-01	11/10/14 0:29
Tetrachloro-m-xylene [1]	*	30-150	S-01	11/10/14 0:29
Tetrachloro-m-xylene [2]	*	30-150	S-01	11/10/14 0:29

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0270

Date Received: 11/6/2014

Field Sample #: TP-08 (0.5-4ft)
Sampled: 11/6/2014 10:10

Sample ID: 14K0270-14

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	89.9		% Wt	1		SM 2540G	11/10/14	11/10/14 15:17	MXG

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Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14K0270-01 [TP-01 (4-5ft)]	B109266	11/10/14
14K0270-02 [TP-02 (1-3ft)]	B109266	11/10/14
14K0270-04 [TP-03 (0.5-3ft)]	B109266	11/10/14
14K0270-06 [TP-04 (0.5-3ft)]	B109266	11/10/14
14K0270-08 [TP-05 (0.5-3ft)]	B109266	11/10/14
14K0270-10 [TP-06 (0.5-3ft)]	B109266	11/10/14
14K0270-12 [TP-07 (0.5-3ft)]	B109266	11/10/14
14K0270-14 [TP-08 (0.5-4ft)]	B109266	11/10/14

Prep Method: SW-846 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14K0270-01 [TP-01 (4-5ft)]	B109189	10.0	10.0	11/07/14
14K0270-02 [TP-02 (1-3ft)]	B109189	10.0	10.0	11/07/14
14K0270-04 [TP-03 (0.5-3ft)]	B109189	10.1	10.0	11/07/14
14K0270-06 [TP-04 (0.5-3ft)]	B109189	10.1	10.0	11/07/14
14K0270-08 [TP-05 (0.5-3ft)]	B109189	10.0	10.0	11/07/14
14K0270-10 [TP-06 (0.5-3ft)]	B109189	10.0	10.0	11/07/14
14K0270-12 [TP-07 (0.5-3ft)]	B109189	10.0	10.0	11/07/14
14K0270-14 [TP-08 (0.5-4ft)]	B109189	10.3	10.0	11/07/14

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B109189 - SW-846 3540C										
Blank (B109189-BLK1)				Prepared: 11/07/14 Analyzed: 11/09/14						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.180*		mg/Kg wet	0.200		90.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.173*		mg/Kg wet	0.200		86.6	30-150			
Surrogate: Tetrachloro-m-xylene	*0.159*		mg/Kg wet	0.200		79.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.175*		mg/Kg wet	0.200		87.4	30-150			
LCS (B109189-BS1)				Prepared: 11/07/14 Analyzed: 11/09/14						
Aroclor-1016	0.20	0.10	mg/Kg wet	0.200		100	40-140			
Aroclor-1016 [2C]	0.17	0.10	mg/Kg wet	0.200		84.6	40-140			
Aroclor-1260	0.17	0.10	mg/Kg wet	0.200		86.0	40-140			
Aroclor-1260 [2C]	0.15	0.10	mg/Kg wet	0.200		77.4	40-140			
Surrogate: Decachlorobiphenyl	*0.167*		mg/Kg wet	0.200		83.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.147*		mg/Kg wet	0.200		73.4	30-150			
Surrogate: Tetrachloro-m-xylene	*0.146*		mg/Kg wet	0.200		72.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.149*		mg/Kg wet	0.200		74.3	30-150			
LCS Dup (B109189-BSD1)				Prepared: 11/07/14 Analyzed: 11/09/14						
Aroclor-1016	0.18	0.10	mg/Kg wet	0.200		91.2	40-140	9.24	30	
Aroclor-1016 [2C]	0.19	0.10	mg/Kg wet	0.200		93.5	40-140	9.99	30	
Aroclor-1260	0.19	0.10	mg/Kg wet	0.200		94.4	40-140	9.27	30	
Aroclor-1260 [2C]	0.17	0.10	mg/Kg wet	0.200		86.4	40-140	11.0	30	
Surrogate: Decachlorobiphenyl	*0.179*		mg/Kg wet	0.200		89.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.160*		mg/Kg wet	0.200		80.2	30-150			
Surrogate: Tetrachloro-m-xylene	*0.149*		mg/Kg wet	0.200		74.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.155*		mg/Kg wet	0.200		77.7	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B109189 - SW-846 3540C										
Matrix Spike (B109189-MS1)		**Source: 14K0270-01**		Prepared: 11/07/14 Analyzed: 11/08/14						
Aroclor-1016	0.19	0.11	mg/Kg dry	0.210	ND	88.8	40-140			
Aroclor-1016 [2C]	0.18	0.11	mg/Kg dry	0.210	ND	86.3	40-140			
Aroclor-1260	0.18	0.11	mg/Kg dry	0.210	ND	84.2	40-140			
Aroclor-1260 [2C]	0.18	0.11	mg/Kg dry	0.210	ND	85.1	40-140			
Surrogate: Decachlorobiphenyl	*0.155*		mg/Kg dry	0.210		73.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.155*		mg/Kg dry	0.210		73.7	30-150			
Surrogate: Tetrachloro-m-xylene	*0.154*		mg/Kg dry	0.210		73.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.157*		mg/Kg dry	0.210		74.5	30-150			
Matrix Spike Dup (B109189-MSD1)		**Source: 14K0270-01**		Prepared: 11/07/14 Analyzed: 11/08/14						
Aroclor-1016	0.19	0.11	mg/Kg dry	0.210	ND	92.3	40-140	3.88	50	
Aroclor-1016 [2C]	0.19	0.11	mg/Kg dry	0.210	ND	89.6	40-140	3.81	50	
Aroclor-1260	0.18	0.11	mg/Kg dry	0.210	ND	84.2	40-140	0.0118	50	
Aroclor-1260 [2C]	0.18	0.11	mg/Kg dry	0.210	ND	84.7	40-140	0.557	50	
Surrogate: Decachlorobiphenyl	*0.152*		mg/Kg dry	0.210		72.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.152*		mg/Kg dry	0.210		72.3	30-150			
Surrogate: Tetrachloro-m-xylene	*0.151*		mg/Kg dry	0.210		71.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.153*		mg/Kg dry	0.210		72.8	30-150			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B109266 - % Solids										
Duplicate (B109266-DUP2)		**Source: 14K0270-04**		Prepared & Analyzed: 11/10/14						
% Solids	88.6		% Wt		90.6			2.23	20	

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

TP-02 (1-3ft)

Lab Sample ID: 14K0270-02 Date(s) Analyzed: 11/09/2014 11/09/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	21	
	2	0.00	0.00	0.00	21	0.0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

TP-03 (0.5-3ft)

Lab Sample ID: 14K0270-04 Date(s) Analyzed: 11/09/2014 11/09/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	3.1	
	2	0.00	0.00	0.00	3.2	3.5

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

TP-04 (0.5-3ft)

Lab Sample ID: 14K0270-06 Date(s) Analyzed: 11/09/2014 11/09/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	37	
	2	0.00	0.00	0.00	38	2.1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

TP-05 (0.5-3ft)

Lab Sample ID: 14K0270-08 Date(s) Analyzed: 11/08/2014 11/08/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	0.41	
	2	0.00	0.00	0.00	0.40	1.7

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

TP-06 (0.5-3ft)

Lab Sample ID: 14K0270-10 Date(s) Analyzed: 11/10/2014 11/10/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	6.4	
	2	0.00	0.00	0.00	6.7	4.6

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

TP-07 (0.5-3ft)

Lab Sample ID: 14K0270-12 Date(s) Analyzed: 11/10/2014 11/10/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	0.16	
	2	0.00	0.00	0.00	0.18	9.3

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

TP-08 (0.5-4ft)

Lab Sample ID: 14K0270-14 Date(s) Analyzed: 11/10/2014 11/10/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1248	1	0.00	0.00	0.00	7.0	
	2	0.00	0.00	0.00	11	45.0
Aroclor-1254	1	0.00	0.00	0.00	23	
	2	0.00	0.00	0.00	25	7.9

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B109189-BS1

Date(s) Analyzed: 11/09/2014 11/09/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.20	
	2	0.00	0.00	0.00	0.17	16
Aroclor-1260	1	0.00	0.00	0.00	0.17	
	2	0.00	0.00	0.00	0.15	14

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B109189-BSD1 Date(s) Analyzed: 11/09/2014 11/09/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.18	
	2	0.00	0.00	0.00	0.19	4
Aroclor-1260	1	0.00	0.00	0.00	0.19	
	2	0.00	0.00	0.00	0.17	11

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B109189-MS1 Date(s) Analyzed: 11/08/2014 11/08/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.19	
	2	0.00	0.00	0.00	0.18	4
Aroclor-1260	1	0.00	0.00	0.00	0.18	
	2	0.00	0.00	0.00	0.18	2

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike Dup

Lab Sample ID: B109189-MSD1 Date(s) Analyzed: 11/08/2014 11/08/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.19	
	2	0.00	0.00	0.00	0.19	2
Aroclor-1260	1	0.00	0.00	0.00	0.18	
	2	0.00	0.00	0.00	0.18	2

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
O-03	Sample contains two incompletely resolved aroclors. Aroclor with the closest matching pattern is reported.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1221	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1232	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1242	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1248	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1254	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1260	CT,NH,NY,ME,NC,VA,NJ
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,NJ

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

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CHAIN OF CUSTODY RECORD

39 Spruce Street
East longmeadow, MA 01028

Rev 04.05.12

14K0270

Company Name: EBI Consulting
Address: 21 B Street
Burlington, MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main Street, Woburn, MA
Sampled By: Daniel Bellucci

Telephone: 845-803-4347
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ◉ PDF ◉ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	PCBs 8082 + SOXHLET											# of Containers	** Preservation	***Container Code
																			1	I	
01	TP-01 (4-5')	11/06/14	08:00			S	U	✓													
02	TP-02 (1-3')	11/06/14	08:15			S	U	✓													
03	***TP-02 (3-5')	11/06/14	08:20			S	U	✓													
04	TP-03 (0.5-3')	11/06/14	08:40			S	U	✓													
05	***TP-03 (3-5')	11/06/14	08:45			S	U	✓													
06	TP-04 (0.5-3')	11/06/14	08:55			S	U	✓													
07	***TP-04 (4-6')	11/06/14	09:00			S	U	✓													
08	TP-05 (0.5-3')	11/06/14	09:20			S	U	✓													
09	***TP-05 (4-5')	11/06/14	09:30			S	U	✓													
10	TP-06 (0.5-3')	11/06/14	09:40			S	U	✓													

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:**
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Comments:
***=Hold Analysis

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time: 11/06/14	
Received by: (signature)	Date/Time: 11/6/14 1:20pm	
Relinquished by: (signature)	Date/Time: 11/6/14 4:30pm	
Received by: (signature)	Date/Time: 11/6/14 16:30	

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5-day
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other: Vermont

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

AIHA LAP, LLC ACCREDITED LABORATORY
ACCREDITED IN ACCORDANCE WITH nelac
NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

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CHAIN OF CUSTODY RECORD

39 Spruce Street
East longmeadow, MA 01028

Rev. 04.05.12

14K0270

Company Name: EBI Consulting
Address: 21 B Street
Burlington, MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main Street, Woburn, MA
Sampled By: Daniel Bellucci

Telephone: 845-803-4347
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ◉ PDF ◉ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	PCBs 8082 + SOXHLET
11	***TP-06 (4-6')	11/06/14	09:45			S	U	✓
12	TP-07 (0.5-3')	11/06/14	09:50			S	U	✓
13	***TP-07 (4-6')	11/06/14	09:55			S	U	✓
14	TP-08 (0.5-4)	11/06/14	10:10			S	U	✓
15	***TP-08 (4-6')	11/06/14	10:15			S	U	✓

ANALYSIS REQUESTED

# of Containers
** Preservation
***Container Code

Dissolved Metals
○ Field Filtered
○ Lab to Filter

*****Cont. Code:**
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

****Preservation**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

***Matrix Code:**
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Comments:
***=Hold Analysis

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	11/06/14	Date/Time:
Received by: (signature)	11/6/14	Date/Time: 1:20 pm
Relinquished by: (signature)	11/6/14	Date/Time: 4:30 pm
Received by: (signature)	11/6/14	Date/Time: 16:30

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5-day
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other: Vermont

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

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NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

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F: 413-525-6405
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con-test® ANALYTICAL LABORATORY

Sample Receipt Checklist

CLIENT NAME: EBI RECEIVED BY: KB DATE: 11/6/14

1) **Was the chain(s) of custody relinquished and signed?** Yes No No CoC Included
2) **Does the chain agree with the samples?** Yes No
   If not, explain:
3) **Are all the samples in good condition?** Yes No
   If not, explain:
4) **How were the samples received:**
   On Ice ☑ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☑
   Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A
   Temperature °C by Temp blank _____ Temperature °C by Temp gun 2.1°
5) **Are there Dissolved samples for the lab to filter?** Yes No
   Who was notified _____ Date _____ Time _____
6) **Are there any RUSH or SHORT HOLDING TIME samples?** Yes No
   Who was notified _____ Date _____ Time _____
7) **Location where samples are stored:** 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) **Do all samples have the proper Acid pH:** Yes No N/A _____
9) **Do all samples have the proper Base pH:** Yes No N/A _____
10) **Was the PC notified of any discrepancies with the CoC vs the samples:** Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	15
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below		Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments: First 6 samples - amber jars
7-15 - clear jars

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Doc# 277
Rev. 4 August 2013

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	~~NA~~ T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:** 11/6/14

Log-In Technician Initials: KB **Date/Time:** 16:30

Doc #277 Rev. 4 August 2013

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

November 10, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St., Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14K0268

Enclosed are results of analyses for samples received by the laboratory on November 6, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 11/10/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14K0268

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Tank Product	14K0268-01	Product/Solid	Pure product with No. 4 fuel oil characteristics	EPA 600/4-81-045 SW-846 8015C	

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SW-846 8015C

Qualifications:

Z-01

Sample chromatogram shows that the contamination is a mixture of mineral spirits and heavy residual hydrocarbons that are similar to asphalt.

Analyte & Samples(s) Qualified:

TPH (C9-C36)

14K0268-01[Tank Product]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damboragian
Laboratory Manager

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA Sample Description: Pure product with No. 4 fuel oil charac Work Order: 14K0268

Date Received: 11/6/2014

Field Sample #: Tank Product Sampled: 11/6/2014 11:45

Sample ID: 14K0268-01

Sample Matrix: Product/Solid

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.96	mg/Kg	1		EPA 600/4-81-045	11/7/14	11/8/14 17:37	JMB
Aroclor-1221 [1]	ND	0.96	mg/Kg	1		EPA 600/4-81-045	11/7/14	11/8/14 17:37	JMB
Aroclor-1232 [1]	ND	0.96	mg/Kg	1		EPA 600/4-81-045	11/7/14	11/8/14 17:37	JMB
Aroclor-1242 [1]	ND	0.96	mg/Kg	1		EPA 600/4-81-045	11/7/14	11/8/14 17:37	JMB
Aroclor-1248 [1]	ND	0.96	mg/Kg	1		EPA 600/4-81-045	11/7/14	11/8/14 17:37	JMB
Aroclor-1254 [2]	5.2	0.96	mg/Kg	1		EPA 600/4-81-045	11/7/14	11/8/14 17:37	JMB
Aroclor-1260 [1]	ND	0.96	mg/Kg	1		EPA 600/4-81-045	11/7/14	11/8/14 17:37	JMB
Aroclor-1262 [1]	ND	0.96	mg/Kg	1		EPA 600/4-81-045	11/7/14	11/8/14 17:37	JMB
Aroclor-1268 [1]	ND	0.96	mg/Kg	1		EPA 600/4-81-045	11/7/14	11/8/14 17:37	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	67.7	30-150		11/8/14 17:37
Decachlorobiphenyl [2]	81.6	30-150		11/8/14 17:37
Tetrachloro-m-xylene [1]	75.4	30-150		11/8/14 17:37
Tetrachloro-m-xylene [2]	73.8	30-150		11/8/14 17:37

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Project Location: 1071 Main St., Woburn, MA
Sample Description: Pure product with No. 4 fuel oil charac
Work Order: 14K0268

Date Received: 11/6/2014

Field Sample #: Tank Product
Sampled: 11/6/2014 11:45

Sample ID: 14K0268-01

Sample Matrix: Product/Solid

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	42000	2500	mg/Kg	1	Z-01	SW-846 8015C	11/7/14	11/7/14 13:13	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	117	40-140		11/7/14 13:13

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Sample Extraction Data

Prep Method: SW-846 3580A-EPA 600/4-81-045

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14K0268-01 [Tank Product]	B109181	0.208	10.0	11/07/14

Prep Method: SW-846 3546-SW-846 8015C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14K0268-01 [Tank Product]	B109149	0.990	10.0	11/07/14

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B109181 - SW-846 3580A										
Blank (B109181-BLK1)				Prepared: 11/07/14 Analyzed: 11/08/14						
Aroclor-1016	ND	0.99	mg/Kg							
Aroclor-1016 [2C]	ND	0.99	mg/Kg							
Aroclor-1221	ND	0.99	mg/Kg							
Aroclor-1221 [2C]	ND	0.99	mg/Kg							
Aroclor-1232	ND	0.99	mg/Kg							
Aroclor-1232 [2C]	ND	0.99	mg/Kg							
Aroclor-1242	ND	0.99	mg/Kg							
Aroclor-1242 [2C]	ND	0.99	mg/Kg							
Aroclor-1248	ND	0.99	mg/Kg							
Aroclor-1248 [2C]	ND	0.99	mg/Kg							
Aroclor-1254	ND	0.99	mg/Kg							
Aroclor-1254 [2C]	ND	0.99	mg/Kg							
Aroclor-1260	ND	0.99	mg/Kg							
Aroclor-1260 [2C]	ND	0.99	mg/Kg							
Aroclor-1262	ND	0.99	mg/Kg							
Aroclor-1262 [2C]	ND	0.99	mg/Kg							
Aroclor-1268	ND	0.99	mg/Kg							
Aroclor-1268 [2C]	ND	0.99	mg/Kg							
Surrogate: Decachlorobiphenyl	*8.09*		mg/Kg	9.90		81.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	*9.62*		mg/Kg	9.90		97.1	30-150			
Surrogate: Tetrachloro-m-xylene	*8.72*		mg/Kg	9.90		88.1	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*7.92*		mg/Kg	9.90		80.0	30-150			
LCS (B109181-BS1)				Prepared: 11/07/14 Analyzed: 11/08/14						
Aroclor-1260	6.6	1.0	mg/Kg	7.58		87.6	40-140			
Aroclor-1260 [2C]	7.0	1.0	mg/Kg	7.58		93.0	40-140			
Surrogate: Decachlorobiphenyl	*9.66*		mg/Kg	10.0		96.6	30-150			
Surrogate: Decachlorobiphenyl [2C]	*11.4*		mg/Kg	10.0		114	30-150			
Surrogate: Tetrachloro-m-xylene	*9.83*		mg/Kg	10.0		98.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*8.60*		mg/Kg	10.0		86.0	30-150			
LCS Dup (B109181-BSD1)				Prepared: 11/07/14 Analyzed: 11/08/14						
Aroclor-1260	6.4	1.0	mg/Kg	7.55		84.3	40-140	4.15	30	
Aroclor-1260 [2C]	6.7	1.0	mg/Kg	7.55		89.4	40-140	4.31	30	
Surrogate: Decachlorobiphenyl	*9.41*		mg/Kg	10.0		94.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	*11.0*		mg/Kg	10.0		110	30-150			
Surrogate: Tetrachloro-m-xylene	*9.54*		mg/Kg	10.0		95.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*8.35*		mg/Kg	10.0		83.5	30-150			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B109149 - SW-846 3546										
Blank (B109149-BLK1)				Prepared & Analyzed: 11/07/14						
Fuel Oil #2	ND	25000	mg/Kg							
Surrogate: o-Terphenyl	*2070*		mg/Kg	2000		104	40-140			
LCS (B109149-BS1)				Prepared & Analyzed: 11/07/14						
Fuel Oil #2	21500	25000	mg/Kg	20000		108	40-140			
Surrogate: o-Terphenyl	*2000*		mg/Kg	2000		99.8	40-140			
LCS Dup (B109149-BSD1)				Prepared & Analyzed: 11/07/14						
Fuel Oil #2	21300	25000	mg/Kg	20000		107	40-140	0.949	25	
Surrogate: o-Terphenyl	*1950*		mg/Kg	2000		97.4	40-140			

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

EPA 600/4-81-045

Tank Product

Lab Sample ID: 14K0268-01 Date(s) Analyzed: 11/08/2014 11/08/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1254	1	0.00	0.00	0.00	4.7	
	2	0.00	0.00	0.00	5.2	10.1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

EPA 600/4-81-045

LCS

Lab Sample ID: B109181-BS1

Date(s) Analyzed: 11/08/2014 11/08/2014

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1260	1	0.00	0.00	0.00	6.6	
	2	0.00	0.00	0.00	7.0	5

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

EPA 600/4-81-045

LCS Dup

Lab Sample ID: B109181-BSD1 Date(s) Analyzed: 11/08/2014 11/08/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1260	1	0.00	0.00	0.00	6.4	
	2	0.00	0.00	0.00	6.7	5

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
Z-01	Sample chromatogram shows that the contamination is a mixture of mineral spirits and heavy residual hydrocarbons that are similar to asphalt.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 600/4-81-045 in Oil	
Aroclor-1016	MA
Aroclor-1016 [2C]	MA
Aroclor-1221	MA
Aroclor-1221 [2C]	MA
Aroclor-1232	MA
Aroclor-1232 [2C]	MA
Aroclor-1242	MA
Aroclor-1242 [2C]	MA
Aroclor-1248	MA
Aroclor-1248 [2C]	MA
Aroclor-1254	MA
Aroclor-1254 [2C]	MA
Aroclor-1260	MA
Aroclor-1260 [2C]	MA
Aroclor-1262	MA
Aroclor-1262 [2C]	MA
Aroclor-1268	MA
Aroclor-1268 [2C]	MA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com
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East longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

14K02268

Rev 04.05.12

Company Name: EBI Consulting
Address: 21 B St Burlington, MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main St, Woburn, MA
Sampled By: Dan Bellucci

Telephone: (845) 803 4347
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ● EMAIL ● WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ● PDF ● EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	# of Containers	** Preservation	***Container Code	PCBs	TPH + Fingerprint
01	Tank Product	11/06/14	11:45			O	H	1	H	A	X	X

ANALYSIS REQUESTED

*Caution when opening Jar
Oil on outside of Jar*

Comments:
* Pure product w/ No. 4 Fuel oil characteristics - use Caution when handling bottle*

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

***Dissolved Metals**
○ Field Filtered
○ Lab to Filter

***Cont. Code:**
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Relinquished by: (signature)	11/06/14	Date/Time:
Received by: (signature)	11/6/14	Date/Time: 1:20 pm
Relinquished by: (signature)	11/6/14	Date/Time: 4:30 pm
Received by: (signature)	11/6/14	Date/Time: 16:30

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5 RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other:

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

con-test® ANALYTICAL LABORATORY

Sample Receipt Checklist

CLIENT NAME: EBI **RECEIVED BY:** KB **DATE:** 11/6/14

1) Was the chain(s) of custody relinquished and signed? (Yes) No **No CoC Included**

2) Does the chain agree with the samples? (Yes) No

If not, explain:

3) Are all the samples in good condition? (Yes) No

If not, explain:

4) How were the samples received:

On Ice ☑ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☑

Were the samples received in Temperature Compliance of (2-6°C)? (Yes) No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 5.4°

5) Are there Dissolved samples for the lab to filter? Yes (No)

Who was notified _____ Date _____ Time _____

6) Are there any (RUSH) or SHORT HOLDING TIME samples? (Yes) No

Who was notified _____ Date _____ Time _____

7) Location where samples are stored: 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No (N/A) _____

9) Do all samples have the proper Base pH: Yes No (N/A) _____

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No (N/A)

Containers received at Con-Test

	# of containers			# of containers
1 Liter Amber	1		8 oz amber/clear jar	
500 mL Amber			4 oz amber/clear jar	
250 mL Amber (8oz amber)			2 oz amber/clear jar	
1 Liter Plastic			Plastic Bag / Ziploc	
500 mL Plastic			SOC Kit	
250 mL plastic			Non-ConTest Container	
40 mL Vial - type listed below			Perchlorate Kit	
Colisure / bacteria bottle			Flashpoint bottle	
Dissolved Oxygen bottle			Other glass jar	
Encore			Other	

Laboratory Comments: Container completely coated in oil

40 mL vials:	# HCl _____	# Methanol _____	Time and Date Frozen:
	# Bisulfate _____	# DI Water _____	
	# Thiosulfate _____	Unpreserved _____	

Doc# 277
Rev. 4 August 2013

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	F	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:** 11/6/14

Log-In Technician Initials: KB **Date/Time:** 16:30

Doc #277 Rev. 4 August 2013

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

November 24, 2014

Dan Bellucci
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: 1071 Main St., Woburn, MA
Client Job Number:
Project Number: 12140078
Laboratory Work Order Number: 14K0603

Enclosed are results of analyses for samples received by the laboratory on November 13, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Dan Bellucci

REPORT DATE: 11/24/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 12140078

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14K0603

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 1071 Main St., Woburn, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
TP-01 (4-5ft)	14K0603-01	Soil		SM 2540G	
				SW-846 8081B	
				SW-846 8151A	
TP-03 (0.5-3ft)	14K0603-02	Soil		SM 2540G	
				SW-846 8081B	
				SW-846 8151A	
TP-05 (0.5-3ft)	14K0603-03	Soil		SM 2540G	
				SW-846 8081B	
				SW-846 8151A	
TP-06 (0.5-3ft)	14K0603-04	Soil		SM 2540G	
				SW-846 8081B	
				SW-846 8151A	
TP-08 (0.5-4ft)	14K0603-05	Soil		SM 2540G	
				SW-846 8081B	
				SW-846 8151A	

con-test® ANALYTICAL LABORATORY

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 8151, samples were derivatized on 11/20/14.

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

SW-846 8081B

Qualifications:

DL-04

Elevated reporting limit due to high concentration of an interfering analyte(s).

Analyte & Samples(s) Qualified:

14K0603-02[TP-03 (0.5-3ft)], 14K0603-03[TP-05 (0.5-3ft)], 14K0603-04[TP-06 (0.5-3ft)], 14K0603-05[TP-08 (0.5-4ft)]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Decachlorobiphenyl
14K0603-02[TP-03 (0.5-3ft)], 14K0603-03[TP-05 (0.5-3ft)], 14K0603-04[TP-06 (0.5-3ft)], 14K0603-05[TP-08 (0.5-4ft)]

Decachlorobiphenyl [2C]
14K0603-02[TP-03 (0.5-3ft)], 14K0603-03[TP-05 (0.5-3ft)], 14K0603-04[TP-06 (0.5-3ft)], 14K0603-05[TP-08 (0.5-4ft)]

Tetrachloro-m-xylene
14K0603-02[TP-03 (0.5-3ft)], 14K0603-03[TP-05 (0.5-3ft)], 14K0603-04[TP-06 (0.5-3ft)], 14K0603-05[TP-08 (0.5-4ft)]

Tetrachloro-m-xylene [2C]
14K0603-02[TP-03 (0.5-3ft)], 14K0603-03[TP-05 (0.5-3ft)], 14K0603-04[TP-06 (0.5-3ft)], 14K0603-05[TP-08 (0.5-4ft)]

SW-846 8151A

Qualifications:

V-06

Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.

Analyte & Samples(s) Qualified:

2,4,5-T [2C]
B110027-MS1, B110027-MSD1

2,4,5-TP (Silvex) [2C]
B110027-MS1, B110027-MSD1

2,4-D [2C]
B110027-MS1, B110027-MSD1

2,4-DB [2C]
B110027-MS1, B110027-MSD1

Dalapon [2C]
B110027-MS1, B110027-MSD1

Dicamba [2C]
B110027-MS1, B110027-MSD1

Dichloroprop [2C]
B110027-MS1, B110027-MSD1

Dinoseb [2C]
B110027-MS1, B110027-MSD1

MCPA [2C]
B110027-MS1, B110027-MSD1

MCPP [2C]
B110027-MS1

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Dinoseb
14K0603-01[TP-01 (4-5ft)], 14K0603-02[TP-03 (0.5-3ft)], 14K0603-03[TP-05 (0.5-3ft)], 14K0603-04[TP-06 (0.5-3ft)], 14K0603-05[TP-08 (0.5-4ft)], B110027-BLK1, B110027-BS1, B110027-BSD1, B110027-MS1, B110027-MSD1

Dinoseb [2C]
14K0603-01[TP-01 (4-5ft)], 14K0603-02[TP-03 (0.5-3ft)], 14K0603-03[TP-05 (0.5-3ft)], 14K0603-04[TP-06 (0.5-3ft)], 14K0603-05[TP-08 (0.5-4ft)], B110027-BLK1, B110027-BS1, B110027-BSD1, B110027-MS1, B110027-MSD1

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damboragian
Laboratory Manager

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-01 (4-5ft)
Sampled: 11/6/2014 08:00

Sample ID: 14K0603-01

Sample Matrix: Soil

Organochloride Pesticides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aldrin [1]	ND	0.0052	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
alpha-BHC [2]	ND	0.0052	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
beta-BHC [1]	ND	0.0052	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
delta-BHC [2]	ND	0.0052	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
gamma-BHC (Lindane) [1]	ND	0.0021	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
Chlordane [1]	ND	0.021	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
4,4'-DDD [1]	ND	0.0041	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
4,4'-DDE [1]	ND	0.0041	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
4,4'-DDT [1]	ND	0.0041	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
Dieldrin [1]	ND	0.0041	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
Endosulfan I [1]	ND	0.0052	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
Endosulfan II [1]	ND	0.0083	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
Endosulfan sulfate [1]	ND	0.0083	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
Endrin [1]	ND	0.0083	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
Endrin ketone [1]	ND	0.0083	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
Heptachlor [1]	ND	0.0052	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
Heptachlor epoxide [1]	ND	0.0052	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
Hexachlorobenzene [2]	ND	0.0062	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG
Methoxychlor [1]	ND	0.052	mg/Kg dry	1		SW-846 8081B	11/15/14	11/19/14 6:26	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	88.2	30-150		11/19/14 6:26
Decachlorobiphenyl [2]	91.0	30-150		11/19/14 6:26
Tetrachloro-m-xylene [1]	98.0	30-150		11/19/14 6:26
Tetrachloro-m-xylene [2]	88.3	30-150		11/19/14 6:26

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Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-01 (4-5ft)
Sampled: 11/6/2014 08:00

Sample ID: 14K0603-01

Sample Matrix: Soil

Herbicides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	26	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 12:51	MJC
2,4-DB [1]	ND	26	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 12:51	MJC
2,4,5-TP (Silvex) [1]	ND	2.6	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 12:51	MJC
2,4,5-T [1]	ND	2.6	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 12:51	MJC
Dalalpon [1]	ND	66	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 12:51	MJC
Dicamba [1]	ND	2.6	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 12:51	MJC
Dichloroprop [1]	ND	26	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 12:51	MJC
Dinoseb [1]	ND	13	µg/kg dry	1	V-34	SW-846 8151A	11/18/14	11/22/14 12:51	MJC
MCPA [1]	ND	2600	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 12:51	MJC
MCPP [1]	ND	2600	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 12:51	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2,4-Dichlorophenylacetic acid [1]	94.6	30-150		11/22/14 12:51
2,4-Dichlorophenylacetic acid [2]	97.1	30-150		11/22/14 12:51

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-01 (4-5ft)
Sampled: 11/6/2014 08:00

Sample ID: 14K0603-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	94.1		% Wt	1		SM 2540G	11/19/14	11/19/14 4:07	JJL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA Sample Description: Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-03 (0.5-3ft) Sampled: 11/6/2014 08:40

Sample ID: 14K0603-02

Sample Matrix: Soil

Sample Flags: DL-04

Organochloride Pesticides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aldrin [1]	ND	0.54	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
alpha-BHC [2]	ND	0.54	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
beta-BHC [1]	ND	0.54	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
delta-BHC [2]	ND	0.54	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
gamma-BHC (Lindane) [2]	ND	0.22	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
Chlordane [1]	ND	2.2	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
4,4'-DDD [1]	ND	0.43	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
4,4'-DDE [1]	ND	0.43	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
4,4'-DDT [1]	ND	0.43	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
Dieldrin [1]	ND	0.43	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
Endosulfan I [1]	ND	0.54	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
Endosulfan II [1]	ND	0.87	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
Endosulfan sulfate [1]	ND	0.87	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
Endrin [1]	ND	0.87	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
Endrin ketone [1]	ND	0.87	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
Heptachlor [1]	ND	0.54	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
Heptachlor epoxide [1]	ND	0.54	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
Hexachlorobenzene [2]	ND	0.65	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG
Methoxychlor [1]	ND	5.4	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:09	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	11/19/14 15:09
Decachlorobiphenyl [2]	*	30-150	S-01	11/19/14 15:09
Tetrachloro-m-xylene [1]	*	30-150	S-01	11/19/14 15:09
Tetrachloro-m-xylene [2]	*	30-150	S-01	11/19/14 15:09

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-03 (0.5-3ft)
Sampled: 11/6/2014 08:40

Sample ID: 14K0603-02

Sample Matrix: Soil

Herbicides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	27	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 13:32	MJC
2,4-DB [1]	ND	27	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 13:32	MJC
2,4,5-TP (Silvex) [1]	ND	2.7	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 13:32	MJC
2,4,5-T [1]	ND	2.7	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 13:32	MJC
Dalalpon [1]	ND	68	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 13:32	MJC
Dicamba [1]	ND	2.7	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 13:32	MJC
Dichloroprop [1]	ND	27	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 13:32	MJC
Dinoseb [1]	ND	14	µg/kg dry	1	V-34	SW-846 8151A	11/18/14	11/22/14 13:32	MJC
MCPA [1]	ND	2700	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 13:32	MJC
MCPP [1]	ND	2700	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 13:32	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2,4-Dichlorophenylacetic acid [1]	81.8	30-150		11/22/14 13:32
2,4-Dichlorophenylacetic acid [2]	87.1	30-150		11/22/14 13:32

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-03 (0.5-3ft)
Sampled: 11/6/2014 08:40

Sample ID: 14K0603-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.6		% Wt	1		SM 2540G	11/19/14	11/19/14 4:07	JJL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA Sample Description: Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-05 (0.5-3ft) Sampled: 11/6/2014 09:20

Sample ID: 14K0603-03

Sample Matrix: Soil

Sample Flags: DL-04

Organochloride Pesticides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aldrin [1]	ND	0.11	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
alpha-BHC [2]	ND	0.11	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
beta-BHC [1]	ND	0.11	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
delta-BHC [2]	ND	0.11	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
gamma-BHC (Lindane) [2]	ND	0.044	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
Chlordane [1]	ND	0.44	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
4,4'-DDD [1]	ND	0.088	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
4,4'-DDE [1]	ND	0.088	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
4,4'-DDT [1]	ND	0.088	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
Dieldrin [1]	ND	0.088	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
Endosulfan I [1]	ND	0.11	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
Endosulfan II [1]	ND	0.18	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
Endosulfan sulfate [1]	ND	0.18	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
Endrin [1]	ND	0.18	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
Endrin ketone [1]	ND	0.18	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
Heptachlor [1]	ND	0.11	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
Heptachlor epoxide [1]	ND	0.11	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
Hexachlorobenzene [2]	ND	0.13	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG
Methoxychlor [1]	ND	1.1	mg/Kg dry	20		SW-846 8081B	11/15/14	11/19/14 15:32	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	11/19/14 15:32
Decachlorobiphenyl [2]	*	30-150	S-01	11/19/14 15:32
Tetrachloro-m-xylene [1]	*	30-150	S-01	11/19/14 15:32
Tetrachloro-m-xylene [2]	*	30-150	S-01	11/19/14 15:32

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-05 (0.5-3ft)
Sampled: 11/6/2014 09:20

Sample ID: 14K0603-03

Sample Matrix: Soil

Herbicides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	27	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:13	MJC
2,4-DB [1]	ND	27	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:13	MJC
2,4,5-TP (Silvex) [1]	ND	2.7	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:13	MJC
2,4,5-T [1]	ND	2.7	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:13	MJC
Dalalpon [1]	ND	68	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:13	MJC
Dicamba [1]	ND	2.7	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:13	MJC
Dichloroprop [1]	ND	27	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:13	MJC
Dinoseb [1]	ND	14	µg/kg dry	1	V-34	SW-846 8151A	11/18/14	11/22/14 14:13	MJC
MCPA [1]	ND	2700	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:13	MJC
MCPP [1]	ND	2700	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:13	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2,4-Dichlorophenylacetic acid [1]	92.4	30-150		11/22/14 14:13
2,4-Dichlorophenylacetic acid [2]	93.6	30-150		11/22/14 14:13

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-05 (0.5-3ft)
Sampled: 11/6/2014 09:20

Sample ID: 14K0603-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.5		% Wt	1		SM 2540G	11/19/14	11/19/14 4:07	JJL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-06 (0.5-3ft)
Sampled: 11/6/2014 09:40

Sample ID: 14K0603-04

Sample Matrix: Soil

Sample Flags: DL-04

Organochloride Pesticides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aldrin [1]	ND	0.53	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
alpha-BHC [2]	ND	0.53	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
beta-BHC [1]	ND	0.53	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
delta-BHC [2]	ND	0.53	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
gamma-BHC (Lindane) [2]	ND	0.21	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
Chlordane [1]	ND	2.1	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
4,4'-DDD [1]	ND	0.43	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
4,4'-DDE [1]	ND	0.43	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
4,4'-DDT [1]	ND	0.43	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
Dieldrin [1]	ND	0.43	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
Endosulfan I [1]	ND	0.53	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
Endosulfan II [1]	ND	0.85	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
Endosulfan sulfate [1]	ND	0.85	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
Endrin [1]	ND	0.85	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
Endrin ketone [1]	ND	0.85	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
Heptachlor [1]	ND	0.53	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
Heptachlor epoxide [1]	ND	0.53	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
Hexachlorobenzene [2]	ND	0.64	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG
Methoxychlor [1]	ND	5.3	mg/Kg dry	100		SW-846 8081B	11/15/14	11/19/14 15:55	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	11/19/14 15:55
Decachlorobiphenyl [2]	*	30-150	S-01	11/19/14 15:55
Tetrachloro-m-xylene [1]	*	30-150	S-01	11/19/14 15:55
Tetrachloro-m-xylene [2]	*	30-150	S-01	11/19/14 15:55

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-06 (0.5-3ft)
Sampled: 11/6/2014 09:40

Sample ID: 14K0603-04

Sample Matrix: Soil

Herbicides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	27	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:53	MJC
2,4-DB [1]	ND	27	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:53	MJC
2,4,5-TP (Silvex) [1]	ND	2.7	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:53	MJC
2,4,5-T [1]	ND	2.7	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:53	MJC
Dalalpon [1]	ND	68	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:53	MJC
Dicamba [1]	ND	2.7	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:53	MJC
Dichloroprop [1]	ND	27	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:53	MJC
Dinoseb [1]	ND	14	µg/kg dry	1	V-34	SW-846 8151A	11/18/14	11/22/14 14:53	MJC
MCPA [1]	ND	2700	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:53	MJC
MCPP [1]	ND	2700	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 14:53	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2,4-Dichlorophenylacetic acid [1]	89.9	30-150		11/22/14 14:53
2,4-Dichlorophenylacetic acid [2]	117	30-150		11/22/14 14:53

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-06 (0.5-3ft)
Sampled: 11/6/2014 09:40

Sample ID: 14K0603-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.1		% Wt	1		SM 2540G	11/19/14	11/19/14 4:07	JJL

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA Sample Description: Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-08 (0.5-4ft) Sampled: 11/6/2014 10:10

Sample ID: 14K0603-05

Sample Matrix: Soil

Sample Flags: DL-04

Organochloride Pesticides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aldrin [1]	ND	1.1	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
alpha-BHC [2]	ND	1.1	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
beta-BHC [1]	ND	1.1	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
delta-BHC [2]	ND	1.1	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
gamma-BHC (Lindane) [2]	ND	0.44	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
Chlordane [1]	ND	4.4	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
4,4'-DDD [1]	ND	0.88	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
4,4'-DDE [1]	ND	0.88	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
4,4'-DDT [1]	ND	0.88	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
Dieldrin [1]	ND	0.88	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
Endosulfan I [1]	ND	1.1	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
Endosulfan II [1]	ND	1.8	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
Endosulfan sulfate [1]	ND	1.8	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
Endrin [1]	ND	1.8	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
Endrin ketone [1]	ND	1.8	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
Heptachlor [1]	ND	1.1	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
Heptachlor epoxide [1]	ND	1.1	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
Hexachlorobenzene [2]	ND	1.3	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG
Methoxychlor [1]	ND	11	mg/Kg dry	200		SW-846 8081B	11/15/14	11/19/14 16:17	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	11/19/14 16:17
Decachlorobiphenyl [2]	*	30-150	S-01	11/19/14 16:17
Tetrachloro-m-xylene [1]	*	30-150	S-01	11/19/14 16:17
Tetrachloro-m-xylene [2]	*	30-150	S-01	11/19/14 16:17

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-08 (0.5-4ft)
Sampled: 11/6/2014 10:10

Sample ID: 14K0603-05

Sample Matrix: Soil

Herbicides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	27	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 15:33	MJC
2,4-DB [1]	ND	27	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 15:33	MJC
2,4,5-TP (Silvex) [1]	ND	2.7	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 15:33	MJC
2,4,5-T [1]	ND	2.7	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 15:33	MJC
Dalalpon [1]	ND	68	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 15:33	MJC
Dicamba [1]	ND	2.7	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 15:33	MJC
Dichloroprop [1]	ND	27	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 15:33	MJC
Dinoseb [1]	ND	14	µg/kg dry	1	V-34	SW-846 8151A	11/18/14	11/22/14 15:33	MJC
MCPA [1]	ND	2700	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 15:33	MJC
MCPP [1]	ND	2700	µg/kg dry	1		SW-846 8151A	11/18/14	11/22/14 15:33	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2,4-Dichlorophenylacetic acid [1]	84.5	30-150		11/22/14 15:33
2,4-Dichlorophenylacetic acid [2]	93.8	30-150		11/22/14 15:33

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 1071 Main St., Woburn, MA
Sample Description:
Work Order: 14K0603

Date Received: 11/13/2014

Field Sample #: TP-08 (0.5-4ft)
Sampled: 11/6/2014 10:10

Sample ID: 14K0603-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	89.9		% Wt	1		SM 2540G	11/19/14	11/19/14 4:07	JJL

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14K0603-01 [TP-01 (4-5ft)]	B110047	11/19/14
14K0603-02 [TP-03 (0.5-3ft)]	B110047	11/19/14
14K0603-03 [TP-05 (0.5-3ft)]	B110047	11/19/14
14K0603-04 [TP-06 (0.5-3ft)]	B110047	11/19/14
14K0603-05 [TP-08 (0.5-4ft)]	B110047	11/19/14

Prep Method: SW-846 3546-SW-846 8081B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14K0603-01 [TP-01 (4-5ft)]	B109802	10.3	10.0	11/15/14
14K0603-02 [TP-03 (0.5-3ft)]	B109802	10.2	10.0	11/15/14
14K0603-03 [TP-05 (0.5-3ft)]	B109802	10.0	10.0	11/15/14
14K0603-04 [TP-06 (0.5-3ft)]	B109802	10.2	10.0	11/15/14
14K0603-05 [TP-08 (0.5-4ft)]	B109802	10.1	10.0	11/15/14

Prep Method: SW-846 8151-SW-846 8151A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14K0603-01 [TP-01 (4-5ft)]	B110027	20.2	5.00	11/18/14
14K0603-02 [TP-03 (0.5-3ft)]	B110027	20.3	5.00	11/18/14
14K0603-03 [TP-05 (0.5-3ft)]	B110027	20.2	5.00	11/18/14
14K0603-04 [TP-06 (0.5-3ft)]	B110027	20.1	5.00	11/18/14
14K0603-05 [TP-08 (0.5-4ft)]	B110027	20.3	5.00	11/18/14

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B109802 - SW-846 3546										
Blank (B109802-BLK1)				Prepared: 11/15/14 Analyzed: 11/18/14						
Aldrin	ND	0.0050	mg/Kg wet							
Aldrin [2C]	ND	0.0050	mg/Kg wet							
alpha-BHC	ND	0.0050	mg/Kg wet							
alpha-BHC [2C]	ND	0.0050	mg/Kg wet							
beta-BHC	ND	0.0050	mg/Kg wet							
beta-BHC [2C]	ND	0.0050	mg/Kg wet							
delta-BHC	ND	0.0050	mg/Kg wet							
delta-BHC [2C]	ND	0.0050	mg/Kg wet							
gamma-BHC (Lindane)	ND	0.0020	mg/Kg wet							
gamma-BHC (Lindane) [2C]	ND	0.0020	mg/Kg wet							
Chlordane	ND	0.020	mg/Kg wet							
Chlordane [2C]	ND	0.020	mg/Kg wet							
4,4'-DDD	ND	0.0040	mg/Kg wet							
4,4'-DDD [2C]	ND	0.0040	mg/Kg wet							
4,4'-DDE	ND	0.0040	mg/Kg wet							
4,4'-DDE [2C]	ND	0.0040	mg/Kg wet							
4,4'-DDT	ND	0.0040	mg/Kg wet							
4,4'-DDT [2C]	ND	0.0040	mg/Kg wet							
Dieldrin	ND	0.0040	mg/Kg wet							
Dieldrin [2C]	ND	0.0040	mg/Kg wet							
Endosulfan I	ND	0.0050	mg/Kg wet							
Endosulfan I [2C]	ND	0.0050	mg/Kg wet							
Endosulfan II	ND	0.0080	mg/Kg wet							
Endosulfan II [2C]	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate [2C]	ND	0.0080	mg/Kg wet							
Endrin	ND	0.0080	mg/Kg wet							
Endrin [2C]	ND	0.0080	mg/Kg wet							
Endrin Aldehyde	ND	0.0080	mg/Kg wet							
Endrin Aldehyde [2C]	ND	0.0080	mg/Kg wet							
Endrin Ketone	ND	0.0080	mg/Kg wet							
Endrin Ketone [2C]	ND	0.0080	mg/Kg wet							
Heptachlor	ND	0.0050	mg/Kg wet							
Heptachlor [2C]	ND	0.0050	mg/Kg wet							
Heptachlor Epoxide	ND	0.0050	mg/Kg wet							
Heptachlor Epoxide [2C]	ND	0.0050	mg/Kg wet							
Hexachlorobenzene	ND	0.0060	mg/Kg wet							
Hexachlorobenzene [2C]	ND	0.0060	mg/Kg wet							
Methoxychlor	ND	0.050	mg/Kg wet							
Methoxychlor [2C]	ND	0.050	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.176*		mg/Kg wet	0.200		88.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.170*		mg/Kg wet	0.200		85.1	30-150			
Surrogate: Tetrachloro-m-xylene	*0.165*		mg/Kg wet	0.200		82.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.164*		mg/Kg wet	0.200		82.1	30-150			

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B109802 - SW-846 3546										
LCS (B109802-BS1)				Prepared: 11/15/14 Analyzed: 11/18/14						
Aldrin	0.089	0.0050	mg/Kg wet	0.100		88.6	40-140			
Aldrin [2C]	0.089	0.0050	mg/Kg wet	0.100		89.0	40-140			
alpha-BHC	0.10	0.0050	mg/Kg wet	0.100		105	40-140			
alpha-BHC [2C]	0.087	0.0050	mg/Kg wet	0.100		86.7	40-140			
beta-BHC	0.085	0.0050	mg/Kg wet	0.100		85.3	40-140			
beta-BHC [2C]	0.085	0.0050	mg/Kg wet	0.100		85.5	40-140			
delta-BHC	0.093	0.0050	mg/Kg wet	0.100		93.4	40-140			
delta-BHC [2C]	0.086	0.0050	mg/Kg wet	0.100		86.3	40-140			
gamma-BHC (Lindane)	0.094	0.0020	mg/Kg wet	0.100		94.4	40-140			
gamma-BHC (Lindane) [2C]	0.090	0.0020	mg/Kg wet	0.100		90.2	40-140			
4,4'-DDD	0.087	0.0040	mg/Kg wet	0.100		86.8	40-140			
4,4'-DDD [2C]	0.089	0.0040	mg/Kg wet	0.100		88.9	40-140			
4,4'-DDE	0.083	0.0040	mg/Kg wet	0.100		82.8	40-140			
4,4'-DDE [2C]	0.090	0.0040	mg/Kg wet	0.100		89.6	40-140			
4,4'-DDT	0.091	0.0040	mg/Kg wet	0.100		91.2	40-140			
4,4'-DDT [2C]	0.098	0.0040	mg/Kg wet	0.100		97.8	40-140			
Dieldrin	0.083	0.0040	mg/Kg wet	0.100		82.9	40-140			
Dieldrin [2C]	0.085	0.0040	mg/Kg wet	0.100		85.0	40-140			
Endosulfan I	0.080	0.0050	mg/Kg wet	0.100		79.8	40-140			
Endosulfan I [2C]	0.086	0.0050	mg/Kg wet	0.100		86.1	40-140			
Endosulfan II	0.082	0.0080	mg/Kg wet	0.100		81.9	40-140			
Endosulfan II [2C]	0.088	0.0080	mg/Kg wet	0.100		87.7	40-140			
Endosulfan Sulfate	0.086	0.0080	mg/Kg wet	0.100		86.4	40-140			
Endosulfan Sulfate [2C]	0.089	0.0080	mg/Kg wet	0.100		88.5	40-140			
Endrin	0.082	0.0080	mg/Kg wet	0.100		82.2	40-140			
Endrin [2C]	0.089	0.0080	mg/Kg wet	0.100		89.3	40-140			
Endrin Ketone	0.084	0.0080	mg/Kg wet	0.100		84.0	40-140			
Endrin Ketone [2C]	0.088	0.0080	mg/Kg wet	0.100		87.8	40-140			
Heptachlor	0.087	0.0050	mg/Kg wet	0.100		86.5	40-140			
Heptachlor [2C]	0.088	0.0050	mg/Kg wet	0.100		87.9	40-140			
Heptachlor Epoxide	0.082	0.0050	mg/Kg wet	0.100		81.8	40-140			
Heptachlor Epoxide [2C]	0.086	0.0050	mg/Kg wet	0.100		86.4	40-140			
Hexachlorobenzene	0.10	0.0060	mg/Kg wet	0.100		102	40-140			
Hexachlorobenzene [2C]	0.091	0.0060	mg/Kg wet	0.100		91.2	40-140			
Methoxychlor	0.083	0.050	mg/Kg wet	0.100		83.2	40-140			
Methoxychlor [2C]	0.092	0.050	mg/Kg wet	0.100		92.1	40-140			
Surrogate: Decachlorobiphenyl	*0.168*		mg/Kg wet	0.200		84.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.165*		mg/Kg wet	0.200		82.4	30-150			
Surrogate: Tetrachloro-m-xylene	*0.174*		mg/Kg wet	0.200		87.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.174*		mg/Kg wet	0.200		87.2	30-150			
LCS Dup (B109802-BSD1)				Prepared: 11/15/14 Analyzed: 11/18/14						
Aldrin	0.097	0.0050	mg/Kg wet	0.100		97.0	40-140	9.13	30	
Aldrin [2C]	0.096	0.0050	mg/Kg wet	0.100		95.8	40-140	7.36	30	
alpha-BHC	0.11	0.0050	mg/Kg wet	0.100		108	40-140	2.73	30	
alpha-BHC [2C]	0.094	0.0050	mg/Kg wet	0.100		93.6	40-140	7.61	30	
beta-BHC	0.094	0.0050	mg/Kg wet	0.100		94.3	40-140	9.99	30	
beta-BHC [2C]	0.093	0.0050	mg/Kg wet	0.100		92.7	40-140	8.19	30	
delta-BHC	0.11	0.0050	mg/Kg wet	0.100		105	40-140	12.1	30	
delta-BHC [2C]	0.094	0.0050	mg/Kg wet	0.100		94.0	40-140	8.57	30	
gamma-BHC (Lindane)	0.10	0.0020	mg/Kg wet	0.100		104	40-140	9.37	30	
gamma-BHC (Lindane) [2C]	0.098	0.0020	mg/Kg wet	0.100		97.9	40-140	8.26	30	

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B109802 - SW-846 3546										
LCS Dup (B109802-BSD1)				Prepared: 11/15/14 Analyzed: 11/18/14						
4,4'-DDD	0.096	0.0040	mg/Kg wet	0.100		95.8	40-140	9.82	30	
4,4'-DDD [2C]	0.098	0.0040	mg/Kg wet	0.100		97.9	40-140	9.62	30	
4,4'-DDE	0.092	0.0040	mg/Kg wet	0.100		91.6	40-140	10.0	30	
4,4'-DDE [2C]	0.099	0.0040	mg/Kg wet	0.100		98.6	40-140	9.56	30	
4,4'-DDT	0.10	0.0040	mg/Kg wet	0.100		102	40-140	10.9	30	
4,4'-DDT [2C]	0.11	0.0040	mg/Kg wet	0.100		108	40-140	9.75	30	
Dieldrin	0.091	0.0040	mg/Kg wet	0.100		91.2	40-140	9.56	30	
Dieldrin [2C]	0.093	0.0040	mg/Kg wet	0.100		93.0	40-140	8.97	30	
Endosulfan I	0.088	0.0050	mg/Kg wet	0.100		87.7	40-140	9.40	30	
Endosulfan I [2C]	0.094	0.0050	mg/Kg wet	0.100		94.0	40-140	8.76	30	
Endosulfan II	0.090	0.0080	mg/Kg wet	0.100		89.6	40-140	8.93	30	
Endosulfan II [2C]	0.096	0.0080	mg/Kg wet	0.100		95.9	40-140	8.95	30	
Endosulfan Sulfate	0.094	0.0080	mg/Kg wet	0.100		94.4	40-140	8.82	30	
Endosulfan Sulfate [2C]	0.096	0.0080	mg/Kg wet	0.100		96.3	40-140	8.43	30	
Endrin	0.091	0.0080	mg/Kg wet	0.100		91.2	40-140	10.5	30	
Endrin [2C]	0.098	0.0080	mg/Kg wet	0.100		98.2	40-140	9.47	30	
Endrin Ketone	0.093	0.0080	mg/Kg wet	0.100		92.7	40-140	9.76	30	
Endrin Ketone [2C]	0.096	0.0080	mg/Kg wet	0.100		95.7	40-140	8.69	30	
Heptachlor	0.094	0.0050	mg/Kg wet	0.100		94.3	40-140	8.64	30	
Heptachlor [2C]	0.094	0.0050	mg/Kg wet	0.100		94.4	40-140	7.18	30	
Heptachlor Epoxide	0.090	0.0050	mg/Kg wet	0.100		90.1	40-140	9.63	30	
Heptachlor Epoxide [2C]	0.094	0.0050	mg/Kg wet	0.100		94.0	40-140	8.48	30	
Hexachlorobenzene	0.11	0.0060	mg/Kg wet	0.100		110	40-140	7.69	30	
Hexachlorobenzene [2C]	0.098	0.0060	mg/Kg wet	0.100		97.6	40-140	6.78	30	
Methoxychlor	0.092	0.050	mg/Kg wet	0.100		92.2	40-140	10.3	30	
Methoxychlor [2C]	0.10	0.050	mg/Kg wet	0.100		103	40-140	11.0	30	
Surrogate: Decachlorobiphenyl	*0.185*		mg/Kg wet	0.200		92.6	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.179*		mg/Kg wet	0.200		89.3	30-150			
Surrogate: Tetrachloro-m-xylene	*0.187*		mg/Kg wet	0.200		93.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.183*		mg/Kg wet	0.200		91.5	30-150			

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B110027 - SW-846 8151										
Blank (B110027-BLK1)				Prepared: 11/18/14 Analyzed: 11/22/14						
2,4-D	ND	24	µg/kg wet							
2,4-D [2C]	ND	24	µg/kg wet							
2,4-DB	ND	24	µg/kg wet							
2,4-DB [2C]	ND	24	µg/kg wet							
2,4,5-TP (Silvex)	ND	2.4	µg/kg wet							
2,4,5-TP (Silvex) [2C]	ND	2.4	µg/kg wet							
2,4,5-T	ND	2.4	µg/kg wet							
2,4,5-T [2C]	ND	2.4	µg/kg wet							
Dalapon	ND	60	µg/kg wet							
Dalapon [2C]	ND	60	µg/kg wet							
Dicamba	ND	2.4	µg/kg wet							
Dicamba [2C]	ND	2.4	µg/kg wet							
Dichloroprop	ND	24	µg/kg wet							
Dichloroprop [2C]	ND	24	µg/kg wet							
Dinoseb	ND	12	µg/kg wet							V-34
Dinoseb [2C]	ND	12	µg/kg wet							V-34
MCPA	ND	2400	µg/kg wet							
MCPA [2C]	ND	2400	µg/kg wet							
MCPP	ND	2400	µg/kg wet							
MCPP [2C]	ND	2400	µg/kg wet							
Surrogate: 2,4-Dichlorophenylacetic acid	*96.2*		µg/kg wet	95.2		101	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	*96.2*		µg/kg wet	95.2		101	30-150			
LCS (B110027-BS1)				Prepared: 11/18/14 Analyzed: 11/22/14						
2,4-D	108	25	µg/kg wet	124		86.5	40-140			
2,4-D [2C]	126	25	µg/kg wet	124		102	40-140			
2,4-DB	111	25	µg/kg wet	124		89.1	40-140			
2,4-DB [2C]	129	25	µg/kg wet	124		104	40-140			
2,4,5-TP (Silvex)	9.55	2.5	µg/kg wet	12.4		76.8	40-140			
2,4,5-TP (Silvex) [2C]	12.3	2.5	µg/kg wet	12.4		98.6	40-140			
2,4,5-T	10.1	2.5	µg/kg wet	12.4		81.3	40-140			
2,4,5-T [2C]	12.5	2.5	µg/kg wet	12.4		101	40-140			
Dalapon	189	62	µg/kg wet	311		60.6	40-140			
Dalapon [2C]	200	62	µg/kg wet	311		64.5	40-140			
Dicamba	10.8	2.5	µg/kg wet	12.4		86.6	40-140			
Dicamba [2C]	13.3	2.5	µg/kg wet	12.4		107	40-140			
Dichloroprop	140	25	µg/kg wet	124		112	40-140			
Dichloroprop [2C]	159	25	µg/kg wet	124		128	40-140			
Dinoseb	13.4	12	µg/kg wet	62.2		21.5	0-42.4			V-34
Dinoseb [2C]	16.6	12	µg/kg wet	62.2		26.6	0-41.1			V-34
MCPA	10600	2500	µg/kg wet	12400		85.4	40-140			
MCPA [2C]	12400	2500	µg/kg wet	12400		99.8	40-140			
MCPP	9810	2500	µg/kg wet	12400		78.9	40-140			
MCPP [2C]	11900	2500	µg/kg wet	12400		95.3	40-140			
Surrogate: 2,4-Dichlorophenylacetic acid	*104*		µg/kg wet	99.5		104	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	*102*		µg/kg wet	99.5		103	30-150			

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QUALITY CONTROL

Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B110027 - SW-846 8151										
LCS Dup (B110027-BSD1)				Prepared: 11/18/14 Analyzed: 11/22/14						
2,4-D	110	25	µg/kg wet	124		88.2	40-140	1.98	30	
2,4-D [2C]	129	25	µg/kg wet	124		103	40-140	1.71	30	
2,4-DB	114	25	µg/kg wet	124		91.8	40-140	3.03	30	
2,4-DB [2C]	132	25	µg/kg wet	124		106	40-140	2.08	30	
2,4,5-TP (Silvex)	9.59	2.5	µg/kg wet	12.4		77.1	40-140	0.489	30	
2,4,5-TP (Silvex) [2C]	12.6	2.5	µg/kg wet	12.4		101	40-140	2.33	30	
2,4,5-T	10.2	2.5	µg/kg wet	12.4		82.4	40-140	1.27	30	
2,4,5-T [2C]	12.9	2.5	µg/kg wet	12.4		103	40-140	2.46	30	
Dalapon	199	62	µg/kg wet	311		64.1	40-140	5.52	30	
Dalapon [2C]	212	62	µg/kg wet	311		68.1	40-140	5.49	30	
Dicamba	10.6	2.5	µg/kg wet	12.4		85.0	40-140	1.90	30	
Dicamba [2C]	13.3	2.5	µg/kg wet	12.4		107	40-140	0.329	30	
Dichloroprop	144	25	µg/kg wet	124		115	40-140	2.70	30	
Dichloroprop [2C]	162	25	µg/kg wet	124		130	40-140	1.89	30	
Dinoseb	13.4	12	µg/kg wet	62.2		21.5	0-42.4	0.0409	30	V-34
Dinoseb [2C]	16.5	12	µg/kg wet	62.2		26.5	0-41.1	0.464	30	V-34
MCPA	10800	2500	µg/kg wet	12400		86.7	40-140	1.57	30	
MCPA [2C]	12700	2500	µg/kg wet	12400		102	40-140	2.19	30	
MCPP	10100	2500	µg/kg wet	12400		81.0	40-140	2.59	30	
MCPP [2C]	12300	2500	µg/kg wet	12400		99.0	40-140	3.72	30	
Surrogate: 2,4-Dichlorophenylacetic acid	*105*		µg/kg wet	99.5		106	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	*104*		µg/kg wet	99.5		104	30-150			
Matrix Spike (B110027-MS1)	**Source: 14K0603-01**			Prepared: 11/18/14 Analyzed: 11/22/14						
2,4-D	115	26	µg/kg dry	132	ND	87.6	30-150			
2,4-D [2C]	140	26	µg/kg dry	132	ND	106	30-150			V-06
2,4-DB	114	26	µg/kg dry	132	ND	86.6	30-150			
2,4-DB [2C]	145	26	µg/kg dry	132	ND	111	30-150			V-06
2,4,5-TP (Silvex)	11.0	2.6	µg/kg dry	13.2	ND	83.4	30-150			
2,4,5-TP (Silvex) [2C]	13.9	2.6	µg/kg dry	13.2	ND	106	30-150			V-06
2,4,5-T	10.9	2.6	µg/kg dry	13.2	ND	82.9	30-150			
2,4,5-T [2C]	13.3	2.6	µg/kg dry	13.2	ND	101	30-150			V-06
Dalapon	206	66	µg/kg dry	329	ND	62.7	30-150			
Dalapon [2C]	230	66	µg/kg dry	329	ND	69.8	30-150			V-06
Dicamba	11.3	2.6	µg/kg dry	13.2	ND	86.2	30-150			
Dicamba [2C]	14.5	2.6	µg/kg dry	13.2	ND	110	30-150			V-06
Dichloroprop	151	26	µg/kg dry	132	ND	115	30-150			
Dichloroprop [2C]	176	26	µg/kg dry	132	ND	134	30-150			V-06
Dinoseb	12.0	13	µg/kg dry	65.8	ND	18.3	10-150			V-34
Dinoseb [2C]	15.3	13	µg/kg dry	65.8	ND	23.3	10-150			V-06, V-34
MCPA	11800	2600	µg/kg dry	13200	ND	89.7	30-150			
MCPA [2C]	13500	2600	µg/kg dry	13200	ND	102	30-150			V-06
MCPP	10600	2600	µg/kg dry	13200	ND	80.8	30-150			
MCPP [2C]	13500	2600	µg/kg dry	13200	ND	103	30-150			V-06
Surrogate: 2,4-Dichlorophenylacetic acid	*103*		µg/kg dry	105		98.1	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	*109*		µg/kg dry	105		103	30-150			

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QUALITY CONTROL

Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B110027 - SW-846 8151										
Matrix Spike Dup (B110027-MSD1)		**Source: 14K0603-01**		Prepared: 11/18/14 Analyzed: 11/22/14						
2,4-D	116	26	µg/kg dry	132	ND	88.0	30-150	0.500	30	
2,4-D [2C]	139	26	µg/kg dry	132	ND	105	30-150	0.885	30	V-06
2,4-DB	110	26	µg/kg dry	132	ND	83.3	30-150	3.87	30	
2,4-DB [2C]	146	26	µg/kg dry	132	ND	111	30-150	0.361	30	V-06
2,4,5-TP (Silvex)	11.1	2.6	µg/kg dry	13.2	ND	84.5	30-150	1.27	30	
2,4,5-TP (Silvex) [2C]	13.9	2.6	µg/kg dry	13.2	ND	105	30-150	0.383	30	V-06
2,4,5-T	11.1	2.6	µg/kg dry	13.2	ND	84.3	30-150	1.66	30	
2,4,5-T [2C]	13.1	2.6	µg/kg dry	13.2	ND	99.8	30-150	1.02	30	V-06
Dalapon	188	66	µg/kg dry	329	ND	57.0	30-150	9.55	30	
Dalapon [2C]	205	66	µg/kg dry	329	ND	62.3	30-150	11.4	30	V-06
Dicamba	11.1	2.6	µg/kg dry	13.2	ND	84.2	30-150	2.31	30	
Dicamba [2C]	14.3	2.6	µg/kg dry	13.2	ND	109	30-150	1.12	30	V-06
Dichloroprop	146	26	µg/kg dry	132	ND	111	30-150	2.81	30	
Dichloroprop [2C]	177	26	µg/kg dry	132	ND	134	30-150	0.477	30	V-06
Dinoseb	13.1	13	µg/kg dry	65.8	ND	19.9	10-150	8.62	30	V-34
Dinoseb [2C]	15.8	13	µg/kg dry	65.8	ND	24.1	10-150	3.31	30	V-34, V-06
MCPA	11600	2600	µg/kg dry	13200	ND	88.5	30-150	1.37	30	
MCPA [2C]	13400	2600	µg/kg dry	13200	ND	102	30-150	0.446	30	V-06
MCPP	10800	2600	µg/kg dry	13200	ND	82.1	30-150	1.60	30	
MCPP [2C]	13400	2600	µg/kg dry	13200	ND	102	30-150	1.02	30	
Surrogate: 2,4-Dichlorophenylacetic acid	*100*		µg/kg dry	105		95.2	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	*109*		µg/kg dry	105		104	30-150			

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BREAKDOWN REPORT

Lab Sample ID: **S007132-PEM1** **Analyzed:** **11/18/2014**

Column Number: **1**

Analyte	% Breakdown
4,4'-DDT [1]	3.70
Endrin [1]	2.71

Column Number: **2**

Analyte	% Breakdown
4,4'-DDT [2]	3.13
Endrin [2]	2.46

BREAKDOWN REPORT

Lab Sample ID: **S007132-PEM2** **Analyzed:** **11/18/2014**

Column Number: **1**

Analyte	% Breakdown
4,4'-DDT [1]	3.41
Endrin [1]	2.84

Column Number: **2**

Analyte	% Breakdown
4,4'-DDT [2]	2.90
Endrin [2]	2.52

BREAKDOWN REPORT

Lab Sample ID: **S007132-PEM3** **Analyzed:** **11/19/2014**

Column Number: **1**

Analyte	% Breakdown
4,4'-DDT [1]	3.63
Endrin [1]	3.00

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BREAKDOWN REPORT

Lab Sample ID: **S007132-PEM3** **Analyzed:** **11/19/2014**

Column Number: **2**

Analyte	% Breakdown
4,4'-DDT [2]	2.96
Endrin [2]	2.61

BREAKDOWN REPORT

Lab Sample ID: **S007132-PEM4** **Analyzed:** **11/19/2014**

Column Number: **1**

Analyte	% Breakdown
4,4'-DDT [1]	5.18
Endrin [1]	2.76

Column Number: **2**

Analyte	% Breakdown
4,4'-DDT [2]	4.09
Endrin [2]	2.29

BREAKDOWN REPORT

Lab Sample ID: **S007132-PEM5** **Analyzed:** **11/19/2014**

Column Number: **1**

Analyte	% Breakdown
4,4'-DDT [1]	6.39
Endrin [1]	3.63

Column Number: **2**

Analyte	% Breakdown
4,4'-DDT [2]	5.19
Endrin [2]	3.16

BREAKDOWN REPORT

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BREAKDOWN REPORT

Lab Sample ID: **S007132-PEM6** **Analyzed:** **11/20/2014**

Column Number: **1**

Analyte	% Breakdown
4,4'-DDT [1]	6.10
Endrin [1]	3.24

Column Number: **2**

Analyte	% Breakdown
4,4'-DDT [2]	4.54
Endrin [2]	2.71

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8081B

LCS

Lab Sample ID: B109802-BS1 Date(s) Analyzed: 11/18/2014 11/18/2014

Instrument ID (1): ECD 2A Instrument ID (2): ECD 2A

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
4,4'-DDD	1	7.28	0.00	0.00	0.087	
	2	7.29	0.00	0.00	0.089	3
4,4'-DDE	1	6.83	0.00	0.00	0.083	
	2	6.86	0.00	0.00	0.090	8
4,4'-DDT	1	7.49	0.00	0.00	0.091	
	2	7.53	0.00	0.00	0.098	7
Aldrin	1	6.16	0.00	0.00	0.089	
	2	6.10	0.00	0.00	0.089	0
alpha-BHC	1	5.45	0.00	0.00	0.10	
	2	5.39	0.00	0.00	0.087	19
beta-BHC	1	5.71	0.00	0.00	0.085	
	2	5.66	0.00	0.00	0.085	0
delta-BHC	1	5.82	0.00	0.00	0.093	
	2	5.85	0.00	0.00	0.086	8
Dieldrin	1	7.05	0.00	0.00	0.083	
	2	6.97	0.00	0.00	0.085	3
Endosulfan I	1	6.87	0.00	0.00	0.080	
	2	6.77	0.00	0.00	0.086	7
Endosulfan II	1	7.39	0.00	0.00	0.082	
	2	7.35	0.00	0.00	0.088	7
Endosulfan Sulfate	1	8.05	0.00	0.00	0.086	
	2	7.84	0.00	0.00	0.089	3
Endrin	1	7.22	0.00	0.00	0.082	
	2	7.19	0.00	0.00	0.089	8
Endrin Ketone	1	8.24	0.00	0.00	0.084	
	2	8.22	0.00	0.00	0.088	5
gamma-BHC (Lindane)	1	5.65	0.00	0.00	0.094	
	2	5.61	0.00	0.00	0.090	5
Heptachlor	1	5.96	0.00	0.00	0.087	
	2	5.88	0.00	0.00	0.088	2
Heptachlor Epoxide	1	6.59	0.00	0.00	0.082	

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8081B

LCS

Lab Sample ID: B109802-BS1 Date(s) Analyzed: 11/18/2014 11/18/2014

Instrument ID (1): ECD 2A Instrument ID (2): ECD 2A

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
	2	6.49	0.00	0.00	0.086	5
Hexachlorobenzene	1	5.35	0.00	0.00	0.10	
	2	5.31	0.00	0.00	0.091	11
Methoxychlor	1	7.88	0.00	0.00	0.083	
	2	8.07	0.00	0.00	0.092	10

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8081B

LCS Dup

Lab Sample ID: B109802-BSD1 Date(s) Analyzed: 11/18/2014 11/18/2014

Instrument ID (1): ECD 2A Instrument ID (2): ECD 2A

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
4,4'-DDD	1	7.28	0.00	0.00	0.096	
	2	7.29	0.00	0.00	0.098	2
4,4'-DDE	1	6.83	0.00	0.00	0.092	
	2	6.86	0.00	0.00	0.099	8
4,4'-DDT	1	7.49	0.00	0.00	0.10	
	2	7.53	0.00	0.00	0.11	8
Aldrin	1	6.16	0.00	0.00	0.097	
	2	6.10	0.00	0.00	0.096	1
alpha-BHC	1	5.45	0.00	0.00	0.11	
	2	5.39	0.00	0.00	0.094	14
beta-BHC	1	5.71	0.00	0.00	0.094	
	2	5.66	0.00	0.00	0.093	1
delta-BHC	1	5.82	0.00	0.00	0.11	
	2	5.85	0.00	0.00	0.094	11
Dieldrin	1	7.05	0.00	0.00	0.091	
	2	6.97	0.00	0.00	0.093	2
Endosulfan I	1	6.87	0.00	0.00	0.088	
	2	6.77	0.00	0.00	0.094	7
Endosulfan II	1	7.39	0.00	0.00	0.090	
	2	7.35	0.00	0.00	0.096	7
Endosulfan Sulfate	1	8.05	0.00	0.00	0.094	
	2	7.84	0.00	0.00	0.096	2
Endrin	1	7.22	0.00	0.00	0.091	
	2	7.19	0.00	0.00	0.098	7
Endrin Ketone	1	8.24	0.00	0.00	0.093	
	2	8.22	0.00	0.00	0.096	4
gamma-BHC (Lindane)	1	5.65	0.00	0.00	0.10	
	2	5.61	0.00	0.00	0.098	6
Heptachlor	1	5.96	0.00	0.00	0.094	
	2	5.88	0.00	0.00	0.094	0
Heptachlor Epoxide	1	6.59	0.00	0.00	0.090	

con-test® ANALYTICAL LABORATORY
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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8081B

LCS Dup

Lab Sample ID: B109802-BSD1 Date(s) Analyzed: 11/18/2014 11/18/2014

Instrument ID (1): ECD 2A Instrument ID (2): ECD 2A

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
	2	6.49	0.00	0.00	0.094	4
Hexachlorobenzene	1	5.35	0.00	0.00	0.11	
	2	5.31	0.00	0.00	0.098	12
Methoxychlor	1	7.88	0.00	0.00	0.092	
	2	8.07	0.00	0.00	0.10	8

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8151A

LCS

Lab Sample ID: B110027-BS1 Date(s) Analyzed: 11/22/2014 11/22/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-T	1	15.57	0.00	0.00	10.1	
	2	17.12	0.00	0.00	12.5	21
2,4,5-TP (Silvex)	1	14.96	0.00	0.00	9.55	
	2	16.69	0.00	0.00	12.3	25
2,4-D	1	13.17	0.00	0.00	108	
	2	14.91	0.00	0.00	126	15
2,4-DB	1	16.69	0.00	0.00	111	
	2	17.49	0.00	0.00	129	15
Dalapon	1	4.54	0.00	0.00	189	
	2	4.77	0.00	0.00	200	6
Dicamba	1	11.15	0.00	0.00	10.8	
	2	12.56	0.00	0.00	13.3	21
Dichloroprop	1	12.69	0.00	0.00	140	
	2	14.19	0.00	0.00	159	13
Dinoseb	1	17.54	0.00	0.00	13.4	
	2	17.67	0.00	0.00	16.6	21
MCPA	1	11.95	0.00	0.00	10600	
	2	13.45	0.00	0.00	12400	16
MCPP	1	11.63	0.00	0.00	9810	
	2	12.91	0.00	0.00	11900	19

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8151A

LCS Dup

Lab Sample ID: B110027-BSD1 Date(s) Analyzed: 11/22/2014 11/22/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-T	1	15.57	0.00	0.00	10.2	
	2	17.12	0.00	0.00	12.9	23
2,4,5-TP (Silvex)	1	14.96	0.00	0.00	9.59	
	2	16.69	0.00	0.00	12.6	27
2,4-D	1	13.17	0.00	0.00	110	
	2	14.91	0.00	0.00	129	16
2,4-DB	1	16.69	0.00	0.00	114	
	2	17.49	0.00	0.00	132	15
Dalapon	1	4.54	0.00	0.00	199	
	2	4.77	0.00	0.00	212	6
Dicamba	1	11.14	0.00	0.00	10.6	
	2	12.56	0.00	0.00	13.3	23
Dichloroprop	1	12.68	0.00	0.00	144	
	2	14.19	0.00	0.00	162	12
Dinoseb	1	17.54	0.00	0.00	13.4	
	2	17.67	0.00	0.00	16.5	21
MCPA	1	11.95	0.00	0.00	10800	
	2	13.45	0.00	0.00	12700	16
MCPP	1	11.63	0.00	0.00	10100	
	2	12.91	0.00	0.00	12300	20

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8151A

Matrix Spike

Lab Sample ID: B110027-MS1 Date(s) Analyzed: 11/22/2014 11/22/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-T	1	15.56	0.00	0.00	10.9	
	2	17.12	0.00	0.00	13.3	20
2,4,5-TP (Silvex)	1	14.96	0.00	0.00	11.0	
	2	16.69	0.00	0.00	13.9	23
2,4-D	1	13.17	0.00	0.00	115	
	2	14.90	0.00	0.00	140	20
2,4-DB	1	16.69	0.00	0.00	114	
	2	17.49	0.00	0.00	145	24
Dalapon	1	4.54	0.00	0.00	206	
	2	4.77	0.00	0.00	230	11
Dicamba	1	11.14	0.00	0.00	11.3	
	2	12.56	0.00	0.00	14.5	25
Dichloroprop	1	12.68	0.00	0.00	151	
	2	14.18	0.00	0.00	176	15
Dinoseb	1	17.53	0.00	0.00	12.0	
	2	17.67	0.00	0.00	15.3	24
MCPA	1	11.94	0.00	0.00	11800	
	2	13.45	0.00	0.00	13500	13
MCPP	1	11.62	0.00	0.00	10600	
	2	12.91	0.00	0.00	13500	24

con-test® ANALYTICAL LABORATORY
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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8151A

Matrix Spike Dup

Lab Sample ID: B110027-MSD1 Date(s) Analyzed: 11/22/2014 11/22/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-T	1	15.56	0.00	0.00	11.1	
	2	17.12	0.00	0.00	13.1	17
2,4,5-TP (Silvex)	1	14.95	0.00	0.00	11.1	
	2	16.69	0.00	0.00	13.9	22
2,4-D	1	13.17	0.00	0.00	116	
	2	14.90	0.00	0.00	139	18
2,4-DB	1	16.69	0.00	0.00	110	
	2	17.49	0.00	0.00	146	28
Dalapon	1	4.53	0.00	0.00	188	
	2	4.76	0.00	0.00	205	9
Dicamba	1	11.14	0.00	0.00	11.1	
	2	12.55	0.00	0.00	14.3	25
Dichloroprop	1	12.68	0.00	0.00	146	
	2	14.18	0.00	0.00	177	19
Dinoseb	1	17.53	0.00	0.00	13.1	
	2	17.67	0.00	0.00	15.8	19
MCPA	1	11.94	0.00	0.00	11600	
	2	13.44	0.00	0.00	13400	14
MCPP	1	11.62	0.00	0.00	10800	
	2	12.90	0.00	0.00	13400	22

con-test® ANALYTICAL LABORATORY

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
DL-04	Elevated reporting limit due to high concentration of an interfering analyte(s).
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.
V-06	Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

con-test® ANALYTICAL LABORATORY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8081B in Soil	
Aldrin	CT,NC,NH,NY,ME,VA,NJ
Aldrin [2C]	CT,NC,NH,NY,ME,VA,NJ
alpha-BHC	CT,NC,NH,NY,ME,VA,NJ
alpha-BHC [2C]	CT,NC,NH,NY,ME,VA,NJ
beta-BHC	CT,NC,NH,NY,ME,VA,NJ
beta-BHC [2C]	CT,NC,NH,NY,ME,VA,NJ
delta-BHC	CT,NC,NH,NY,ME,VA,NJ
delta-BHC [2C]	CT,NC,NH,NY,ME,VA,NJ
gamma-BHC (Lindane)	CT,NC,NH,NY,ME,VA,NJ
gamma-BHC (Lindane) [2C]	CT,NC,NH,NY,ME,VA,NJ
Chlordane	CT,NC,NH,NY,ME,VA,NJ
Chlordane [2C]	CT,NC,NH,NY,ME,VA,NJ
4,4'-DDD	CT,NC,NH,NY,ME,VA,NJ
4,4'-DDD [2C]	CT,NC,NH,NY,ME,VA,NJ
4,4'-DDE	CT,NC,NH,NY,ME,VA,NJ
4,4'-DDE [2C]	CT,NC,NH,NY,ME,VA,NJ
4,4'-DDT	CT,NC,NH,NY,ME,VA,NJ
4,4'-DDT [2C]	CT,NC,NH,NY,ME,VA,NJ
Dieldrin	CT,NC,NH,NY,ME,VA,NJ
Dieldrin [2C]	CT,NC,NH,NY,ME,VA,NJ
Endosulfan I	CT,NC,NH,NY,ME,VA,NJ
Endosulfan I [2C]	CT,NC,NH,NY,ME,VA,NJ
Endosulfan II	CT,NC,NH,NY,ME,VA,NJ
Endosulfan II [2C]	CT,NC,NH,NY,ME,VA,NJ
Endosulfan Sulfate	CT,NC,NH,NY,ME,VA,NJ
Endosulfan Sulfate [2C]	CT,NC,NH,NY,ME,VA,NJ
Endrin	CT,NC,NH,NY,ME,VA,NJ
Endrin [2C]	CT,NC,NH,NY,ME,VA,NJ
Endrin Ketone	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NC,NH,NY,ME,VA,NJ
Heptachlor [2C]	CT,NC,NH,NY,ME,VA,NJ
Heptachlor Epoxide	CT,NC,NH,NY,ME,VA,NJ
Heptachlor Epoxide [2C]	CT,NC,NH,NY,ME,VA,NJ
Hexachlorobenzene	NC
Hexachlorobenzene [2C]	NC
Methoxychlor	CT,NC,NH,NY,ME,VA,NJ
Methoxychlor [2C]	CT,NC,NH,NY,ME,VA,NJ
SW-846 8151A in Soil	
2,4-D	NY,ME,NC,NH,VA,CT,NJ
2,4-D [2C]	NY,ME,NC,NH,VA,CT,NJ
2,4-DB	NY,ME,NC,NH,VA,CT,NJ
2,4-DB [2C]	NY,ME,NC,NH,VA,CT,NJ
2,4,5-TP (Silvex)	NY,ME,NC,NH,VA,CT,NJ
2,4,5-TP (Silvex) [2C]	NY,ME,NC,NH,VA,CT,NJ
2,4,5-T	NY,ME,NC,NH,VA,CT,NJ

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8151A in Soil	
2,4,5-T [2C]	NY,ME,NC,NH,VA,CT,NJ
Dalapon	NY,ME,NC,NH,VA,CT,NJ
Dalapon [2C]	NY,ME,NC,NH,VA,CT,NJ
Dicamba	NY,ME,NC,NH,VA,CT,NJ
Dicamba [2C]	NY,ME,NC,NH,VA,CT,NJ
Dichloroprop	NY,ME,NC,NH,VA,CT,NJ
Dichloroprop [2C]	NY,ME,NC,NH,VA,CT,NJ
Dinoseb	NY,ME,NC,NH,VA,CT,NJ
Dinoseb [2C]	NY,ME,NC,NH,VA,CT,NJ
MCPA	NY,ME,NC,NH,VA,CT,NJ
MCPA [2C]	NY,ME,NC,NH,VA,CT,NJ
MCPP	NY,ME,NC,NH,VA,CT,NJ
MCPP [2C]	NY,ME,NC,NH,VA,CT,NJ

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

14K0603

CHAIN OF CUSTODY RECORD

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com
39 Spruce Street
East longmeadow, MA 01028

Rev 04.05.12

~~14K0210~~

Company Name: EBI Consulting
Telephone: 845-803-4347
Address: 21 B Street
Burlington, MA 01803
Project # 12140078
Client PO#
Attention: Meghan Kelley
Project Location: 1071 Main Street, Woburn, MA
Sampled By: Daniel Bellucci

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ◉ PDF ◉ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	PCBs 8082 + SOXHLET																							
								# of Containers																							
								** Preservation																							
								***Container Code																							
® 01 -01	TP-01 (4-5')	11/06/14	08:00			S	U	✓		X	DRST	MWB																			
02	TP-02 (1-3')	11/06/14	08:15			S	U	✓																							
03	***TP-02 (3-5')	11/06/14	08:20			S	U	✓																							
® 04 -02	TP-03 (0.5-3')	11/06/14	08:40			S	U	✓		X																					
05	***TP-03 (3-5')	11/06/14	08:45			S	U	✓																							
06	TP-04 (0.5-3')	11/06/14	08:55			S	U	✓																							
07	***TP-04 (4-6')	11/06/14	09:00			S	U	✓																							
® 08 -03	TP-05 (0.5-3')	11/06/14	09:20			S	U	✓		X																					
09	***TP-05 (4-5')	11/06/14	09:30			S	U	✓																							
® 10 -04	TP-06 (0.5-3')	11/06/14	09:40			S	U	✓		X																					

Comments:
***=Hold Analysis
® Reactive to pass attached email MCP 11/13/14

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

*Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
R = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Relinquished by: (signature) [signature] 11/06/14	Date/Time:	
Received by: (signature) [signature] 11/6/14	Date/Time: 1:20pm	
Relinquished by: (signature) [signature] 11/6/14	Date/Time: 4:30pm	
Received by: (signature) [signature] 11/6/14	Date/Time: 16:30	

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5-day
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other: Vermont

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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14K0603

CHAIN OF CUSTODY RECORD

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com
39 Spruce Street
East longmeadow, MA 01028

Page 2 of 2

Rev 04.05.12

14K0270 ME

Company Name: EBI Consulting
Address: 21 B Street
Burlington, MA 01803
Attention: Meghan Kelley
Project Location: 1071 Main Street, Woburn, MA
Sampled By: Daniel Bellucci

Telephone: 845-803-4347
Project # 12140078
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ◉ EMAIL ◉ WEBSITE
Fax #
Email: dbellucci@ebiconsulting.com
Format: ◉ PDF ◉ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	PCBs 8082 + SOXHLET	Pest/herb											# of Containers / ** Preservation / ***Container Code
11	***TP-06 (4-6')	11/06/14	09:45			S	U	✓												
12	TP-07 (0.5-3')	11/06/14	09:50			S	U	✓												
13	***TP-07 (4-6')	11/06/14	09:55			S	U	✓												
14 -05	TP-08 (0.5-4)	11/06/14	10:10			S	U	✓		X										
15 ME	***TP-08 (4-6')	11/06/14	10:15			S	U	✓												

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other_____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other_____

Comments:
***=Hold Analysis

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) [signature] 11/06/14	Date/Time:	
Received by: (signature) [signature] 11/6/14	Date/Time: 1:20 pm	
Relinquished by: (signature) [signature] 11/6/14	Date/Time: 4:30 pm	
Received by: (signature) [signature] 11/6/14	Date/Time: 16:30	

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5-day
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other: Vermont

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

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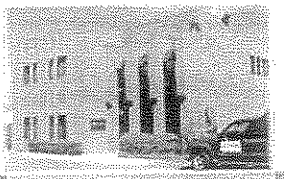
39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

con-test® ANALYTICAL LABORATORY



Sample Receipt Checklist

CLIENT NAME: EBI RECEIVED BY: KB DATE: 11/6/14

1) Was the chain(s) of custody relinquished and signed? (Yes) No No CoC Included
2) Does the chain agree with the samples? (Yes) No
   If not, explain:
3) Are all the samples in good condition? (Yes) No
   If not, explain:
4) How were the samples received:
   On Ice ☑ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☑
   Were the samples received in Temperature Compliance of (2-6°C)? (Yes) No N/A
   Temperature °C by Temp blank _____ Temperature °C by Temp gun 2.1°
5) Are there Dissolved samples for the lab to filter? Yes (No)
   Who was notified _____ Date _____ Time _____
6) Are there any (RUSH) or SHORT HOLDING TIME samples? (Yes) No
   Who was notified _____ Date _____ Time _____
7) Location where samples are stored: 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No (N/A) _____
9) Do all samples have the proper Base pH: Yes No (N/A) _____
10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No (N/A)

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	15
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below		Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments: First 6 samples - amber jars
7-15 - clear jars

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Doc# 277
Rev. 4 August 2013

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	~~NA~~ T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:** 11/6/14

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** KB **Date/Time:** 16:30

APPENDIX C

Soil Borings Logs

Weston & Sampson	PROJECT Seaver Construction	REPORT OF BORING No. WS-1 SHEET 1 OF 1 Project No. 2100583 CHKD BY

BORING Co.	New England Geotech	BORING LOCATION	See attached plan
FOREMAN	Hayes	GROUND SURFACE ELEV.	unknown DATUM
WSE GEOLOGIST:	KSN	DATE START 10/27/10	DATE END 10/27/10

SAMPLER: Geoprobe 6620 DT

CASING: na

CASING SIZE: N/A Method Direct Push

GROUNDWATER READINGS

DATE	TIME	WATER AT	CASING AT	STABILIZATION TIME

DEPTH (feet)	CASING (lb/ft)	SAMPLE No.	PEN/REC (in)	DEPTH (ft)	BLOWS/6"	PID (ppm)	SAMPLE DESCRIPTION Burmister Classification	NOTES	STRATUM DESCRIPTION
		S1	60/30	0-3		0.0	Brown fine to medium SAND, little Gravel, trace coal ash.		SAND
3									
		S2	60/36	3-6		0.0	Brown fine to medium SAND, little Gravel, trace coal ash.		SAND
6									
							End of Boring @ 6'		
9									
12									
15									
18									
21									

GRANULAR SOILS		COHESIVE SOILS	
BLOWS/FT	DENSITY	BLOWS/FT	DENSITY
0-4	V. LOOSE	0-2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
> 50	V. DENSE	15-30	V. STIFF
		> 30	HARD

REMARKS:

NOTES:
1) THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THIS BORING LOG. FLUCTUATIONS IN THE LEVEL OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS ARE MADE.

BORING No. WS-1

Weston & Sampson	PROJECT Seaver Construction	REPORT OF BORING No. WS-2 SHEET 1 OF 1 Project No. 2100583 CHKD BY

BORING Co.	New England Geotech	BORING LOCATION	See attached plan
FOREMAN	Hayes	GROUND SURFACE ELEV.	unknown DATUM
WSE GEOLOGIST:	KSN	DATE START 10/27/10	DATE END 10/27/10

SAMPLER: Geoprobe 6620 DT

CASING: na

CASING SIZE: N/A Method Direct Push

GROUNDWATER READINGS

DATE	TIME	WATER AT	CASING AT	STABILIZATION TIME

DEPTH (feet)	CASING (lb/ft)	SAMPLE No.	PEN/REC (in)	DEPTH (ft)	BLOWS/6"	PID (ppm)	SAMPLE DESCRIPTION Burmister Classification	NOTES	STRATUM DESCRIPTION
		S1	60/24	0-3		0.0	Brown fine to medium SAND, little Gravel, coal ash and coal fragments		SAND
3									
		S2	60/24	3-6		0.0	Brown fine to medium SAND, little Gravel, trace coal ash.		SAND
6									
							End of Boring @ 6'		
9									
12									
15									
18									
21									

GRANULAR SOILS		COHESIVE SOILS	
BLOWS/FT	DENSITY	BLOWS/FT	DENSITY
0-4	V. LOOSE	0-2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
> 50	V. DENSE	15-30	V. STIFF
		> 30	HARD

REMARKS:

NOTES:
1) THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THIS BORING LOG. FLUCTUATIONS IN THE LEVEL OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS ARE MADE.

BORING No. WS-2

Weston & Sampson	PROJECT Seaver Construction	REPORT OF BORING No. WS-3 SHEET 1 OF 1 Project No. 2100583 CHKD BY

BORING Co.	New England Geotech	BORING LOCATION	See attached plan
FOREMAN	Hayes	GROUND SURFACE ELEV.	unknown DATUM
WSE GEOLOGIST:	KSN	DATE START 10/27/10	DATE END 10/27/10

SAMPLER: Geoprobe 6620 DT

CASING: na

CASING SIZE: N/A Method Direct Push

GROUNDWATER READINGS

DATE	TIME	WATER AT	CASING AT	STABILIZATION TIME

DEPTH (feet)	CASING (lb/ft)	SAMPLE No.	PEN/REC (in)	DEPTH (ft)	BLOWS/6"	PID (ppm)	SAMPLE DESCRIPTION Burmister Classification	NOTES	STRATUM DESCRIPTION
		S1	60/24	0-3		0.0	Brown fine to medium SAND, little Gravel, coal ash and coal fragments		SAND
3									
		S2	60/24	3-6		0.0	Brown fine to medium SAND, little Gravel, trace coal ash.		SAND
6									
							End of Boring @ 6'		
9									
12									
15									
18									
21									

GRANULAR SOILS		COHESIVE SOILS	
BLOWS/FT	DENSITY	BLOWS/FT	DENSITY
0-4	V. LOOSE	0-2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
> 50	V. DENSE	15-30	V. STIFF
		> 30	HARD

REMARKS:

NOTES:
1) THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THIS BORING LOG. FLUCTUATIONS IN THE LEVEL OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS ARE MADE.

BORING No. WS-3

Weston & Sampson	PROJECT Seaver Construction	REPORT OF BORING No. WS-4 SHEET 1 OF 1 Project No. 2100583 CHKD BY

BORING Co.	New England Geotech	BORING LOCATION	See attached plan
FOREMAN	Hayes	GROUND SURFACE ELEV.	unknown DATUM
WSE GEOLOGIST:	KSN	DATE START 10/27/10	DATE END 10/27/10

SAMPLER: Geoprobe 6620 DT

CASING: na

CASING SIZE: N/A Method Direct Push

GROUNDWATER READINGS

DATE	TIME	WATER AT	CASING AT	STABILIZATION TIME

DEPTH (feet)	CASING (lb/ft)	SAMPLE No.	PEN/REC (in)	DEPTH (ft)	BLOWS/6"	PID (ppm)	SAMPLE DESCRIPTION Burmister Classification	NOTES	STRATUM DESCRIPTION
		S1	60/34	0-3		0.0	Brown fine SAND, some Gravel, trace coal ash.		SAND
3									
		S2	60/29	3-6		0.0	Brown fine SAND, some Gravel, trace coal ash. Note: Gray fine to medium SAND @ 5'		SAND
6									
		S3	60/60	6-11		0.0	Black fine SAND (organic odor), wet at ~ 6.5'		SAND
11									
							Refusal @ 11'		

GRANULAR SOILS		COHESIVE SOILS	
BLOWS/FT	DENSITY	BLOWS/FT	DENSITY
0-4	V. LOOSE	0-2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
> 50	V. DENSE	15-30	V. STIFF
		> 30	HARD

REMARKS:

NOTES:
1) THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THIS BORING LOG. FLUCTUATIONS IN THE LEVEL OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS ARE MADE.

BORING No. WS-4

Weston & Sampson	PROJECT Seaver Construction	REPORT OF BORING No. WS-5 SHEET 1 OF 1 Project No. 2100583 CHKD BY

BORING Co.	New England Geotech	BORING LOCATION	See attached plan
FOREMAN	Hayes	GROUND SURFACE ELEV.	unknown DATUM
WSE GEOLOGIST:	KSN	DATE START 10/27/10	DATE END 10/27/10

SAMPLER: Geoprobe 6620 DT

CASING: na

CASING SIZE: N/A Method Direct Push

GROUNDWATER READINGS

DATE	TIME	WATER AT	CASING AT	STABILIZATION TIME

DEPTH (feet)	CASING (lb/ft)	SAMPLE No.	PEN/REC (in)	DEPTH (ft)	BLOWS/6"	PID (ppm)	SAMPLE DESCRIPTION Burmister Classification	NOTES	STRATUM DESCRIPTION
		S1	60/34	0-3		0.0	Brown fine SAND, sand Gravel, brick fragments, trace coal ash.		SAND
3									
		S2	60/24	3-6		0.0	Brown fine SAND, some Gravel, trace coal ash. Note: Gray fine to medium SAND @ ~5.5'		SAND
6									
		S3	60/0	6-11		0.0	No recovery - observed black fine SAND at tip (organic odor); wet		SAND
11									
		S4	60/60	11-16		0.0	Brown to black fine SAND, some Silt, organic odor; wet.		SAND
16									
		S5	60/0	16-18		0.0	No recovery		
18									
							Refusal @ 18'		

GRANULAR SOILS		COHESIVE SOILS	
BLOWS/FT	DENSITY	BLOWS/FT	DENSITY
0-4	V. LOOSE	0-2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
> 50	V. DENSE	15-30	V. STIFF
		> 30	HARD

REMARKS:
Monitoring well WS-5 (WS-1) installed in boring WS-5. Well construction as follows: 15 feet of screen, 3 feet of riser. Silica sand two feet above screen and 1 foot of bentonite seal above sand pack.

NOTES:
1) THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THIS BORING LOG. FLUCTUATIONS IN THE LEVEL OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS ARE MADE.

BORING No. WS-5

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *04/08/14*
Date Ended: *04/08/14*
Project Location: *Woburn, MA*
Project Number: *12140096*
Sheet: *1 of 1*

Log of Borehole: EB-201

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
1	Topsoil with some small gravel; brown; moist							
2			S-1	1.5/4	NA	Core	0	
3	Fine to medium SAND with some SILT and gravel; light brown; dry							
4	Fine SAND with some SILT; reddish staining; some organic material; moist							
5								
6			S-2	3/4	NA	Core	0	
7	Fine SAND; blackish brown; moist							
8	Fine SAND with some SILT; blackish brown; organic material; very wet							
9			S-3	2/1.5	NA	Core	0	
10	Equipment refusal encountered at 9.5 feet bgs							

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *04/08/14*
Date Ended: *04/08/14*
Project Location: *Woburn, MA*
Project Number: *12140096*
Sheet: *1 of 1*

Log of Borehole: EB-202

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
1, 2, 3	Medium to coarse SAND with some gravel; brown; moist		S-1	1/4	NA	Core	0	2-feet PVC casing; DTW=4.85'; 10-feet of 1-inch PVC well screen
4, 5	Fine SAND and SILT; reddish brown; moist							
6, 7	Fine SAND and SILT; black; moist		S-2	3/4	NA	Core	0	
8, 9, 10, 11	Fine SAND and SILT; black; wet		S-3	4/4	NA	Core	0	
12, 13	Boring terminated at 12 feet bgs							

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *04/08/14*
Date Ended: *04/08/14*
Project Location: *Woburn, MA*
Project Number: *12140096*
Sheet: *1 of 1*

Log of Borehole: EB-203

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Medium to coarse SAND and gravel; light brown; moist							
1	Fine to medium SAND with some SILT and gravel; reddish brown; moist; petroleum odor; animal fur noted							
2			S-1	3/4	NA	Core	0	
3								
4	Fine SAND with some SILT and CLAY; reddish brown; wet; petroleum odor; animal fur noted							
5								
6			S-2	4/4	NA	Core	0	
7								
8	Fine SAND with some SILT and CLAY; reddish brown; wet; petroleum odor; animal fur noted							
9								
10	Fine SAND; blackish grey; wet		S-3	4/4	NA	Core	0	
11								
12	Boring terminated at 12 feet bgs							
13								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *04/08/14*
Date Ended: *04/08/14*
Project Location: *Woburn, MA*
Project Number: *12140096*
Sheet: *1 of 1*

Log of Borehole: EB-204

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
1	Fine to medium SAND with some SILT, gravel, brick and ash; light brown to brown; moist							2-feet PVC casing
2			S-1	1.5/4	NA	Core	0	
3								
4	No recovery							
5								
6			S-2	0/4	NA	Core	0	DTW=6.5'
7								
8	Fine to coarse SAND; reddish brown; wet							
9	Fine SAND; light brown; wet							
10			S-3	3/4	NA	Core	0	
11	Fine SAND; blackish brown; wet							
12	Boring terminated at 12 feet bgs							
13								

10-feet of 1-inch PVC well screen

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *08/29/14*
Date Ended: *08/29/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-301

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
1	Loose gravel and fine to medium SAND; some asphalt; brown; dry							
2	Fine SAND; light brown; dry		S-1	1.5/4	NA	Core	0	
3	Fine SAND; light dark brown; dry							
4	Fine SAND; grey; slightly moist							
5								
6			S-2	3/4	NA	Core	1	
7								
8	Fine SAND and SILT; grey; moist							
9	Fine SAND and SILT; grey; moist		S-3	2/2	NA	Core	0	
10	Boring terminated at 10 feet bgs							
11								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *08/29/14*
Date Ended: *08/29/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-302

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fine SAND with some SILT; brown/ light brown; dry							
1	Fine SAND with some SILT; light brown; dry							
2								
			S-1	4/5	NA	Core	0	
3								
4								
5	Boring terminated at 5 feet bgs							
6								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *08/29/14*
Date Ended: *08/29/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-303

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fine to medium SAND with some gravel; brown; dry							
1	Fine SAND with some small gravel; brown; dry							
2			S-1	1.5/4	NA	Core	0	
3								
4	Equipment refusal (Cobble) encountered at 4 feet bgs							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *08/29/14*
Date Ended: *08/29/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-304

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fine to medium SAND with some small gravel; brown; dry							
1	Fine SAND; light brown to brown; dry							
2			S-1	2.5/4	NA	Core	0	
3								
4	Fine SAND with trace SILT; light brown; dry							
5								
6			S-2	2/4	NA	Core	0	
7								
8	Fine SAND and SILT; brown; moist							
9			S-3	3/2	NA	Core	0	
10	Boring terminated at 10 feet bgs							
11								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *08/29/14*
Date Ended: *08/29/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-305

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fine to medium SAND with some gravel; brown; dry							
1	Fine SAND; light brown; dry							
2								
			S-1	3/5	NA	Core	0	
3								
4								
5	Boring terminated at 5 feet bgs							
6								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *08/29/14*
Date Ended: *08/29/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-306

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine to coarse SAND and gravel with some intermittent asphalt, ash and brick; brown; dry							
1								
2			S-1	2/4	NA	Core	0	
3								
4	Equipment refusal encountered at 3 and 4 feet bgs in two locations. Composite soil sample for COM-97							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *08/29/14*
Date Ended: *08/29/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-307

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine SAND and SILT with some gravel and coarse SAND; blackish brown; dry; slight petroleum odor							
1								
2								
3			S-1	3.5/6	NA	Core	1	
4								
5								
6	Boring terminated at 6 feet bgs							
7								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *08/29/14*
Date Ended: *08/29/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-308

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine to medium SAND with some gravel and asphalt; grey; dry							
1	Fine SAND with some SILT; dark brown; dry							
2			S-1	2/5	NA	Core	0	
3								
4								
5	Boring terminated at 5 feet bgs							
6								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *08/29/14*
Date Ended: *08/29/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-309

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
1	Fill material comprised of fine to medium SAND with some gravel; light brown; dry							
2			S-1	3/4	NA	Core	0	
3	Peat layer comprised of fine SAND and SILT; black; moist							
4	Peat layer comprised of SILT with some fine SAND; black; moist							
5								
6								
7			S-2	3/6	NA	Core	0	
8								
9								
10	Boring terminated at 10 feet bgs							
11								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *09/22/14*
Date Ended: *09/22/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-401

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Asphalt							
1	Fill material comprised of fine to coarse SAND and gravel; light brown; dry							
2			S-1	3/4	NA	Core	0	
3	Organic layer (Fill); roots and detris material; brown; dry							
	Fill material comprised of fine SAND and SILT; light brown to brown; dry							
4	Fill material comprised of fine SAND and SILT; brown; dry							
5								
6								
7	Native coarse SAND and gravel; light brown; dry		S-2	3/5.5	NA	Core	0	
8								
9								
10	Equipment refusal encountered at 9.5 feet bgs							

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *09/22/14*
Date Ended: *09/22/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-402

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
1	Fill material comprised of medium to coarse SAND and gravel; light brown; dry							
2	Fill material comprised of fine SAND and SILT; blackish blue staining; dry; slight petroleum odor		S-1	2.5/4	NA	Core	0	
3	Fill material comprised of fine SAND and SILT; blackish brown; dry; slight petroleum odor							
4	Fill material comprised of fine SAND and SILT; brown; dry							
5	Native fine to coarse SAND with some SILT; light brown; dry							
6			S-2	3/4	NA	Core	0	
7								
8	Boring terminated at 8 feet bgs							
9								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *09/22/14*
Date Ended: *09/22/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-403

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
1	Fill material comprised of fine to coarse SAND with some cobbles, brick and concrete; brown; dry							
2	Fill material comprised of fine to medium SAND and SILT with some gravel, brick and glass; blackish brown; dry; slight petroleum odor		S-1	2.5/4	NA	Core	0	
3								
4	Fill material comprised of fine to medium SAND and SILT with some gravel, brick and glass; blackish brown; dry; slight petroleum odor							
5	Native fine to coarse SAND and gravel; light brown; dry		S-2	1.5/3	NA	Core	0	
6								
7	Equipment refusal (cobble) encountered at 7 feet bgs							
8								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *09/22/14*
Date Ended: *09/22/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-404

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine to coarse SAND with some SILT and brick; blackish brown; dry; slight petroleum odor							
1								
2			S-1	2/4	NA	Core	0	
3								
4	No recovery		S-2	0/1	NA	Core		
5	Equipment refusal (cobble) encountered at 5 feet bgs							
6								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *09/22/14*
Date Ended: *09/22/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-405

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine to coarse SAND with some SILT and asphalt; blackish brown; dry							
1								
			S-1	1/2.5	NA	Core	0	
2								
	Equipment refusal (concrete) encountered at 2.5 feet bgs							
3								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *09/22/14*
Date Ended: *09/22/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-406

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine to coarse SAND and gravel; light brown; dry							
1	Fill material comprised of fine SAND with some gravel; blackish brown; dry							
2			S-1	3/4	NA	Core	0	
3								
4	Fill material comprised of fine SAND with some gravel; brown; dry							
	Native fine SAND with some rounded gravel; light brown to tan; dry							
5								
6			S-2	3/4	NA	Core	0	
7								
8	Boring terminated at 8 feet bgs							
9								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *09/22/14*
Date Ended: *09/22/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-407

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
1	Fill material comprised of fine to coarse SAND with some SILT and gravel; light to dark brown; dry							
2			S-1	3/4	NA	Core	0	
3								
4	Fill material comprised of fine to coarse SAND with some SILT and gravel; light to dark brown; dry							
5	Native fine SAND with some rounded gravel; light brown; dry							
6			S-2	3/4	NA	Core	0	
7								
8	Boring terminated at 8 feet bgs							
9								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *10/20/14*
Date Ended: *10/20/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
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Log of Borehole: EB-501

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine to medium SAND with some SILT and gravel; brown with blue staining; dry PCBs >50 ppm (0-2')							
1							1	
2	Fill material comprised of fine SAND with SILT and gravel; brown; dry PCBs >50 ppm (2-4')		S-1	2/4	NA	Core		
3							1	
4	Boring terminated at 4 feet bgs							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *10/20/14*
Date Ended: *10/20/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-502

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine to coarse SAND with some SILT and gravel; light brown to brown; dry PCBs >50 ppm (0-2')							
1							0	
2	Fill material comprised of fine SAND with some SILT and gravel; brown to light brown; dry PCBs <50 ppm (2-4')		S-1	3/4	NA	Core		
3							0	
4	Boring terminated at 4 feet bgs							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *10/20/14*
Date Ended: *10/20/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-503

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine SAND with some SILT and gravel; light brown; dry PCBs <50 ppm (0-2')							
1							0	
2	Fill material comprised of fine SAND with some SILT and gravel; reddish brown; dry PCBs <50 ppm (2-4')		S-1	2.5/4	NA	Core		
3							0	
4	Boring terminated at 4 feet bgs							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *10/20/14*
Date Ended: *10/20/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-504

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of topsoil, cobbles and fine SAND; brown; dry PCBs >50 ppm (0-2')							
1	Fill material comprised of fine SAND and SILT with some gravel; brown to light brown; dry PCBs <50 ppm (2-4')						0	
2			S-1	2.5/4	NA	Core		
3							0	
4	Boring terminated at 4 feet bgs							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *10/20/14*
Date Ended: *10/20/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-505

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of asphalt, fine SAND and gravel; light brown; dry PCBs >50 ppm (0-2')							
1	Fill material comprised of fine SAND and SILT; greyish black; dry PCBs >50 ppm (0-2')						0	
2	Fill material comprised of fine SAND and SILT; blackish brown; dry PCBs <50 ppm (2-4')		S-1	3.5/4	NA	Core		
3							1	
4	Boring terminated at 4 feet bgs							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *10/20/14*
Date Ended: *10/20/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-506

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine to coarse SAND and gravel; light brown; dry PCBs <50 ppm (0-2')							
1	Fill material comprised of fine SAND with some SILT; light brown; dry PCBs <50 ppm (2-4')						0	
2			S-1	3/4	NA	Core		
3	Fill material comprised of fine SAND with some SILT; blackish grey; dry PCBs <50 ppm (2-4')						0	
	Fill material comprised of fine SAND with some SILT; light brown; dry PCBs <50 ppm (2-4')							
4	Boring terminated at 4 feet bgs							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *10/20/14*
Date Ended: *10/20/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-507

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine to coarse SAND and gravel; light brown; dry PCBs <50 ppm (0-2')							
1	Fill material comprised of fine SAND with some SILT and gravel; brownish black; dry PCBs test not conclusive (2-4')						0	
2			S-1	1.5/4	NA	Core		
3							0	
4	Boring terminated at 4 feet bgs							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *10/20/14*
Date Ended: *10/20/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-508

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine to coarse SAND and gravel; light brown; dry PCBs >50 ppm (0-2')							
1							0	
	Fill material comprised of fine SAND with some SILT; brownish black; dry PCBs >50 ppm (2-4')							
2			S-1	3/4	NA	Core		
3							0	
	Fill material comprised of fine SAND with some SILT; light brown; dry PCBs >50 ppm (2-4')							
4	Boring terminated at 4 feet bgs							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *10/20/14*
Date Ended: *10/20/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-509

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine to coarse SAND with gravel and asphalt; brown; dru PCBs <50 ppm (0-2')						0	
1	Fill material comprised of fine SAND; grey; dry PCBs <50 ppm (0-2')							
	Fill material comprised of fine SAND and SILT with some gravel; dark brown; dry PCBs <50 ppm (2-4')		S-1	3/4	NA	Core		
2								
3							0	
	Fill material comprised of fine SAND and SILT with some gravel; light brown; dry PCBs <50 ppm (2-4')							
4	Boring terminated at 4 feet bgs							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *10/20/14*
Date Ended: *10/20/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-510

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of topsoil, fine to coarse SAND and gravel; brown to light brown; dry PCBs <50ppm (0-2')							
1	Fill material comprised of fine SAND, SILT and gravel; dark brown; dry; large piece of rubber noted PCBs <50ppm (2-4')						0	
2			S-1	2.5/4	NA	Core		
3							0	
	Fill material comprised of fine SAND with some SILT; light brown; dry PCBs <50ppm (2-4')							
4	Boring terminated at 4 feet bgs							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *10/20/14*
Date Ended: *10/20/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-511

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of topsoil, fine SAND and some gravel; brown; dry							
1	Fill material comprised of fine SAND with some SILT; light brown; dry						0	
2			S-1	2.5/4	NA	Core		
3							0	
4	Boring terminated at 4 feet bgs							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *10/20/14*
Date Ended: *10/20/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-512

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
	Fill material comprised of fine to coarse SAND, SILT and gravel; trace brick and asphalt; light brown to grey; dry PCBs >50ppm (0-2')							
1							0	
	Fill material comprised of fine to coarse SAND, SILT and gravel; black layers; dry PCBs <50ppm (2-4')							
2			S-1	2.5/4	NA	Core		
3							0	
	Fill material comprised of fine SAND with some SILT; light brown; dry PCBs <50ppm (2-4')							
4								
	Boring terminated at 4 feet bgs							
5								

Drilling Company: *Harvey Associates*
Drilling Foreman: *Doug Harvey*
EBI Geologist/Scientist: *Daniel Bellucci*
Drilling Method: *Direct Push*
Borehole Diameter: *2.25-inch*

Date Started: *10/20/14*
Date Ended: *10/20/14*
Project Location: *Woburn, MA*
Project Number: *12140078*
Sheet: *1 of 1*

Log of Borehole: EB-513

EBI Consulting
21 B Street
Burlington, MA

SUBSURFACE PROFILE			SAMPLE					Well Construction
Depth	Description	Strata	No.	Rec.	SPT Blows	Type	FID/PID Readings (ppm) 100 300	
1	Fill material comprised of fine to coarse SAND, SILT and gravel; some asphalt; greyish black; dry PCBs <50ppm (0-2')						0	
2	Fill material comprised of fine SAND with some SILT and gravel; greyish black; dry		S-1	3/4	NA	Core		
3							0	
4	Fill material comprised of fine SAND with some SILT; light brown; dry Boring terminated at 4 feet bgs							
5								

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21 B Street, Burlington, MA 01803

Project Number: 12140078

Excavating Co: A&E Utility Excavating

Project Location: 1071 Main Street
Woburn Massachusetts

Equipment: Backhoe

Date: 11/06/2014

EBI Scientist: Daniel Bellucci

TP-01

Depth	Description
0 - 1'	Fill material comprised of fine to medium SAND with some SILT and gravel; brown; dry
1' - 1' 5"	Ash layer- black ash, sand and silt with coal slag and glass bottles
1' 5" - 2'	Fine SAND with some SILT and gravel; light brown; dry
2' - 4'	Native fine SAND with some SILT and gravel; brown; dry; some roots noted
4' - 5' 4"	Native fine SAND with some SILT and gravel; light brown to tan; dry
Test pit terminated at a depth of 5' 4" bgs	

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21 B Street, Burlington, MA 01803

Project Number: 12140078

Excavating Co: A&E Utility Excavating

Project Location: 1071 Main Street
Woburn Massachusetts

Equipment: Backhoe

Date: 11/06/2014

EBI Scientist: Daniel Bellucci

TP-02

Depth	Description
0 - 1'	Fill material comprised of fine to medium SAND with some SILT and gravel; brown; dry
1' - 1' 4"	Fill material comprised of fine to medium SAND with some SILT and gravel; orangeish brown; dry
1' 4" - 2' 2"	Ash layer- black ash, sand and silt with coal slag and brick
2' 2" - 3'	Native fine SAND with some SILT and gravel; brown; dry; some roots
3' - 5' 6"	Native fine SAND with some SILT and gravel; light brown; dry
Test pit terminated at a depth of 5' 6" bgs	

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21 B Street, Burlington, MA 01803

Project Number: 12140078

Excavating Co: A&E Utility Excavating

Project Location: 1071 Main Street
Woburn Massachusetts

Equipment: Backhoe

Date: 11/06/2014

EBI Scientist: Daniel Bellucci

TP-03	
Depth	Description
0 - 1' 6"	Fill material comprised of fine to medium SAND with some SILT and gravel; brown; dry
1' 6" - 2' 1"	Ash layer- black ash, sand and silt with coal slag, brick and wood.
2' 1" - 3' 3"	Native fine SAND and SILT; brown; dry; some roots
3' 3" - 5' 3"	Native fine SAND and SILT; light brown; dry
Test pit terminated at a depth of 5' 3" bgs	

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21 B Street, Burlington, MA 01803

Project Number: 12140078

Excavating Co: A&E Utility Excavating

Project Location: 1071 Main Street
Woburn Massachusetts

Equipment: Backhoe

Date: 11/06/2014

EBI Scientist: Daniel Bellucci

TP-04

Depth	Description
0 - 1'	Fill material comprised of fine to medium SAND with some SILT and gravel; brown; dry
1' - 2'	Ash layer- black ash, sand and silt with coal slag; slight petroleum odor (0.4 ppm)
2' - 4'	Native fine SAND and SILT; brown; dry; some roots; slight petroleum odor
4' - 6'	Native fine SAND and SILT; light brown; dry

***Note- UST discovered along western portion of excavation from approximately 2-feet bgs to 8-feet bgs. ~1,000 gallon UST with No. 4 fuel oil. ~750 gallons remain in tank.

Test pit terminated at a depth of 6' bgs

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21 B Street, Burlington, MA 01803

Project Number: 12140078

Excavating Co: A&E Utility Excavating

Project Location: 1071 Main Street
Woburn Massachusetts

Equipment: Backhoe

Date: 11/06/2014

EBI Scientist: Daniel Bellucci

TP-05

Depth	Description
0 - 6"	Fill material comprised of asphalt and gravel
6" - 3'	Ash layer- black ash, sand and silt with coal slag
3' - 5'	Native fine SAND with some SILT; brown; dry
***Note- UST located along northern portion of excavation from approximately 2-feet bgs to 8-feet bgs. ~1,000 gallon UST with No. 4 fuel oil. ~750 gallons remain in tank.	
Test pit terminated at a depth of 5' bgs	

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21 B Street, Burlington, MA 01803

Project Number: 12140078

Excavating Co: A&E Utility Excavating

Project Location: 1071 Main Street
Woburn Massachusetts

Equipment: Backhoe

Date: 11/06/2014

EBI Scientist: Daniel Bellucci

TP-06	
Depth	Description
0 - 1' 5"	Fill material comprised of fine to medium SAND with some rounded gravel and ash; greyish black; dry
1' 5" - 3'	Ash layer- black ash, sand and silt with coal slag and wood.
3' - 4'	Native fine SAND and SILT; brown; dry
4' - 6'	Native fine SAND and SILT; light brown; dry
Test pit terminated at a depth of 6' bgs	

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Excavating Co: A&E Utility Excavating

Project Location: 1071 Main Street
Woburn Massachusetts

Equipment: Backhoe

Date: 11/06/2014

EBI Scientist: Daniel Bellucci

TP-07	
Depth	Description
0 - 1'	Fill material comprised of fine to medium SAND with some gravel; brown; dry
1' - 1' 6"	Ash layer- greyish black ash, sand and silt - *Less distinct than other ash layers observed
1' 6" - 3'	Native fine SAND and SILT; brown; dry
3' - 6'	Native fine SAND and SILT; light brown to tan; dry
Test pit terminated at a depth of 6' bgs	

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Project Number: 12140078

Excavating Co: A&E Utility Excavating

Project Location: 1071 Main Street
Woburn Massachusetts

Equipment: Backhoe

Date: 11/06/2014

EBI Scientist: Daniel Bellucci

TP-08	
Depth	Description
0 - 2'	Fill material comprised of fine to medium SAND with some gravel; brown; dry
2' - 3' 5"	Ash layer- greyish black ash, sand and silt; blackish brown; dry
3' 5" - 6'	Native fine SAND with some SILT; light brown to tan; dry
Test pit terminated at a depth of 6' bgs	

APPENDIX D

Public Notification Letters

EBI Consulting
environmental | engineering | due diligence

21 B Street
Burlington, MA 01803
Tel: (617) 715.1839
Fax: (617) 715.6539

NOTICE OF AN ENVIRONMENTAL RESPONSE ACTION
1017 Main Street
Woburn, Massachusetts
RTN TBD

Pursuant to the Massachusetts Contingency Plan (MCP) [(310 CMR 40.1403(3)(d)] adopted by the Department of Environmental Protection, notice is hereby given that the item(s) checked below applies to this site:

- ☐ Implementation of Phase IV Remedial Actions
- ☐ Use of Respirators & Protective Clothing
- ☐ Sampling of Private Drinking Water Well/ Indoor Air/ or Surficial Soils
- ☐ Immediate Response Action (IRA) involving Imminent Hazard
- ☐ IRA Completion Statement Availability including Imminent Hazard Evaluation
- ☒ **Release Abatement Measure (RAM) Implementation**
- ☐ Phase I Initial Site Investigation Report Availability
- ☐ Subsequent Status Report Availability
- ☐ Response Action Outcome (RAO) Statement Availability
- ☐ Downgradient Property Status (DPS) Submittal Availability.

Any person interested in obtaining additional information or obtaining a copy of the document(s) (where applicable) may contact EBI CONSULTING at (781-418-2318) or the Northeast Regional Office of the Massachusetts Department of Environmental Protection (978-694-3200).

Sincerely,
EBI Consulting

Edward F. Giordano, LSP # 5448
Senior Project Manager

cc: Mr. Scott Seaver, 1071 Village LLC, 215 Lexington Street, Woburn, MA 01801
Town of Woburn Board of Health, 10 Common Street, Woburn, MA 01801

APPENDIX B

EPA SIP Checklist

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

SELF-IMPLEMENTING CLEANUP AND DISPOSAL § 761.61(a)(3) CHECKLIST

I. Cleanup and Disposal Notification to EPA with the following:

☒ Cover letter stating purpose of the submission and signed by the Site owner or operator, or by the party responsible for conducting the cleanup, such as a former Site owner.

☒ A plan which includes the following information:

☒ Site background and history. This should include a discussion of past activities (e.g. use of PCBs and/or PCB equipment, storage, manufacturing, etc), site ownership, and current or proposed site uses. This section should also include information on any cleanups/remediations that have occurred at the Site.

Section 1.0 (SIP)
Section 2.0 (RAM Plan)

☒ The nature of the contamination, including the kinds of materials contaminated (§ 761.61(a)(3)(i)(A)).

Figures 3a & 3B (SIP & RAM Plan)
Section 1.0 and 3.0 (SIP)
Section 2.0 (RAM Plan)

☒ A summary of the standard operating procedures (SOPs) employed during characterization of the Site, including a table or cleanup Site map showing PCB concentrations measured in the pre-cleanup characterization samples. The SOPs must include information on the field sample collection procedures and field and/or laboratory extraction and analytical procedures (§ 761.61(a)(3)(i)(B)).

Section 2.0 (SIP)

☒ A Site map showing the PCB sampling locations cross referenced to the sample identification numbers provided as part of the characterization information. The extent of the identified PCB contaminated area(s) must be clearly identified (§ 761.61(a)(3)(i)(C)).

Figures 3a & 3B (SIP & RAM Plan)
Tables 8 & 9 (RAM Plan)

SDMS DocID 484694

Section 4.0 (SIP) Appendix B (RAM Plan)	☒	Copies of the laboratory analytical reports of the characterization sampling, including field and laboratory quality assurance/quality control samples, should be provided to document the extraction/analytical dates and methods and laboratory QC (§ 761.61(a)(3)(i)(C)). *If extensive, the laboratory analytical reports may be provided on a CD-ROM.*
Section 5.0 (SIP) Section 3.0 (RAM Plan)	☒	A cleanup plan for the Site, including the proposed disposal technology and approach, and a cleanup schedule. ***The plan must include contingency plans in the event that higher PCB concentrations and/or a wider distribution of PCBs are identified during the cleanup*** (§ 761.61(a)(3)(i)(D)).
Attached cover letter	☒	A written certification, signed by the owner of the property where the cleanup site is located and the party conducting the cleanup, that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site, are on file at the location designated in the certificate, and are available for EPA inspection (§ 761.61(a)(3)(i)(E)).
Section 8.0 (SIP)	☒	Subpart Q alternative method: If an alternative method of extraction and/or analysis is/will be used, the certification shall include a statement to this fact and that a comparison study which meets or exceeds the requirements of Subpart Q has been completed prior to the verification sampling. In the event that the alternative extraction and/or analytical method was previously validated under Subpart Q using materials from other projects, the laboratory must provide a certification that the sample types used during that comparison study are similar to (e.g., % organic content, grain size, etc) the sample types that will be cleaned up under the Notification. A copy of the Subpart Q comparison study should be included in the Notification (§ 761.61(a)(3)(i)(E)).
Section 8.0 (SIP) Section 3.2 (RAM Plan)	☒	QA/QC plan for documenting that the cleanup levels have been achieved (e.g. confirmatory sampling/analysis QA/QC). The QA/QC plan should at a minimum include information on the types/numbers of samples; extraction/analytical methods; MS/MSDs (both frequency and acceptance criteria), etc. The QA/QC plan should also discuss data validation.

☒ In the event that the party conducting the cleanup is not the Site owner (for example, the party could be a previous Site owner), EPA will require documentation that the party conducting the cleanup legally has the authority to access the Site and to conduct the proposed PCB activities. This documentation for example may be in the form of a Site Access Agreement stating this fact or perhaps in a lease agreement or a property transfer agreement.

Section 6.0 (SIP)
Cover Letter (SIP)

☐ If a cleanup will involve the use of a cap, the cap design specifications and a cross-section showing the design should be provided. Please insure that it is clear where the cap will be used. ***Please note: the use of a cap will require a deed notation documenting this fact and the limitations on the use of the Site*** (§§ 761.61(a)(7) and (8)).

II. Important Considerations:

This checklist provides only a summary of the information that is specified under § 761.61(a)(3), is for reference only, and is not intended to replace the requirements of the PCB regulations.

Region 1 requires that the SOPs and QA/QC information be submitted as part of the Notification.

The Notification may include any additional information that supports the proposed cleanup, such as information regarding state regulations, community involvement (especially for schools), and environmental justice communities. In addition, any documentation that has been developed for a state regulatory agency, such as a remedial investigation report, may be submitted to support the pertinent required documentation in lieu of generating a new document.

The 30-day default timeframe for EPA review of a Self-Implementing PCB Cleanup and Disposal Notification (§ 761.61(a)(3)(ii)) does not apply if the proposed PCB plan does not follow the prescriptive cleanup and disposal procedures and provisions specified under § 761.61(a).

APPENDIX C

Health and Safety Plan

SITE-SPECIFIC HAZARDOUS MATERIALS HEALTH AND SAFETY PLAN

SITE-SPECIFIC
HAZARDOUS MATERIALS
HEALTH AND SAFETY PLAN

PROJECT:
1071 Main Street
Woburn, Massachusetts

Prepared for:
1071 Village LLC
215 Lexington Street
Woburn, MA 01801

Prepared by:
EBI Consulting
21 B St.
Burlington, MA 01803

December 2014

EBI Consulting
environmental | engineering | due diligence

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APPENDICES

Appendix

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B Resumes and Certifications: LSP & SSHOs
C Historical Soil Sampling Data
D Material Safety Data Sheets
E Hazardous Materials
F Respirator Program

1.0 GENERAL {tc \l 1 "1.0 GENERAL"}

This Project Site-specific Health and Safety Plan (HASP) have been prepared by EBI Consulting (EBI) for the environmental work to be conducted at 1071 Main Street in Woburn, Massachusetts. This HASP was prepared in accordance with the regulatory requirements of 29 CFR 1926.65, "Hazardous Waste Operations and Emergency Response and 29 CFR 1910.120 (HAZWOPER)." This HASP is for use by EBI Consulting (EBI), Petroleum Management Services, Inc. (PMSI) and Seaver Construction, Inc. (Seaver) referred to as the contractor, personnel and relevant subcontractors.

In accordance with 29 CFR 1926.65 and project specifications, this plan establishes the procedures and protocols necessary for protecting workers and the general public from potential chemical and physical exposures associated with the following activities related to the project activities:

- Site Preparation Activities:
  - Saw cut and strip asphalt and concrete
- Excavation and stockpiling of excavated material:
  - Ex-situ/stockpile screening of soil, laboratory characterization as necessary
  - Soils to be stockpiled within limits of work or an area provided by the owner
- Removal of Underground Storage Tank

1.1 HASP Organization

This HASP summarizes the project organization and responsibilities; establishes Standard Operating Guidelines for preventing accidents, injuries, and illnesses; identifies hazards; discusses the personal protective equipment that may be used at the site; identifies personnel health and safety training requirements; summarizes the monitoring techniques to be used; establishes emergency procedures; describes the medical surveillance program; identifies the appropriate first aid equipment that is available; provides for accident record keeping; and establishes a schedule for safety inspections.

This HASP *does not* address construction-related safety and health issues/activities/tasks. Construction-related safety issues during work tasks are the responsibility of the contractor and subcontractor(s) performing their activities.

The project assigned Site Safety & Health Officer (SSHO) will implement the HASP during site work in the area(s) of concern. Evaluation of Health and Safety issues associated with excavation and management of contaminated soils encountered during construction shall be the responsibility of the SSHO. Compliance with this HASP is required of all personnel who enter this site. If a situation should arise that is not specified in this HASP the on-call SSHO and/or a Certified Industrial Hygienist (CIH)will be contacted immediately.

Using the Modification Form presented in Appendix A, the content of this plan may change or undergo revisions based upon additional information made available to health and safety personnel, monitoring results, or changes in the SSHO.

2.0 ASSIGNMENT OF HASP RESPONSIBILITY{tc \l 1 "2.0 ASSIGNMENT OF HMH&SP RESPONSIBILITY"}

The following describes the health and safety designations and general responsibilities, which will be implemented for the activities to be conducted at the site.

The site specific HASP has been developed as guidance document for the project and its implementation is the responsibility of assigned SSHO and/or CIH. EBI has included staff that maybe assigned by the project to administer these roles on an as-needed-basis. See Appendix B for Resumes and Certifications.

2.1 On-Call Certified Industrial Hygienist (CIH)

For this project, the CIH shall be contacted as needed.

The On-call Certified Industrial Hygienist (CIH) has the overall responsibility for the development, review and approval of the HASP and subsequent amendments. The Site Safety & Health Officer (SSHO) is the "designee" of the CIH and is responsible for the implementation, administration and supervision of this HASP. The SSHO and CIH will submit to the owner's onsite representative and owner's engineer for review, any changes to this plan due to modification of procedures or newly proposed site activities.

Health and safety-related duties and responsibilities will be assigned only to qualified individuals designated by the SSHO or the CIH.

Peter Hosford will serve as the on-call CIH for this Project. If a situation should arise that is not specified in this HASP, the on-call CIH will be contacted immediately by the SSHO. Contact information is given below:

Peter Hosford, CIH
EBI Consulting
21 B Street
Burlington, MA
(617) 715-1823 (office and cell)

2.2 On-Call Site Safety & Health Officer

For this project, the SSHO shall be contacted as needed and will direct the site health and safety efforts.

The SSHO will be responsible for implementing the HASP on-site, evaluating risks, safety oversight, determining levels of personnel protection required and performing any required monitoring at the Site. The SSHO may direct or participate in on-site activities as appropriate when this does not interfere with primary SSHO responsibilities. The SSHO has stop-work authorization, which he/she will execute upon determination of an imminent safety hazard, emergency situation, or other potentially dangerous situations, such as detrimental weather conditions. Authorization to proceed with work will be issued by the SSHO.

The SSHO will select the proper levels of protection based on the details of this plan and the hazards encountered. The SSHO will be trained and certified in First Aid, CPR, and blood borne pathogens, and have been provided the opportunity to receive the Hepatitis B vaccination series. The SSHO shall be responsible for preparing, maintaining and signing daily Health & Safety site logs (Appendix A). At a minimum this log shall include a description of weather conditions, levels of personnel protection being employed, monitoring data and any other information relevant to on-site safety conditions.

The on-call SSHO for this project is:

Daniel Bellucci – Cell phone # 845-803-4347
EBI Consulting
Lauren Bellucci – Cell phone # 617-715-6565
EBI Consulting
Edward Giordano – Cell phone # 339-234-8739
EBI Consulting

2.3 Licensed Site Professional (LSP)

The LSP will be responsible for issues associated with the excavation and management of contaminated soil encountered during work at the Project site. The LSP shall be a hazardous waste consultant, as defined in M.G.L. C 21A paragraph 19 and hold a valid license issued by the Board of the Registration of Hazardous Waste Site Cleanup Professionals pursuant to M.G.L. C21A, paragraph 19-19J.

As required, Edward Giordano will serve as the Contractor's LSP for this Project. The Contractor's LSP duties are further defined in contract specifications and other required submittals. At the LSP's discretion, he/she may designate a representative to oversee work activities.

Edward Giordano, LSP
EBI Consulting – Project Manager

Daniel Bellucci, LSP Representative
EBI Consulting – Environmental Scientist

2.4 {tc \l 22 ".2 Site Safety & Health Officer (SSHO)"}{tc \l 22 ".3 Licensed Site Professional (LSP)"}Field Personnel{tc \l 22 ".4 Field Personnel"}

As needed, field personnel will include EBI, PMSI and Seaver representatives and subcontractors. Field personnel will take direction regarding safety and health issues from the SSHO. All field personnel who will work with or adjacent to hazardous materials will provide to the SSHO proof of having at a minimum a 40-hour OSHA certification, 24-hour "on the job" training, up-to-date 8-hour refresher course, and annual medical monitoring by an occupational physician. All subcontractors shall comply with the requirements outlined in this HASP and in accordance with OSHA 29 CFR 1910 and 29 CFR 1926; but, in all cases, subcontractors shall be responsible for site safety related to, or affected by, their own field operations (e.g. heavy equipment operations).

3.0 SITE HISTORY AND BACKGROUND{tc \l 1 "3.0 SITE HISTORY AND BACKGROUND"}

3.1 Project Description

The General scope of the work to be performed under this contract is for the removal of a previously unknown underground storage tank (UST) and soil impacted with Polychlorinated byphenols, metals and residual tota; petroleum hydrocarbons (TPH). Work will be performed at 1071 Main Street in Woburn, Massachusetts. See Figure 1 for site location map.

The following quantities are expected to be excavated, requiring management. Soil Management Activities will include field screening and chemical characterization of soil, in-situ and/or ex-situ pre-characterization.

Volume of soil to be managed (tons)

1. Cut: 1,400
2. Fill: To Be Determined
3. Import: To Be Determined
4. Excess: None (0)

The Contractor will provide the sequence and timing of soil disturbances to EBI and PMSI by way of a Construction Schedule of Operations (Schedule). The Contractor will provide the findings of the HASP Inspections to the owner as required.

3.2 Site History and Background{tc \l 23 ".1 Location, Site History, and Background"}

The site is located in Woburn, Massachusetts in a neighborhood of single-family residential homes. The site is improved with three one-story commercial buildings on a 5.03-acre lot. The buildings were reportedly constructed in 1959 and include 17,928± square feet of net rentable space. It is located approximately 200-feet south of the intersection of Main Street and North Maple Street. The site is identified on the Town of Woburn Assessor's Office as Map 08, Block 07, Lot 18, and is located at an elevation of approximately 30 feet above mean sea level (msl). EBI completed an Environmental Site Assessment in 2004, at which time the property was occupied by Action Autobody, Allied Cartage, John's Automotive, Paul's Landscaping, and Old Outboard Motor Company. Woburn Hide and Leather conducted tannery operations at the parcel from approximately 1928 until 1957. Since the 1960s, the buildings have been either vacant, or occupied by various industrial tenants contained in different parts of the buildings. The property is not listed on the MassDEP Searchable Sites database. 1071 LLC is in the process of purchasing the property and leases portions of the property for remedial efforts.

The following summary identifies the environmental conditions that were encountered at the Site conducted during a Limited Subsurface Investigations completed between February 2004 and November 2014 as part of a real estate transaction and propose site redevelopment activities. During soil disposal characteristic analysis, polychlorinated biphenyls (PCBs) were reported in the soil.

February 2004 Assessment

A release of chromium, antimony and petroleum hydrocarbons to soil was discovered by EBI field personnel during a Limited Subsurface Investigation conducted on February 26 and 27, 2004. The release is the result of historic onsite tannery activities including the use of a tannery waste lagoon. The investigation included the advancement of seventeen exterior soil borings and excavation of seven test pits. Three soil borings were converted to permanent monitoring wells designated MW-1, MW-2 and MW-3. Soil and groundwater samples were analyzed for volatile organic compounds (VOCs), extractable petroleum hydrocarbons (EPH), dissolved PPM-13, phenols and total cyanide.

Concentrations of chromium, antimony and C_{11}-C_{22} aromatic hydrocarbon fraction were detected in soil in excess of applicable RCS-1 standards. No concentrations of VOCs, EPH, PPM-13, phenols or total cyanide were detected in groundwater above applicable Reportable Concentrations for Groundwater Reporting (RCGW-2) standards.

EBI recommended further delineation of the identified metals, and that subsequent site closure/remediation be conducted under the provisions of the Massachusetts Contingency Plan (MCP) prior to/in conjunction with the redevelopment of the parcel.

July 2009 Assessment

An additional investigation was conducted at the property in 2009 by EBI to assess the extent of antimony and chromium impacts to soil beneath the onsite buildings. The investigations included the advancement of ten interior soil borings designated IB-1 through IB-10. The results of delineation activities revealed concentrations of chromium and antimony beneath the existing building slabs in excess of RCS-1 standards.

October 2010 Assessment

Weston & Sampson conducted an additional investigation to further delineate the extent of antimony and chromium impacts to soil. The investigation included the advancement of five exterior soil borings designated WS-1 through WS-5. The results of delineation activities revealed concentrations of chromium and antimony on the northern and eastern portions of the site in excess of RCS-1 standards.

November 2010 Assessment

EBI conducted an investigation to further delineate the extent of antimony, chromium and petroleum hydrocarbon impacts to soil on November 1, 2010. The investigation included the advancement of 16 exterior soil borings designated EB-1 through EB-16. The results of delineation activities revealed concentrations of chromium and antimony throughout the site in excess of RCS-1 standards.

Laboratory analysis of the soils samples designated EB-1 through EB-16 did not include analysis for hexavalent chromium versus trivalent chromium. The MADEP RCS-1 standard for hexavalent chromium is 30 mg/kg, whereas the RCS-1 standard for trivalent chromium is 1,000 mg/kg. The highest concentration of hexavalent chromium detected in soil at the property is 16 mg/kg. Based on the low concentrations of hexavalent chromium versus trivalent chromium, it is EBI's opinion that the soil samples not sampled for hexavalent chromium do not contain concentrations of hexavalent chromium above 30 mg/kg. EBI performed a linear regression analysis to further demonstrate the low concentrations of hexavalent chromium distributed across the sampling regimen.

April 2014 Assessment

On April 8, 2014, four (4) soil borings were advanced at the property to provide sampling information at locations not previously investigated during the 2004 through 2010 delineation activities. Two of the borings were converted into temporary monitoring wells for the purpose of obtaining grab groundwater samples. The borings were advanced using a direct push sampling rig operated by Harvey Associates.

Soil samples were collected using a four-foot long core sampler equipped with dedicated acetate liners. The physical characteristics of each soil sample were recorded on boring logs, and a portion of the sample was placed in clean plastic bags for soil vapor headspace screening. The vapor headspace of each soil sample was field-screened using a photoionization detector (PID). The PID provides a reading of total ionizable volatile organic compounds (VOCs). The PID was calibrated with an isobutylene standard and corrected to measure total VOCs as Methyl isobutyl ketone (MIBK) equivalents. This correction factor was utilized in order to attempt to more closely represent the heavier petroleum compounds detected during earlier rounds of sampling. The PID has a practical sensitivity of approximately one part per million by volume (ppmV). PID readings should not be considered as exact

measurements, but as relative readings of VOCs between locations. PID readings above background were not detected in the soil samples collected.

EBI installed two temporary groundwater monitoring wells in the EB-202 and EB-204 boreholes. The wells were constructed of 1-inch slotted PVC well screen across the water table and completed to grade with solid 1-inch casing. Groundwater samples were collected from the two temporary wells along with two existing wells (MW-1 and MW-3) and analyzed for EPH by the MADEP Method, antimony and chromium.

The groundwater analytical data obtained during the April 8, 2014 sampling event was compared to the Massachusetts Contingency Plan (MCP) RCGW-2 standards. None of the concentrations of EPH, antimony or chromium detected exceeded applicable RCGW-2 standards.

Analytical results showed concentrations of chromium (trivalent) exceeding the Massachusetts Contingency Plan (MCP) Reportable Concentrations Soil Category 1 (RCS-1) regulatory standard. No concentrations of EPH or antimony exceeded RCS-1 standards in the soil samples collected.

August 2014 Assessment

On August 29, 2014 nine (9) soil borings, designated EB-301 through EB-309, were installed throughout the northern portion of the property. The boring locations, sampling intervals and laboratory analysis were selected to delineate chromium and antimony impacts previously identified in the northern portion of the property. Additionally, five (5) samples were collected for analysis of Comm-97 parameters for pre-disposal characterization. Total chromium was detected at a concentration of 5,300 mg/kg in the sample collected from EB-306 at a depth of 0 to 3 feet bgs, above the MADEP RCS-1 standard of 1,000 mg/kg. Laboratory analysis indicated hexavalent chromium was detected at a concentration of 6.1 mg/kg, below the MADEP RCS-1 standard of 30 mg/kg.

PCBs (Aroclor 1254) were detected in three (3) of the five (5) soil samples collected for Comm-97 disposal analysis. The concentrations ranged from 1.21 to 39 mg/kg, above the MADEP RCS-1 standard of 1 mg/kg. To further evaluate the extent of PCB concentrations in soil, EBI analyzed two (2) additional soil samples collected in the vicinity of the identified PCB impacted soil. Concentrations of PCBs were detected below 1 mg/kg (0.26 and 0.3 mg/kg) in the two additional soil samples analyzed.

September 2014 Assessment

EBI returned to the site on September 22, 2014, to collect additional samples for PCBs by EPA Method 8082 analysis. Borings EB-401through EB-407 were advanced in the vicinity to previously identified PCB impacted soil (EB-306 and EB-307). A deep sample (3-6 feet bgs) was collected below the previously identified PCB concentration (39 mg/kg) from 0 to 3 feet bgs. Seven (7) borings were advanced southwest of the of the suspected source area with selected samples analyzed for PCBs by EPA Method 8082 for lateral delineation. The concentrations detected in the second round of sampling ranged from 0.22 to 420 mg/kg.

October 2014 Assessment

EBI returned to the site on October 20, 2014, to collect additional samples for PCBs by EPA Method 8082 analysis. Borings EB-501 through EB-513 were advanced in a general grid pattern surrounding EB-407, where PCBs were previously detected at a concentration of 420 mg/kg at a depth of 0 to 4 feet bgs. Soil samples were collected at depths of 0 to 2 and 2 to 4 feet bgs from each location. The samples were tested for PCB content prior to laboratory analysis using Dexsil® Clor-N-Soil PCB Screening kits to determine PCB content < or > 50 parts per million. Based on the results of the screening, soil samples were submitted for laboratory analysis of PCBs by EPA Method 8082 plus

Soxhlet extraction. The concentrations of PCBs in the soil samples analyzed ranged from 0.46 to 246 mg/kg.

November 2014 Assessment

EBI returned to the site on November 6, 2014 for the excavation of eight soil test pits to further evaluate subsurface soil conditions in the vicinity of the previously identified PCB impacted soils. Samples were collected at the digression of EBI field personnel for analysis of PCBs by EPA Method 8082 plus Soxhlet extraction. Eleven shallow soil samples were collected from the test pits for PCB analysis. Concentrations of PCBs ranged from 0.18 to 38 mg/Kg.

EBI encountered an approximate 1,000-gallon Underground Storage Tank (UST) containing approximately 750-gallons of No. 6 fuel oil in the location of TP-04.

{tc \l 1 "4.0 HAZARD ASSESSMENT"}4.0 HAZARD ASSESSMENT

4.1 Waste Description/Characterization.{tc \l 24 ".2 Degree of Hazard"}

The following chemical information is presented in order to identify the types of materials that may be encountered at the site. The detailed information on these materials was obtained from:

- ACGIH, -2013 Threshold Limit Values and Biological Exposure Indices
- Material Safety Data Sheets
- NIOSH Pocket Guide to Chemical Hazards - 2007

Table 4-1 lists compounds that may be present on-site based on previous environmental investigations at the site referenced in section 3.2 of this HASP.

Table 4-1 General Soil Conditions

Chemical	Source
PCBs	Historic fill
Antimony	Historic site use (Tannery)
Chromium	Historic site use (Tannery)
No. 6 Fuel Oil	UST

Material Safety Data Sheets (MSDS) and/or toxicity summaries for each compound listed below provides information such as the compound's characteristics, health hazards, protection and exposure limits giving the specific health effects for the compounds and the likely routes of exposure are presented in Appendix D.

The work site is currently vacant, with one out-of-use building on site. Excess soils are not anticipated, however, if they are generated they are expected to be as follows:

Waste Types:

Liquid _____X_____ Solid _____X_____ Gas _____
Sludge _____ Semi-Solid _____ Other _____

Characteristics:

Corrosive _____ Flammable _____ Explosive _____
Volatile _____ Radioactive _____ Inert _____X___
Other _____

A list detailing all hazardous materials considered likely to be encountered on-site during construction activities is presented in Appendix E. Material Safety Data Sheets (MSDS) and/or toxicity summaries for the hazardous materials, providing information such as the material's characteristics, health hazards, protection and exposure limits giving the specific health effects for the materials and the likely routes of exposure will be available at Contractor's field office.

Exposures to environmental media will be minimized by the use of personal protective equipment and good housekeeping and engineering practices.

Exposure limits for the materials of concern are presented in Table 4-1. The American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) for the work environment

are given for airborne exposures. Three TLV standards are presented, if available, for each chemical. The Time Weighted Average (TWA) is the average concentration for a normal 8-hour day and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect. The Short-term Exposure Limit (STEL) is a 15-minute-average exposure that should not be exceeded at any time during a workday, even if the 8-hour TWA is within the TLV. Exposures above the TLV-TWA up to the STEL should not be longer than 15 minutes and should not occur more than four times per day. There should be at least 60 minutes between successive exposures in this range. The ceiling limit (CEIL) values refer to the maximum exposure concentration for any duration.

Also presented are the OSHA Permissible Exposure Limits (PELs). The PEL values are presented either as an 8-hour TWA, 15-minute STEL, or CEIL. The immediately dangerous to life and health (IDLH) value represents a maximum concentration from which one could escape within 30 minutes without any escape-impairing symptoms or any irreversible health effects. Other relevant health-based information that applies to this health and safety plan or to the employee's right to know is discussed in the Material Safety Data Sheets for the chemicals of concern in Appendix D.

4.1.1 Polychlorinated Biphenyls (PCBs)

Polychlorinated biphenyls (PCBs) are present in onsite soils as a results of historic industrial activities at the site. PCB is a term used to describe the various species of PCB congeners. PCBs are considered very hazardous in acute skin and eye contact exposure scenarios as well as through ingestion and inhalation. Chronic exposure to PCBs can cause carcinogenic effects based on repeated exposure.

4.1.2 Metals

Metals including antimony and chromium (Predominantly trivalent chromium) are present at the site. In general, the inhalation of metal dusts is irritating to the upper respiratory tract and nasal mucous membranes. Most metal dusts cause dermatitis and/or eye irritation. Early exposure symptoms may include nausea, vomiting, abdominal pain, muscular ache, headache, and dizziness.

4.1.3 Number 6 Fuel Oil

No. 6 fuel oil was discovered in an approximate 1,000-gallon underground storage tank during site investigation activities. Acute hazards associated with No. 6 fuel oil include skin irritation, eye irritation, headaches, dizziness, loss of balance, unconsciousness, suffocation and death.

4.2 Degree of Hazard.{tc \l 24 ".2 Degree of Hazard"}

On-site hazards include physical and chemical hazards. No radiological, biological, or laboratory wastes are suspected on-site. Contaminated materials may be released during soil intrusive activities and any contact with contaminated groundwater. The primary route of exposure is through dermal contact and inhalation exposure to contaminated soils (and groundwater if encountered). Volatile organic compounds may also be released during soil excavation activities.

Soil excavation activities may provide the potential for encountering buried hazards. All utilities will be "cleared" before intrusive activities begin. This includes location of overhead utilities. This will be the responsibility of the subcontractor(s) performing these activities. If encountered, field activities will be stopped, and the SSHO may be notified.

Workers may be exposed to elevated levels of airborne silica (quartz) if the concrete slab is cut using a dry cutting method. To minimize the generation of airborne dust, all concrete cutting will be conducted using a wet cutting method.

Physical hazards that may be encountered at the site during field activities include overhead and tripping hazards associated with heavy construction equipment operations.

Excessive noise may be generated from air compressors, heavy construction equipment, etc. As a precaution, hearing protection will be available to be worn when working around construction-related equipment or deemed necessary. In areas where sound levels prohibit normal speech and where personnel will spend extended time (>1 hour) hearing protection will be required.

Depending on seasonal weather conditions, there is some potential for workers on-site to be affected by heat stress if site activities are scheduled for the summer months or cold exposure if activities are conducted during winter months. The SSHO or on-site personnel may monitor for heat stress or cold exposure in accordance with Section 12.8 of this HASP.

A summary of physical hazards is presented in Table 4-3. Air monitoring and Action Levels are presented in Section 9.0 of this HASP.

4.2.1 Confined Space Entry.

Permit Required Confined Spaces (PRCS) is anticipated. The SSHO/CIH will review requirements prior to entry.
{tc \l 34 ".2.1 Confined Space Entry"}
A confined space is defined as a space, which has any one of the following characteristics: limited opening for entry and exit; is large enough to be bodily entered; and is not designed for continuous worker occupancy. A permit-required confined space is a confined space that contains or has the potential to possess a recognized hazard to personnel (e.g., a hazardous atmosphere, engulfment potential, etc.). This may include excavations as part of this project. Where a location is determined to be a permit-required confined space, all Standard Operating Procedures for permit-required confined space entry will be performed in accordance with the applicable OSHA Standard 29 CFR 1910.146 (Permit Required Confined Space Entry).

For all permit-required confined space entries performed during the project, a written permit system, which evaluates conditions and assures safe entry procedures are followed, shall be implemented by the SSHO/CIH. Training in confined space entry procedures must be obtained by all personnel prior to working on a project task requiring entry into permit-required confined space.

4.3 Spill Containment{tc \l 34 ".2.2 Spill Containment"}

Prevention of spills and vapor releases is a primary concern during all planning and work activities. Spill control and countermeasures are discussed in Section 12.11 of this HASP. Appendix E provides a list of hazardous materials that may be used to complete this project.

Table 4-2
Exposure Limits Based on Human Health Criteria
Contaminants of Concern

Contaminant	TLV-TWA	TLV-STEL	PEL-TWA	PEL-STEL	IDLH
Identified					
PCB	0.5 mg/m ^{3}	--	0.5 mg/m^3 (skin)	--	5 mg/m^3 (Ca)
Antimony	0.5 mg/m ^{3}				
Chromium	0.5 mg/m3	--	1 mg/m3	--	250 mg/m3(CA)
No. 6 fuel oil	1 mg/m ^{3}	1 mg/m ^{3} --	--	--	
Potential contaminants					
PAH's	0.2 mg/m^3	--	0.2 mg/m^3	--	80 mg/m^3 (CA)
Mercury (Alkyl)	0.01 mg/m^3 (skin)	0.03 mg/m^3 (skin)	0.01 mg/m^3 (skin)	0.04 mg/m^3 (ceil)	2 mg/m^3 (skin,Ca)
Cadmium	0.01 mg/m3	- -	0.005 mg/m3	--	9 mg/m3(CA)
Beryllium	0.00005 mg/m3	--	0.002 mg/m3	0.005 mg/m4 (ceil)	4 mg/m3 (CA)
Amorphous Silica	--	--	0.1 mg/m3	--	3,000 mg/m3
Aluminum oxide	1 mg/m3	--	15 mg/m3	--	N.D.
Ferric oxide	5 mg/m3 (respirable)	--	5 mg/m3	--	2,500 mg/m3
Calcium oxide	2 mg/m3	--	5 mg/m3	--	25 mg/m3

CA - indicates that a chemical is considered to be carcinogenic as listed by the International Agency for Research on Cancer (IARC Class 1, 2A and 2B.
Skin - indicates the potential for dermal absorption. Skin exposure should be prevented.
PAH – As coal-tar pitch volatiles

TABLE 4-3
Physical Hazards

TASK(S)	HAZARD	DESCRIPTION	PREVENTION/MONITORING TECHNIQUES
All tasks	Slip, trip, falls	From various debris on ground, cluttered conditions, equipment, slippery footing	Ensure buddy system awareness and good housekeeping practices.
Excavation	Heat Stress/Cold Stress	Associated with protective garment use, respiratory protection and exposure	Ensure adequate work/rest schedule; buddy system; dress appropriately for weather.
Excavation	Struck by Equipment	From heavy equipment during construction activities	Drill rigs, backhoes, dump trucks, and other equipment equipped with backup alarms. Employees remain clear of swing radius and rotating parts of equipment.
Excavation	Collapse of excavation walls	From improperly shored or sloped excavations	No employees allowed in excavated area unless protection methods in place and authorized by competent person. Samples from the bottom of excavation will be collected from the backhoe bucket.
All tasks	Inclement weather	High winds, lightning, hail, etc.	Restrict work in exposed areas, seek shelter, and terminate work activities.

5.0 TRAINING REQUIREMENTS{tc \l 1 "5.0 TRAINING REQUIREMENTS"}

5.1 Basic Training Required{tc \l 25 ".1 Basic Training Required"}

Personnel who are required to work in areas where the potential for toxic exposure exists shall complete training and will have relevant site experience conforming to the requirements of 29 CFR 1926.65 and 29 CFR 1910.120. The required 40-hour course (and 24-hours of "on the job" training) provides training on procedures for working at hazardous waste sites. Personnel are also required to have received 8 hours of refresher training annually thereafter. In addition, all supervisory personnel (e.g., the SSHO, project superintendent) are required to have 8 hours of additional specialized training for managing hazardous waste operations. Training required by OSHA contaminant specific regulations (e.g., lead, arsenic) must be provided as applicable.

Subcontractors shall provide written documentation that these training/experience requirements have been met. All personnel shall also be trained in the contents of Appendix F, "Respiratory Protection Program."

The Contractor shall verify that all personnel have the required training and experience prior to working in areas where the potential for toxic exposure exists.

5.2 Site-Specific Training{tc \l 25 ".2 Site-Specific Training"}

Site-specific training of personnel and subcontractors will be completed to minimize on-site hazards and address the activities, procedures, monitoring and equipment for the field operations. This training will include identifying the names of personnel and alternate personnel responsible for site safety, and facility layout.

In addition, this training, at a minimum, will include the following:

1. Site description and history.
2. Project activities, including coordination with other contractors.
3. Hazard evaluation.
4. On-site safety responsibilities.
5. Site control and work zones (WZ).
6. Personnel training.
7. Medical monitoring.
8. Atmospheric monitoring.
9. Personal protection, clothing, and equipment.
10. Decontamination procedures.
11. Emergency procedures.
12. Review of site-specific material safety data sheets (MSDSs).
13. Safe work practices.
14. Other elements covered in this site-specific HASP.

This training will also allow field workers to clarify anything they do not understand and to reinforce their responsibilities regarding safe operations. Training must include emergency preparedness, location of assembly areas, and proper entry and exit procedures for Exclusion Zone (EZ), warning systems,

location of emergency equipment, and route to hospital. Site safety meetings shall be documented using the Site Safety Meeting Form presented in Appendix A.

Evidence of this training and training performed under the requirements of 29 CFR 1926.65 and 29 CFR 1910.120 will be presented to the SSHO, if requested.

5.3 Safety Briefings{tc \l 25 ".3 Safety Briefings"}

Project personnel will be given briefings by the SSHO or another designated person on an as-needed basis to further assist site personnel in conducting their activities safely. Briefings will be provided when new operations are to be conducted, changes in work practices must be implemented due to new information made available, or if site or environmental conditions change. Briefings will also be given to facilitate conformance with prescribed safety practices when performance deficiencies are identified during routine daily activities or as a result of safety audits.

Project personnel involved in the earth excavation on any DEP listed sites or locations determined contaminated by the pre-characterization program will be given briefings by EBI's SSHO prior to any excavation activities taking place. Briefings will be provided when new operations are to be conducted, new information is made available, or if site or environmental conditions change.

5.4 Safety Audits{tc \l 25 ".4 Safety Audits"}

The SSHO or another designated person, as deemed necessary, may conduct regular safety audits of field operations and subcontractor performance to review for compliance of health and safety policies and procedures. Audits shall include verification of provisions for emergency medical treatment, as listed in Section 6.1, review of contractor yards and staging areas and management of hazardous materials. Written documentation shall be provided to Contractor summarizing the scope of the inspection, personnel making the inspection, date of the inspection, observations and response actions. Daily operations will adhere to the protocols outlined in this HASP.

5.5 First Aid and CPR{tc \l 25 ".5 First Aid and CPR"}

The SSHO or another designated person shall be trained and qualified to administer first aid and CPR. The SSHO will identify the individual requiring this training in order to ensure that emergency treatment is available during every work shift from a person qualified in first aid and CPR. These courses will be consistent with requirements of the American Red Cross and/or American Heart Association. Individuals who may administer First Aid and CPR are also required to have completed training in Blood borne Pathogens and have had the opportunity to receive the Hepatitis-B vaccination series.

6.0 MEDICAL SURVEILLANCE PROGRAM{tc \l 1 "6.0 MEDICAL SURVEILLANCE PROGRAM"}

Personnel performing field work in areas where the potential for toxic exposure exists will be required to have passed a pre-assignment and/or periodic medical examination that is consistent with 29 CFR 1926.65 and 29 CFR 1910.120. A release for work will be confirmed by the SSHO or another designated person before an employee can begin hazardous site activities.

Additional medical testing may be required in consultation with the company physician if an overt exposure or accident occurs, or if other site conditions warrant further medical surveillance.

Subcontractors will maintain the medical records for their own employees but shall also provide written documentation certifying that each employee at the site has met the requirements of the Medical Surveillance Program. This documentation will be provided before the first day of work for each employee assigned to the site. The Contractor will be responsible for tracking all medical records. The pre-assignment and annual examinations are essentially the same in content and will include:

- An updated medical and occupational history
- A screening physical examination
- Blood and urine laboratory tests
- Chest x-ray
- Electrocardiogram
- Pulmonary function tests
- Audiometric Testing
- Visual acuity test

The physician has the authority to include other tests.

6.1 Emergency Medical Treatment{tc \l 26 ".1 Emergency Medical Treatment"}

Provisions for emergency medical treatment shall be integrated with the overall Site Emergency Plan (see Section 12) and shall include:

- At least one individual per shift qualified to render first aid and CPR.
- First aid kits in compliance with OSHA requirements and emergency first aid stations in the immediate work vicinity. Universal precautions shall be used for all first aid operations.
- Conspicuously posted phone numbers and procedures for contacting ambulance services, fire department, police and medical facilities.
- Maps and directions to medical facilities.

7.0 SITE CONTROL MEASURES{tc \l 1 "7.0 SITE CONTROL MEASURES"}

The purposes of the site control measures discussed in this section are to maintain order at the site and to minimize chemical and physical hazards to on-site personnel, visitors, and the public. Site organization and control will be established and maintained according to the recommendations set forth in EPA's "Standard Operating Safety Guide," October 1985 and the NIOSH/OSHA/USCG/EPA publication "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities," October 1985. Three general areas of operation shall be established as necessary to reduce the risk of personnel exposure to hazardous substances. The three areas are:

- Exclusion Zone (Zone A)
- Contamination Reduction Zone (Zone B)
- Support Zone (Zone C).

The decision to establish these control zones, as well as the dimensions of each area and the safe working distances between each area, shall be established by the SSHO or another designated person and balanced against practical work considerations and existing field conditions. The extent and relative positions of the control zones will change during progressive stages of the project. The limits of these control zones will be adjusted as site-specific conditions relative to contaminant conditions are better defined. These changes from the original defined field parameters will be documented.

7.1 Exclusion Zone{tc \l 27 ".1 Exclusion Zone"}

The Exclusion Zone (Zone A) is the area containing or suspected of containing contaminated materials. The Exclusion Zone is generally defined as the area immediately surrounding the tank area, soil boring, trench excavation, or the area that is contaminated or will be unavoidably contaminated by site operations. Since this area shall be considered contaminated, all personnel within the area must use the prescribed levels of personal protection and training. The Exclusion Zone may be marked with caution tape or other similar temporary barricade system (e.g., barricade fences) to allow for adjustments to the size and location due to changing site conditions. Access and egress from the Exclusion Zone will be through the Contaminant Reduction Zone following the procedures described in Section 10.0 of this HASP. The Exclusion Zone boundary (hotline) is based on observations and/or measurements of air contaminant concentrations. Any change in the protection level specified by the HASP shall be approved by the SSHO before being initiated.

As defined in the HASP, there may be some areas where the use of respiratory protection is not required during normal work activities. Respirators will be immediately available for use, however, should a potential hazard become evident. Areas where respirators are not required are identified by the following characteristics:

- No known airborne hazards are present; and

- There is little or no potential for being impacted by the release of hazardous airborne contaminants.

Because of the nature of field operations, Tyvek suits, disposable gloves, and shoe coverings must be available for use in the Exclusion Zone and Contamination Reduction Zone. Hard hats, steel toe/shank

boots, safety glasses and work clothes are required in all cases. Any item taken into the Exclusion Zone shall be considered to be contaminated until carefully inspected and/or decontaminated. All vehicles, equipment, instruments, and materials taken into the Exclusion Zone shall remain in the zone until no longer needed or until they need repair.

Work Zone (Exclusion Zone) Entry and Exit Logs are to be completed on a daily basis. An example of this log is presented in Appendix A.

7.2 Contamination Reduction Zone{tc \l 27 ".2 Contamination Reduction Zone"}

The Contamination Reduction Zone (Zone B) shall be placed at the Exclusion Zone perimeter and will provide a physical separation of the Exclusion Zone and the Support Zone. The Contamination Reduction Zone is intended to prevent the spread of contaminants from work areas. All decontamination procedures shall be conducted within this area. A portable eyewash, first aid kit, towels, plastic bags, fire extinguisher and decontamination supplies are required in this area and will be provided by the Contractor. The Contamination Reduction Zone will provide an entry for personnel and equipment into the Exclusion Zone and an exit area for decontamination personnel, materials and equipment from the Exclusion Zone. Personnel entering this area will wear the PPE prescribed by the Action Levels. The Contamination Reduction Zone may be surrounded with a suitable temporary barricade system (e.g., caution tape, barricade fence, etc.) to allow for adjustments to the size and location due to changing site conditions.

Decontamination details are provided in Section 10 of this HASP.

7.3 Support Zone{tc \l 27 ".3 Support Zone"}

The Support Zone (Zone C) is considered the uncontaminated area and will be identified by the SSHO when field activities begin. The support zone shall be upwind of the Exclusion Zone, and within the limits of the construction boundaries, but away from areas containing hazardous materials. It will contain the Command Post provided by the Contractor, which will provide for team communications and emergency response. A mobile telephone is generally located in this area. Appropriate sanitary facilities, safety, medical, and support equipment will also be provided in this area. Any personnel not fully trained for work with hazardous materials will be required to remain in the Support Zone. Boundaries for the Support Zone may be separated from public access through the use a suitable temporary barricade system (e.g., caution tape, barricade fence, etc.).

7.4 Modification to Site Control{tc \l 27 ".4 Modification to Site Control"}

Less stringent site control and decontamination procedures may be utilized based upon field activities and results of monitoring data. However, any modifications must be authorized by the SSHO/CIH.

7.5 Personnel and Small Equipment Decontamination{tc \l 27 ".5 Personnel and Small Equipment Decontamination"}

Personnel and small equipment decontamination areas will be established on-site. Personnel will decontaminate and/or dispose of soiled protective clothing (i.e. disposable boots and gloves, etc.) in the

Contamination Reduction Zone established next to the Exclusion Zone. Refer to Section 10.1 for further decontamination procedures.

7.6 Heavy Equipment Decontamination Area.{tc \l 27 ".6 Heavy Equipment Decontamination Area"}

To prevent off-site transport of contamination, construction equipment and vehicles will, as necessary, be decontaminated at a fixed temporary decontamination area before exiting the Contamination Reduction Zone immediately after exiting the Exclusion Zone. This location will be selected by the SSHO prior to startup of field activities. Heavy equipment (drill rig, backhoes, etc.) and other construction equipment will be steam-cleaned and/or decontaminated via dry brushing at the fixed decontamination area, as necessary. Decontamination liquids will be collected and disposed of in accordance with all applicable Federal, State and local regulations. Refer to Section 10.2 for further decontamination procedures.

7.7 Site Visitors.{tc \l 27 ".7 Site Visitors"}

Visitors are required to report to the SSHO or another designated person prior to accessing the site. The SSHO or other designated person will determine the purpose of individual visits, and will document decisions regarding their access to the site. If granted limited access, visitors must sign in and out daily for the duration of their approved visit. Under no circumstances will visitors be allowed to interfere with or participate in operations within the scope of the field investigation.

As needed, the SSHO will establish a designated Level D area as an observation point for visitors during intrusive activities. This designated area will be located to offer proximate viewing of site operations, and positioned such that visitors in no way may inhibit site access, logistics, or general operations. Further, the viewing areas will be located such that visitors present are at minimal risk of exposure to site hazards.

Prior to gaining access to designated viewing areas described above, visitors must provide documented compliance with Section 5 of the HASP, comply with other applicable sections, and satisfy additional conditions placed on them as deemed appropriate to assure visitor safety. Site visitors will be escorted throughout the site by the SSHO or another designated person.

8.0 PERSONAL PROTECTIVE EQUIPMENT{tc \l 1 "8.0 PERSONAL PROTECTIVE EQUIPMENT"}

8.1 General.{tc \l 28 ".1 General"}

Personal protective equipment (PPE) for general operations will be consistent with the requirements of 29 CFR 1910 Subpart I, "Personal Protective Equipment." Basic levels of protection for hazardous waste operations will be selected in accordance with the provisions of 29 CFR 1926.65 and 29 CFR 1910.120, "Personal Protective Equipment Selection," and "General Description and Discussion of the Levels of Protection and Protective Gear." Modification to basic PPE ensembles may be necessary for specific operations. In these cases, further definition will be provided by review of specific hazards, conditions, and proposed operational requirements and by conducting monitoring at the particular operation. Protection may be upgraded or downgraded, as deemed appropriate by the SSHO.

8.2 Anticipated Levels of Protection for Site Operations

- Site Preparation (Level D)
- UST Cleaning and Removal (Level C)
- Cut and Cap of Utilities (Level D)
- Excavation and stockpiling of material (Level D)
- Hand shoveling contaminated soil (Modified Level D)
- Environmental Assessment (Level D)
- Excavation and loading of dump trailers for offsite disposition (Level D)

Level D personal protective clothing and equipment includes:

- Work clothes.
- Hardhat
- Safety glasses or goggles
- Steel toe, steel shank boots
- Reflective vest
- Noise protection - as warranted

Modified Level D personal protective clothing and equipment includes:

- Work clothes
- Tyvek disposable coveralls - required when splashing by contaminated liquids is a possibility and/or significant contact with contaminated soils is expected
- Polycoated disposable tyvek coveralls - required when splashing by contaminated liquids is expected to be heavy and/or significant contact with contaminated soils is expected to be heavy
- Hardhat
- Safety glasses or goggles
- Steel toe, steel shank boots
- Disposable latex gloves - required when collecting soil samples and when splashing by contaminated groundwater is a possibility
- Outer nitrile gloves - required when splashing by contaminated liquids is expected to be heavy and/or when significant contact with contaminated soils is likely.
- Disposable outer boots - required when splashing by contaminated groundwater is possible and/or when significant contact with contaminated soils is expected to be heavy

- Noise protection - as warranted
- Half face negative air respirators equipped with a combination filter cartridge for organic vapors and particulates (High Efficiency Particulate Air "HEPA" filter)

Level C protective clothing and equipment includes:

- Full-face air-purifying respirator (NIOSH/Mine Safety Health Administration (MSHA) approved) fitted with acid gas/organic vapor/High Efficiency Particulate Air filter (HEPA) cartridges.
- Hardhat
- Disposable tyvek coveralls
- Polycoated disposable tyvek coveralls - required when splashing by contaminated liquids is expected to be heavy and/or significant contact with contaminated soils is expected to be heavy
- Disposable latex inner gloves
- Nitrile outer gloves
- Steel toe, steel shank boots
- Disposable outer boots

The use and care of respiratory protection will be in accordance with the protocols described in Appendix F. Action levels used to determine the need to upgrade or downgrade the levels of protection are described in Section 9.4 of this HASP.

9.0 AIR MONITORING

9.1 General{tc \l 29 ".1 General"}

Air monitoring will be conducted to assess employee exposure and the potential release of contaminants to downwind receptors. Air monitoring may be conducted as needed during soil excavation, re-location, staging, loading, and grading of soil/waste materials. All air monitoring observations will be documented using the Atmospheric Monitoring Log presented in Appendix A.

Air monitoring may be conducted by EBI during soils activities and other site-specific operations (soil sampling, etc.). Documentation of one upwind and two downwind sites will be conducted during monitoring events. The actual locations of the monitoring may change from day to day based on wind direction and operations on site. Observations may occur more than once if site conditions change. EBI will document and provide insight for the additional measurements in the Daily log. All monitoring locations will be documented on a site map and included with the daily reports.

The monitoring shall consist of total dust testing using a MIE, Inc. dust meter or equivalent. Ambient dust quantities greater than 50ug/m^3 will initiate appropriate measures to reduce the total dust concentrations. If dust levels in the worker's breathing zone persist above the action level, personal exposure monitoring for specific contaminants of concern will be conducted.

Written records will be maintained by EBI and will document but not be limited to baseline, daily baseline, and real-time dust monitoring, weather conditions (precipitation, temperature, and wind direction) monitoring conditions, and calibration frequency. This record will be provided weekly to the Contractor and the Engineer.

Note: To minimize the generation of silica-containing dust, all concrete cutting will be conducted using a wet cutting method. Concrete will not be cut using a dry cutting method.

9.2 Exclusion Zone and Exclusion Zone Perimeter.{tc \l 29 ".2 Exclusion Zone and Exclusion Zone Perimeter"}

Activities in the Exclusion Zone shall be initiated in Level D protection with the contingency to upgrade the level of protection based on the action levels. Operators present within the exclusion zone, during soil removal/testing activities, will wear, at a minimum, chemical protective suits (e.g. tyvek), boot covers and chemical protective gloves (e.g. nitrile or neoprene). If the SSHO determines that a higher level of personal protection is needed it will be relayed to CONTRACTOR and the Resident Engineer prior to any work being conducted. All personnel that will be working under these conditions will have the appropriate training and certifications as required by OSHA regulations.

Monitoring for particulates shall be performed continuously in the Exclusion Zone during all soil related activities. See Table 9.1 for a complete list. Exclusion Zone perimeter(s) will be continuously monitored (i.e., every 30 minutes) for particulates (visible dust) at an upwind and downwind location.

Dust suppression activities (i.e., water trucks, water mist over excavation) will be utilized when necessary to minimize the generation of particulate aerosols (i.e., visible dust). Refer to Table 9-1 for a

summary of Action Levels and respiratory protection requirements for particular activities and contaminants detected.

9.3 Fence Line Monitoring.{tc \l 29 ".3 Fence Line Monitoring"}

Level D protection will be utilized by personnel conducting fence line monitoring with the contingency to upgrade the level of protection based on the action levels presented in Table 9-2. In most cases, the fence line will also serve as the Exclusion Zone perimeter(s). EBI will use a Dust Meter to monitor fence line for particulates as needed during soils excavating and sampling and soil stockpiling/disposal activities. Dust suppression activities (i.e., water trucks, water mist over excavation) will be utilized when necessary to minimize the generation of particulate aerosols (i.e., visible dust).

9.3.1 Primary Ambient Air Quality Standards for Particulate Matter

The primary ambient air quality standards for particulate matter, measured by the reference method described in 40 CFR Part 50, Appendix J or by equivalent methods, are;

- 50 micrograms per cubic meter annual ambient air quality standard, attained when expected annual mean arithmetic concentration, as determined in accordance with 40 CFR Part 50, Appendix K, is less than or equal to 50 micrograms per cubic meter.

- 150 micrograms per cubic meter – maximum 24- hour concentration, attained when the expected number of days per calendar year with a 24 hour average concentration above 150 micrograms per cubic meter, as determined in accordance with 40 CFR Part 50, Appendix K, is less or equal to one.

For purposes of determining attainment with standards, particulate matter shall be measured in the ambient air as PM10**. Due to the levels of fill contaminants present within the soil, including metals, the perimeter exposure value for dust will be limited to 50 ug/m³. Dust mitigation measure will be instituted if airborne dust levels exceed this value.**

Table 1 USEPA National Ambient Air Quality Standards (NAAQS).

Particulate Size	24-Hour Standard ug/m³	Annual Standard ug/m³
PM-10	150	50
PM-2.5	65	15

9.4 Action Levels.{tc \l 29 ".4 Action Levels"}

Instrumentation may include the dust meter for total particulates, or PID for total volatile organic compounds. The Action Levels in this HASP will apply to all site work during the duration of activities conducted at the site, if areas of concern (refer to Section 3). Action Levels for direct-reading instruments are provided in Table 9.1 (worker protection in the Exclusion Zone and at Exclusion Zone perimeter) and Table 9.2 (general public/off-site receptors at the fence line).

Table 9-1

Air Monitoring Plan for Worker Protection in the Exclusion Zone and Perimeter: Summary of Action Levels and Respiratory Protection Requirements

Activity	Contaminants To Be Measured	Monitoring Instrument	Frequency of Measurement	Duration of Measurement	Action Level	Required Action
Excavation of material	Solid/semi-volatile contaminates (e.g., Lead, Mercury, PAH, Cadmium, Chromium, cyanide and Nickel	MIE PDR 1000 (measure as total suspended particulate)	30 Minutes	Continuous while intrusive activities are occurring at Exclusion Zone	>0.05 mg/m^3	Implement dust control. If action levels persist, initiate personal exposure monitoring for specific contaminants of concern (e.g., lead, arsenic)
	Organic Vapors (Fuel Oil, Gasoline, Ethyl-benzene, Toluene, Xylenes, MTBE)	PID	If needed, continuous during intrusive work, confined space entries, or Level C and B activities	Continuous while intrusive activities are occurring at Exclusion Zone	>5 ppm (sustained for 1 min) >20 ppm (sustained for 1 min) >100 ppm (sustained for 1 min)	Stop Work and implement engineering controls. Stop Work, expand Exclusion Zone size and upgrade to Level C Evacuate area and plan upgrade to Level B
	Oxygen	CGI with	If needed,	Continuous	<19.5% or	Stop Work and

		oxygen sensor	continuous during intrusive work, confined space entries, or Level C and B activities	during intrusive work, confined space entries, or Level C and B activities	>23.5%	Evacuate area. Consult SSHO and Resident Engineer
	Carbon Monoxide	CGI with carbon monoxide sensor	If needed, continuous during intrusive work, confined space entries, or Level C and B activities	Continuous during intrusive work, confined space entries, or Level C and B activities	>25 ppm	Stop Work and Evacuate area. Consult SSHO and Resident Engineer
	Hydrogen Sulfide	CGI with hydrogen sulfide sensor	If needed, continuous during intrusive work, confined space entries, or Level C and B activities	Continuous during intrusive work, confined space entries, or Level C and B activities	>10 ppm	Stop Work and Evacuate area. Consult SSHO and Resident Engineer
	Explosive Flammable Vapors	CGI	If needed, continuous while positive PID readings occur	Continuous while positive PID readings occur	>10% LEL	Stop Work and Evacuate area. Consult SSHO and Resident Engineer
	Dust, PAH (Nuisance dust)	Visible Measurement	Continuous during intrusive activities	Continuous during intrusive activities	Visible Dust	Modify work practice, Begin dust suppression measures.

PID = Photo-ionization Detector CGI = Combustible Gas Indicator

Table 9-2
Air Monitoring Plan for the General Public:
Summary of Action Levels at the Fence Line

Activity	Contaminants To Be Measured	Monitoring Instrument	Frequency of Measurement	Duration of Measurement	Action Level	Required Action
Excavation of material	Dust	MIE PDR 1000 Visible Measurement	30 minutes Continuous during intrusive activities	Continuous during intrusive activities	> 0.05 mg/m^3 Visible Dust	Stop Work and begin Dust Control Procedures
	Organic Vapors (VOCs) (Fuel Oil, Gasoline, Ethylbenzene, Toluene Xylenes, MTBE)	PID	If needed	Continuous while intrusive activities are occurring	>1 ppm (sustained for 1 min)	Greater than 1 ppm, Stop Work and begin Vapor Control Procedures

PID = Photo ionization Detector

MIE PDR 100 = MIE Personal Dataram Model (dust meter)

10.0 DECONTAMINATION PROCEDURES{tc \l 1 "10.0 DECONTAMINATION PROCEDURES"}

The SSHO shall determine the level of decontamination necessary based on the evaluation of specific work activities and the potential degree of contamination encountered. Temporary Contamination Reduction Zones shall be established as necessary.

10.1 Personnel and Small Equipment.{tc \l 210 ".1 Personnel and Small Equipment"}

Personnel will perform decontamination in the personal decontamination area upon entering the Contamination Reduction Zone. Decontamination of personnel in Level D will consist of closure and disposal of coveralls (when worn), disposable boots (when worn), and gloves. A minimum decontamination layout for Level C protection and equipment is presented in Table 10-1. Decontamination of personnel using Level C protective equipment will consist of:

- Removal and disposal of boot covers.
- Removal and disposal of coveralls.
- Removal and disposal of outer gloves.
- Removal, cleaning, and storage of respiratory equipment.
- Washing boots or other non-disposable protective equipment (i.e., hard hat, safety glasses/goggles, etc.) suspected of being contaminated using soap solution followed by potable or distilled water rinse.
- Removal and disposal of inner gloves.

Contaminated wash solutions and PPE will be disposed of at an appropriate and licensed disposal facility. Hand tools and other small equipment will be decontaminated as needed by washing in decontamination basins, or if possible, by dry decontamination.

10.2 Heavy Equipment.{tc \l 210 ".2 Heavy Equipment"}

Prior to exiting contaminated areas that are being excavated, equipment and transport vehicles may be decontaminated by dry decontamination methods if the equipment potentially came in contact with contaminated materials. If dry decontamination methods are not successful, washing methods may be utilized. It should be noted that, if possible, clean areas/corridors that either eliminate or minimize any decontamination washing would be utilized. Efforts will be made to unload; use and load transport equipment in a manner that prevents contact of the vehicles with impacted materials and, therefore, decontamination will not be necessary.

10.2.1 Decon Pad Design.{tc \l 310 ".2.1Decon Pad Design"}

If washing with pressure washers is required, the decon pad will be utilized. The decon pad will be portable and readily assembled/disassembled to insure that it does not interfere with traffic control provisions. A typical decon pad design is as follows:

- Typical decon pad dimensions will be 50 feet (length) by 15 feet (width);

- The decon pad will slope toward a center low point sump to allow for collection of decontamination water;

- The pad will be constructed of 60-mil high-density polyethylene (HDPE) liner material overlain by a geotextile, and a minimum of 12 inches of clean sub-angular stone will be back filled over the HDPE liner and geotextile;

- A 12-inch high containment berm constructed of clean sub-angular stone will be placed around the perimeter of the decon pad; and

- The decon pad will be equipped with 3-feet high splashguards dropped inside the bermed pad to prevent over spray.

*10.2.2 Decon Water.***{***tc \l 310 ".2.2 Decon Water"***}**

Equipment and vehicles exiting established Exclusion Zones will be washed down, as required, using a high pressure water and steam system.

Decon water will drain toward the center of the decon pad. A 6-inch diameter perforated HDPE pipe (SDR 17 or equal) will be located at the low point of the pad which will collect and drain decon water into a 55-gallon sump or equivalent.

Water collected in the sump will be pumped into a 5,000-gallon storage (poly) tank or equivalent. Flexible hose and/or piping will serve as the connection between the decon pad sump and the poly tank.

*10.2.3 Decon Water Disposal.***{***tc \l 310 ".2.3 Decon Water Disposal"***}**

Poly tanks that are at or near capacity will be transported to a fully operational, licensed facility that is in compliance with all Federal, State, and local regulations, which is capable of decon water recycling or disposal.

EBI will prepare all hazardous waste manifests, bills of lading, and all other documentation in order to transport and dispose of decon water. The OWNER will be designated as generator and will sign all manifests.

Documentation certifying that all decon water was transported to, accepted, and disposed of, will be submitted to the Client. The documentation will include, but is not limited to the following:

- A record of each load from the site to the disposal/recycling facility, including all manifests, bills of lading, and all other documentation as applicable.

- All documentation for each load shall be tracked by the original manifest document number that was assigned at the site.

It should also be noted that decon water will not be transported off-site until all disposal/recycling facility documentation has been reviewed and approved by the Client or their representative.

Transportation of the decon water from the site to the disposal/recycling facility will be in accordance with all U.S. Department of Transportation, U.S. EPA and MassDEP regulations. Decon water hauler(s) will be licensed in all states affected by the transport.

Chemical analyses shall be performed, if necessary, to fulfill any disposal/recycling testing requirements of the approved facility. The decontamination water will be sampled at the frequency specified by the disposal facility and for the parameters required for waste acceptance at the facility. A copy of all chemical analyses results will be submitted after receipt of the laboratory report.

*10.2.4 Decon Pad Disposal.***{***tc \l 310 ".2.4 Decon Pad Disposal"***}**

Once contaminated soils excavation activities within the Exclusion Zones have been completed, the decon pad(s) will be disassembled and each component handled properly.

The stone base will be tested to determine the most appropriate end use or disposal method. The HDPE liner will be pressure washed. It is anticipated that both materials will be reused and/or disposed in a lined landfill. The geotextile will be properly disposed at a lined landfill.

10.3 Contamination Prevention.{tc \l 210 ".3 Contamination Prevention"}

One of the most important aspects of decontamination is the prevention of contamination. Good contamination prevention should minimize worker exposure and help ensure valid sample results by precluding cross-contamination. Procedures for contamination avoidance include:

10.3.1 Personnel

- Know the limitations of all PPE being used.
- Do not walk through areas of obvious or known contamination.
- Do not handle or touch contaminated materials directly. Do not sit or lean on potentially contaminated surfaces.
- Make sure all PPE does not have any cuts or tears prior to donning.
- Fasten all closures on suits, covering with tape, if necessary.
- Take particular care to protect any skin injuries.
- Stay upwind of airborne contaminants.
- Do not carry cigarettes, gum, food, or candy into contaminated areas.
- Do not smoke, eat, or drink in contaminated areas.
- Shower at the hotel or home, immediately upon arrival, at the end of the workday.

10.3.2 Sampling/Monitoring

- Cover instruments with clear plastic, leaving openings for sampling ports, sensor points.
- Bag sample containers prior to placement of sample material into containers.

10.3.3 Heavy Equipment

- Limit the surface area of equipment that comes into contact with contamination.

10.3.4 General

- If contaminated tools are to be placed on non-contaminated equipment for transport to the decontamination pad, use plastic to keep the non-contaminated equipment clean.

- Place spoils from subsurface work so as not to be in the expected paths of individuals.

- Keep any excavated soils out of the way of workers.

10.4 Disposal Procedures{tc \l 210 ".4 Disposal Procedures"}

Discarded materials, waste materials, field equipment and supplies will be handled to preclude the potential for spreading contamination, creating a sanitary hazard, or causing litter to be left on site. Potentially contaminated materials, e.g., clothing, gloves, etc., will be bagged or drummed with appropriate labeling affixed as regulated, and disposed of and shipped with other hazardous materials. Non-contaminated materials shall be collected, bagged, and disposed of as simple non-hazardous solid waste.

Table 10-1
Minimum Decontamination Layout
For Level C Protection and Equipment

	Station 1	**Station 2**	**Station 3**	**Station 4**	**Station 5**
Decon Procedures	Equipment Drop	PPE and Other Equipment Wash	PPE and Other Equipment Rinse	PPE Disposal	Hand and Face Wash

<u>Equipment needed to perform decontamination</u>

Station 1: Plastic Sheet	**Station 4:** 20-30 Gallon Trash Can, Disposal Bag
Station 2: Wash tub, Decon Solution, Long-handled soft-bristled scrub brush	**Station 5:** Field table, washtub, 5 gal. water cooler or carboy, soap, towels
Station 3: Wash tub, rinse water, long-handled soft-bristled scrub brush	

11.0 GENERAL SAFE WORK PRACTICES AND COMMUNICATIONS{tc \l 1 "11.0 GENERAL SAFE WORK PRACTICES AND COMMUNICATIONS"}

11.1 Safety Equipment {tc \l 211 ".1 Safety Equipment "}

Basic emergency and first aid equipment will be available at the Support Zone and/or the Contamination Reduction Zone as appropriate. This shall include communications equipment, first aid kit, emergency eyewash, fire extinguishers, and other safety-related equipment.

11.2 Communications.{tc \l 211 ".2 Communications"}

Nextel's: Hand-held units shall be used as much as possible by field teams for communication between downrange operations and the Command Post base-station.

Telephones: A mobile telephone will be located within the Support Zone for communication with emergency support services/facilities.

Hand Signals: Hand signals will be used by downrange field teams in conjunction with the buddy system. These signals are very important when working with heavy equipment. The entire field team shall know them before operations commence and reviewed during site-specific training.

Signal	Meaning
• Hand gripping throat	Out of air; can't breathe
• Grip partner's wrist	Leave area immediately; no debate
• Hands on top of head	Need assistance
• Thumbs up	OK; I'm all right; I understand
• Thumbs down	No; negative

11.3 Safe Work Practices{tc \l 211 ".3 Safe Work Practices"}

The following safe work practices will be implemented during site operations:

- Prior to the start of work, this HASP will be reviewed and placed in a conspicuous location. Emergency phone numbers will be posted next to the on-site telephone. Emergency phone numbers will include the CONTRACTOR field office trailer, hospital, ambulance, fire, and police.

- Only properly trained and equipped personnel will be allowed to work in potentially contaminated areas.

- The number of personnel and equipment in the sampling areas will be kept to a minimum, consistent with safe site operations.

- Workers shall adhere to the "buddy system" while working downrange and in designated exclusion areas. Radio contact shall be maintained between pairs on-site in order to assist each other in case of emergencies.

- Workers shall not exit exclusion areas until soiled equipment and clothing have been removed and decontaminated or properly disposed of.

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer, ingestion, and inhalation of potentially contaminated materials is prohibited.

- As necessary, personnel will thoroughly wash their hands and faces upon leaving the investigation areas.

- Contact with potentially contaminated materials and surfaces shall be avoided. Personnel shall comply with contamination control measures.

- Personnel with facial hair or other face piece seal obstructions will not be permitted to work where respirators are required.

- Work shall only be conducted if adequate illumination is provided, i.e., visual observation is not impaired due to loss of daylight conditions.

- Sampling personnel shall not work near heavy equipment.

11.4 Machinery and Mechanized Equipment{tc \l 211 ".5 Machinery and Mechanized Equipment"}

Actions to be taken to minimize the potential for hazards related to the operation of machinery and other mechanized equipment include:

- Licensed operators in the Commonwealth of Massachusetts will only perform operation of machinery.

- Machinery will be inspected daily before use.

- Safety features such as belts, harnesses and warning lights/alarms will be used throughout these activities.

- Guide ropes will be used when lifting items.

- All electrical equipment will be locked out and tagged out prior to conducting repairs or maintenance. The person who placed it will only remove Lock/tag.

- Equipment capable of stopping, lowering and holding at least the full test load shall be provided.

- Riding on load, hoods, hammers, buckets, material hoists, etc. not meant for personnel is prohibited.

- The operator of hoisting equipment will not perform any other work or leave his/her position at the controls until the load has been safely landed or returned to ground level.

- Adequate clearance shall be maintained between moving or rotating parts of the equipment and fixed objects to allow for passage of personnel.

11.5 Hazardous Materials{tc \l 211 ".6 Hazardous Materials"}

Actions to be taken to minimize the potential for hazards (refer to Section 4.0) related to personnel who may come in contact with hazardous materials include:

- Hazardous materials expected to be on-site will be discussed at the morning safety meeting. The HASP, including MSDS copies or toxicity summaries, will be kept on-site.
- Workers will use appropriate Personal Protective Equipment for each phase of work, as described in Section 9.0.
- Monitoring of worker exposure will be performed to ensure an adequate level of protection.
- Standard Operating Procedures will be followed for loading and sealing containers and trucks that may contain hazardous materials.
- Control zones will be established as described in Section 7.0.
- The directives of the SSHO shall be followed for emergency supplies, response and spill cleanup procedures, as described in the Site Emergency Plan (see Section 12).
- If spills occur, the area will be sampled and tested to assure complete cleanup.

11.6 Miscellaneous Hazards{tc \l 211 ".7 Miscellaneous Hazards"}

Actions to be taken to minimize the potential for hazards associated with on-site activities not previously addressed (e.g., operation of power tools, vehicular traffic control, etc.) include:

- Only trained personnel are to use power tools. Operation of power tools will be as specified by the manufacturer. Safety glasses and protective guards will be employed. Ground fault circuit interrupters will be used on all electrical equipment used outdoors.
- D.O.T. approved containers will be used to store all fuels.
- Shut down of engines will be performed prior to any fueling/refueling or servicing activities. Electrical equipment will be disconnected when not in use.
- An appropriately rated fire extinguisher will be on hand in each work area.
- Open flames will only be allowed in designated work areas.
- Equipment will be inspected, removed from service and tagged to indicate it is not in good working condition.
- The SSHO or another designated person will warn employees verbally of all potential traffic hazards before starting activities involving exposure to traffic. The Contractor will be responsible for traffic police details, laborers or other visual and/or physical warning barriers such as caution tape, snow fence or jersey barriers. Traffic is expected to be

minimal, as this would be on-site traffic only which would include cranes, forklifts, tractor-trailers, etc.

12.0 EMERGENCY PREPAREDNESS

EMERGENCY PHONE NUMBERS:

Woburn Police Department		911
Woburn Fire Department		911
State Police		(508) 820-2300
Hospital		
Lahey Hospital & Medical Center		(781) 744-5100
41 Burlington Mall Rd, Burlington, MA		
National Response Center		800-424-8802
Poison Control Center	(National)	800-222-1222
	(Massachusetts)	800-682-9211
Department of Environmental Protection (DEP)		
Emergency Response (24-Hour)		888 304-1133
Main Line (Northeast Regional Office)		978-694-3200

EBI Project Team:

EBI PM	Edward Giordano	339-234-8739
LSP	Edward Giordano	339-234-8739
SSHO	Daniel Bellucci	845-803-4347
	Lauren Bell	781-418-2329

PMSI Project Team:

Robert (Bob) Wass	Cell	781-718-4911

12.1 Chain of Communication.

Should contamination be discovered during excavation, or in the event of a release of petroleum and/or hazardous materials, the following order of communication will be implemented to comply with the provisions and regulations of the Massachusetts Contingency Plan.

The Contractor and Site Safety Officer are advised that reporting to the DEP should be made by Owner or Owner's onsite Representative unless otherwise directed by the Resident Engineer, with the exception that any release caused by a contractor must be reported by the contractor or contractor's LSP to the DEP within the time frames provided under the regulations. In the event of a spill, release or discovery of a condition evidencing possible contamination, the contractor will immediately notify the Owner's Engineer. If the Owner's Engineer is unavailable, the Contractor shall notify the Owner directly. Failure to report a release under the regulations of the MCP may subject the responsible party to significant penalties and/or fines.

12.2 Emergency Coordinator.{tc \l 212 ".1 Emergency Coordinator"}

The SSHO or another designated person shall be the Site Emergency Coordinator and implement the emergency action plan as outlined (29 CFR 1910.38). Although the following five items are typically more applicable to operating facilities, they will be implemented to the extent possible when applicable. (These shall be determined prior to site work by the SSHO and presented during the site initiation meeting.)

- Emergency escape procedures and routes
- Procedures to account for employees after evacuation
- Rescue and medical duties
- Preferred means of reporting fires and emergencies
- Names, job titles, or departments to contact for additional information of duties

These items will be discussed during each site orientation meeting conducted on-site by the SSHO.

12.3 Emergency Services Contacts{tc \l 212 ".2 Emergency Services Contacts"}

The SSHO or a designee will act as the Site Emergency Coordinator and shall verify appropriate emergency contacts and make contact with them before beginning work on-site. The Emergency Coordinator will inform the emergency contacts about the nature and duration of work expected on the site and the type of contaminants and possible health or safety effects of emergencies involving these contaminants. Also at this time, the Emergency Coordinator and the emergency response contacts shall make arrangements to handle any emergencies that might be anticipated.

A Hospital Route Map is presented in Figure 12-1.

Once the Support Zone is established, and before field activity start-up, the Site Emergency Coordinator shall drive the route to the hospital, post directions and/or a map to the hospital, post emergency phone numbers, and set up the first aid station, 10-pound Type A/B/C fire extinguisher, and other emergency equipment.

12.4 Implementation.{tc \l 212 ".3 Implementation"}

The Site Emergency Coordinator shall implement the emergency action procedures whenever conditions at the site warrant such action. The Site Emergency Coordinator will be responsible for coordinating the evacuation, emergency treatment, and emergency transport of site personnel as necessary, and for notification of emergency response units and the appropriate management staff. The following conditions may require implementation of emergency action procedures:

- Fire or explosion on-site
- Serious personal injury.
- Release of hazardous materials, including gases or vapors at levels greater than the maximum use concentrations of respirators
- Unsafe working conditions, such as inclement weather

The following alarm system(s) will be used to alert employees to evacuate the danger area:

( ) Air horn
(X) Radio/Telephone
(X) Direct Verbal Communications (10 Employees or less)
( ) Other

12.5 Fire or Explosion.{tc \l 212 ".4 Fire or Explosion"}

If an actual fire or explosion has taken place, emergency steps will include;

1) Evacuation of work area and venting, and
2) Notification of the fire department and other appropriate emergency response groups if necessary.

12.6 Personal Injury{tc \l 212 ".5 Personal Injury"}

Emergency first aid will be administered on-site as appropriate. Then, the individual will be decontaminated if possible, depending on the severity of the injury, and transported to the nearest medical facility, if needed.

12.7 Overt Chemical Exposure.{tc \l 212 ".6 Overt Chemical Exposure"}

Typical response procedures include:

SKIN CONTACT: Use copious amounts of soap and water. Wash/rinse affected area thoroughly, and then provide appropriate medical attention. An eyewash will be provided on-site at the CRZ and/or support zone as appropriate. Eyes should be rinsed for at least 15 minutes upon chemical contamination.

INHALATION: Move to fresh air and/or, if necessary, decontaminate/transport to hospital.

INGESTION: Decontaminate and transport to emergency medical facility.

PUNCTURE WOUND OR LACERATION: Decontaminate and transport to emergency medical facility. The SSHO will provide medical data sheets to medical personnel as requested.

12.8 Adverse Weather Conditions.{tc \l 212 ".7 Adverse Weather Conditions"}

In the event of adverse weather conditions, the or another designated person will determine if work can continue without endangering the health and safety of field workers. Some items to be considered before determining if work should continue are:

- Potential for heat stress and heat-related injuries
- Potential for cold stress and cold-related injuries
- Treacherous weather-related working conditions
- Limited visibility
- Potential for electrical storms

12.8.1 Heat Stress.{tc \l 312 ".7.1 Heat Stress"}

The SSHO or designee shall continuously visually monitor personnel to note for signs of heat stress. In addition, field personnel will be instructed to observe for symptoms of heat stress and methods on how to control it. One or more of the following control measures can be used to help control heat stress:

- Provision of adequate liquids to replace lost body fluids. Employees must replace water and salt lost from sweating. Employees must be encouraged to drink more than the

amount required to satisfy thirst. Thirst satisfaction is not an accurate indicator of adequate salt and fluid replacement.

- Replacement fluids can be commercial mixes such as Gatorade.
- Establishment of a work regime that will provide adequate rest periods for cooling down. This may require additional shifts of workers.
- Cooling devices such as vortex tubes or cooling vests can be worn beneath protective garments.
- All breaks are to be taken in a cool rest area (77° F is best).
- Employees shall remove impermeable protective garments during rest periods.
- Employees shall not be assigned other tasks during rest periods.
- Employees shall be informed of the importance of adequate rest, acclimation, and proper diet in the prevention of heat stress.

The heat stress of employees on-site may be monitored by the Wet Bulb Globe Temperature Index (WBGT) technique when workers are not wearing protective coveralls (i.e. Tyvek). This method will require the use of a heat stress-monitoring device. Monitoring of personnel wearing impervious clothing shall commence when the ambient temperature is 70° F or above. This will be performed by a person with a current first aid certification and who is trained to recognize symptoms of heat stress.

*12.8.2 Cold Exposure.***{***tc \l 312 ".7.2 Cold Exposure"***}**

If the field activities occur during a period when temperatures average below freezing, the following guidelines will be followed.

Persons working outdoors in temperatures at or below freezing may be subject to frostbite. Extreme cold for a short time may cause severe injury to the surface of the body, or result in profound generalized cooling of the body core, resulting in coma and death. Areas of the body, which have high surface area-to-volume ratio such as <u>fingers, toes, ears</u>, are the most susceptible.

Two factors influence the development of a cold injury; ambient temperature and the velocity of the wind. <u>Wind chill</u> is used to describe the chilling effect of moving air in combination with low temperature. For instance, 10°F with a wind of 15 miles per hour (mph) is equivalent in chilling effect to still air at -18°F.

As a general rule, the greatest incremental increase in wind chill occurs when a wind of 5 mph increases to 10 mph. Additionally, water conducts heat 240 times faster than air. Thus, <u>the body cools suddenly when chemical-protective equipment is removed if the clothing underneath is perspiration-soaked</u>.

Local injury resulting from cold is included in the generic term frostbite. There are several degrees of damage. Frostbite of the extremities can be categorized into:

- <u>Frost nip or incipient frostbite</u>: Characterized by suddenly blanching or whitening of skin.

- Superficial frostbite: Skin has a waxy or white appearance and is firm to the touch, but tissue beneath is resilient.

- Deep frostbite: Tissues are cold, pale, and solid; extremely serious injury.

Prevention of frostbite is vital. Keep the extremities warm. Wear insulated clothing as part of one's protective gear during extremely cold conditions. Check for symptoms of frostbite at every break. The onset is painless and gradual--you may never know you have been injured until it is too late.

To administer first aid for frostbite, bring the victim indoors and rewarm the areas quickly in water between 39◦C and 41◦C (102◦F to 105◦F). Give a warm drink-not coffee, tea, or alcohol. The victim should not smoke. Keep the frozen parts in warm water or covered with warm clothes for 30 minutes, even though the tissue will be very painful as it thaws. Then elevate the injured area and protect it from injury. Do not allow blisters to be broken. Use sterile, soft, dry material to cover the injured areas. Keep victim warm and get immediate medical care.

After thawing, the victim should try to move the injured areas a little, but no more than can be done alone (without help).

- Do not rub the frostbitten part (this may cause gangrene).

- Do not use heat lamps or hot water bottles to re-warm the part.

- Do not place the body part near a hot stove.

Systemic hypothermia is caused by exposure to freezing or rapidly dropping temperature. Its symptoms are usually exhibited in five stages: 1) shivering; 2) apathy, listlessness, sleepiness, and (sometimes) rapid cooling of the body to less than 95◦F; 3) unconsciousness, glassy stare, slow pulse, and slow respiratory rate; 4) freezing of the extremities; and, finally, 5) death.

Providing workers with insulated clothing when the equivalent chill temperature is less than 30 degrees Fahrenheit will minimize effects arising from cold exposure. At minimum, the Physician as suitable for such exposure shall medically certify workers exposed to temperatures below -10 degrees Fahrenheit F with wind speeds of more than 5 miles per hour.

12.9 Poison Ivy{tc \l 212 ".8 Poison Ivy "}

If someone should come in contact with poison ivy, the individual should immediately wash the affected area with the Ivy Cleaner provided in the first aid kit. If a rash develops, it should be treated at a medical facility as soon as possible.

12.10 Snakes and Ticks.{tc \l 212 ".9 Snakes and Ticks"}

12.10.1 Snake Bite Prevention and First Aid.{tc \l 312 ".9.1 Snake Bite Prevention and First Aid"}

On project sites, precautions against the possible presence of snakes should be taken when walking through overgrown vegetation and when moving debris (i.e. lumber, scrap metals, etc.). If someone is bitten by a snake, and the snakebite occurs in a location that is within a 1-hour drive of a medical facility, a conservative approach is safest. Keeping the victim quiet, lying or sitting and reassuring him/her is all that is required. He/she should be transported safely (no speeding) to the nearest medical facility. In North America, death from snakebite to healthy adults is very rare. Many bites, even from known poisonous snakes, do not result in a significant amount of venom being injected. Even when significant

envenomation occurs, symptoms develop slowly over many hours and can be controlled with appropriate treatment. Field treatments advised against include ice, cutting, and suction around the wound, and tourniquets. Studies indicate that ice leads to increased tissue destruction. Cutting and sucking out the wound can be shown to offer some help if it is done with the correct technique and equipment and if the victim has received a large dose of venom. In light of the damage that can be done, the risk of such a procedure is too high. It is best to transport the person immediately to a medical facility.

*12.10.2 Tick Bite Prevention and First Aid.***{***tc \l 312 ".9.2 Tick Bite Prevention and First Aid"***}**

Routinely check for ticks after being outdoors. Remove ticks as soon as possible before they embed. To minimize exposure, wear light-colored clothing so ticks can be detected. Tuck pants into boots or socks and wear long-sleeved shirts. Apply tick/insect repellent to clothing.

When a tick is found embedded, remove it by grasping it with a tweezers as close to the skin as possible and gently pull it straight out. Do not twist or jerk the tick because the head may remain embedded. Once the tick is removed, wash the bite area and your hands with soap and water and apply an antiseptic to the bite. Save the tick in a jar labeled with the date and the place where the tick was acquired. A physician may find this information and the tick specimen helpful in diagnosis if an infection results.

12.11 Spill Containment and Countermeasures Plan. {tc \l 212 ".10 Spill Containment and Countermeasures Plan "}

As indicated in this HASP, all work on potentially hazardous materials will occur in controlled work zones. Further, there will be no significant quantities of hazardous substances, such as solvents, involved in site activities. All vehicles and equipment will be properly maintained to minimize the potential releases of oil, gasoline and other materials.

The SSHO should be familiar with the notification requirements outlined in this HASP. In addition, all subcontractor personnel can recognize spills, and know the links of communication for notification.

Once a spill has been recognized and appropriate notifications have been made, the SSHO will institute appropriate spill control and countermeasure measures. The following response principals apply:

1. Follow contingency and evacuation procedures in this plan.

2. For spills less than 10 gallons, contain the spill to the smallest area possible, through the use of adsorbents and site equipment to build berms. Prevent to the extent possible, the migration of spills to nearby sewers, drainage structures, open waters, and other sensitive human and environmental receptors.

3. Conduct and complete the response in accordance with all applicable local, state and federal regulations. Seek assistance in determining the extent and completeness of the spill response from the Client and appropriate authorities.

4. For spills 10 gallons or greater, contain the spill to the smallest area possible, as noted above. Notify the appropriate emergency response contractor. Coordinate with the Client the methods to be employed in collection, storage, and the ultimate disposal of all contaminated materials. All applicable hazardous waste regulations will be adhered to.

*12.11.1 Emergency Response Contractors.***{***tc \l 312 ".10.1 Emergency Response Contractors"***}**

Listed below are three Emergency Response Contractors. These contractors are experienced in the removal and disposal of oils, contaminated soils, hazardous chemicals, and asbestos pipelines and appurtenances. The telephone numbers for these contractors are also provided.

1. Enpro Services, Inc. (508) 465-1595.

2. CYN Environmental Services (800) 242-5818.

3. Clean Harbors, Inc. (800) 645-8265; (800) OIL-TANK.

FIGURE 12-1 - Hospital Directions (FIGURE 12-2, specific directions to Hospital)

A. Project Location: 1071 Main Street, Woburn, Massachusetts

B. Hospital Location: **Lahey Hospital & Medical Center**
41 Burlington Mall Road, Burlington, MA 01805

Main Number: (781) 744-5100
Emergency Department: 781-744-8100 (Non-Emergent Calls)
911 (Emergency)
Telecommunications Device for the Deaf (TTD): (781) 744-8797

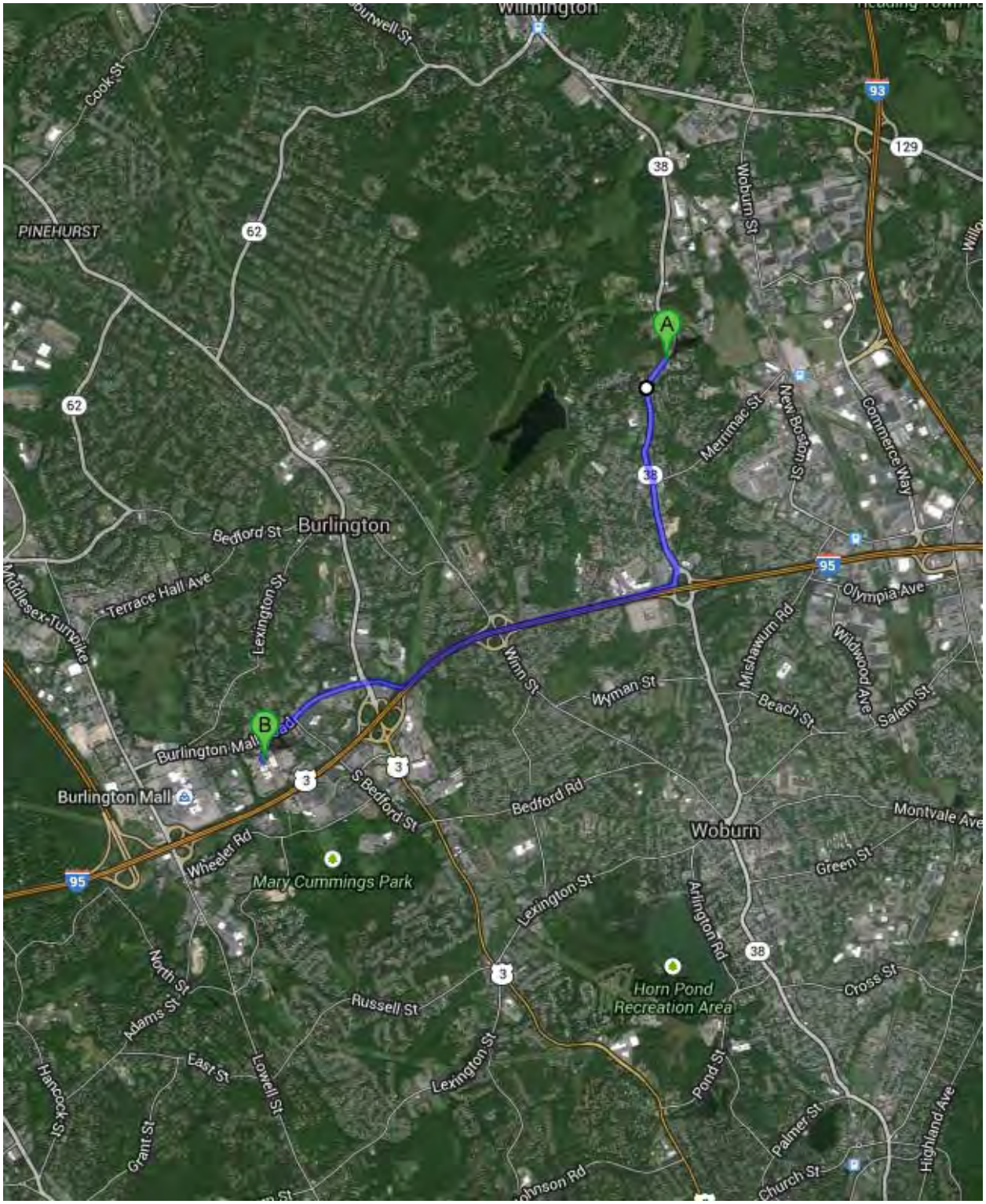
Directions:

A 1071 Main St, Woburn, MA 01801

38	1. Head **southwest** on **MA-38 S/Main St** toward **Wheeling St** About 3 mins	go 1.4 mi total 1.4 mi
95	2. Merge onto **I-95 S** via the ramp to **Waltham/Providence Ri** About 2 mins	go 1.7 mi total 3.0 mi
↱	3. Take exit **33B** for **Massachusetts 3A N** toward **Burlington**	go 0.3 mi total 3.3 mi
	4. Continue straight onto **Burlington Mall Road** About 2 mins	go 0.7 mi total 4.0 mi
↰	5. Turn left	go 331 ft total 4.1 mi
↱	6. Turn right	go 240 ft total 4.1 mi
↗	7. Slight right Destination will be on the right	go 207 ft total 4.1 mi

B 41 Burlington Mall Rd, Burlington, MA 01803

FIGURE 12-2, Hospital Route Map



13.0 AUTHORIZATIONS AND FIELD TEAM REVIEW{tc \l 1 "13.0 AUTHORIZATIONS AND FIELD TEAM REVIEW"}

13.1 Authorized Personnel{tc \l 213 ".1 Authorized Personnel"}

The SSHO or a designee must authorize personnel to enter the areas of concern while field activities are being conducted. Authorization will involve completion of appropriate training courses and medical examination requirements as required by OSHA 29 CFR 1926.65, and 29 CFR 1910.120 current fit testing, and review and signing of this HASP. Appropriately trained personnel, and check in with the Field Team Leader at the Command Post must escort all personnel.

PERSONNEL AUTHORIZED TO PERFORM WORK ON-SITE:

1_____

2_____

3._____

4._____

OTHER PERSONNEL AUTHORIZED TO ENTER SITE:

1_____

2_____

3._____

4._____

13.2 Field Team Review

{tc \l 213 ".2 Field Team Review"}

Each field team member shall sign this section after site-specific training is completed and before being permitted to work on site.

I have read and understand this Site Inspection Health and Safety Plan. I will comply with the provisions contained therein.

Site/Project:

Name Printed	***Signature***	***Date***

14.0 RECORDKEEPING{tc \l 1 "14.0 RECORDKEEPING"}

The following records and reports will be established and maintained on-site by the contractor as needed.

- Accident/Incident Reports
- Daily Sign In/Sign Out Log
- Air Monitoring Records
- Sample Manifest/Transmittal (Chain of Custody Form)
- Employee Training Certificates
- Employee Exposure Record
- Site-Safety Orientation Log
- Health and Safety Audit Reports
- Instrumentation Calibration Logs
- Material Safety Data Sheets/Chem Data Sheets or Hazard lines
- Medical Data Sheets (to be sent with injured personnel to hospital)
- Medical Examination Reports (Physician's Written Opinion)
- Respirator Fit Test Records
- Respirator Inspection Records

A blank Medical Data Sheet is included in Appendix A of this HASP. A Medical Data Sheet will be completed for each person working at the site.

The records will be kept up-to-date and made available to the OWNER at their request.

APPENDIX A

HEALTH AND SAFETY FIELD FORMS

Field Modification Form

Page ____ of ____

Project: _____

Project Location_____

Project Number:_____

Site Safety Officer: _____

Field Modification to HASP

Prepared By: _____
Site Safety Officer Date

Accepted By: _____
Date

Accepted By: _____
Contractor Representative (If Applicable) Date

Approved By: _____
Date

MEDICAL DATA SHEET

Project Name/Location:_____
Employee Name: _____
Home Telephone: _____
Address: _____

Birth date_____
Height: _____ Weight:_____

Drug and Other Allergies:_____

Notable Medical Conditions/Medical Restrictions: _____

Do you wear contact lenses? Yes_____ No_____

Are you using any medications? Yes_____ No_____

If yes, please list:_____

Emergency Contact: Relationship: _____
Address: _____
Phone: _____
Personal Physician: _____
Address: _____
Phone: _____

Health and Safety Log Sheet

Project Name: _____

Client: _____

Date: _____

Date	Time	Sample Location	Dust/ Particulate		VOCs		Notes

RESPIRATOR LOG SHEET

Date	Issued To	Quantity	Make/Model	Description of Use	Location Used

APPENDIX B

RESUMES AND CERTIFICATIONS:
LSP & SSHOs

EBI Consulting
environmental | engineering | due diligence

Edward F. Giordano, LSP
Project Manger, EHS Services
21 B Street
Burlington, MA 01803
Office: 781.418.2316 Mobile: 339-234-8739

SUMMARY OF EXPERIENCE

Mr. Giordano has 20 years of experience in the environmental remediation and emergency response field, working with residential, industrial and commercial clients to resolve environmental concerns. Mr. Giordano has served as both a Licensed Site Professional and a Sr. Project Manger on environmental compliance audits, remediation design and installation, and emergency response sites. Mr. Giordano's work on a myriad of projects has allowed for novel approaches to resolving complex projects from treatment system installation through risk assessment methodology.

RELEVANT PROJECT EXPERIENCE

ENVIRONMENTAL REMEDIATION

Condominium Complex, Sr. Project Manager in charge of Remediation Services, Beverly MA. Managed the installation and operation of a High Vacuum Total Fluid Extraction (HVTFE) system at a Public Involvement Plan (PIP) site. The site included eight occupied multi-level condominium buildings and is located on a harbor. HVTFE system included a Catox for recovered vapors and granular activated carbon (GAC) for water treatment. The system recovered over 5,000 gallons of petroleum for offsite disposal and treated over 1 million gallons of water for permitted disposal at local waste water treatment facility.

Manufacturing Facility, Sr. Project Manager Environmental Services, Palmer, MA . Managed a complex assessment remedial soil excavation activity and site closure at a 43 acre privately owned facility. Subsequent to EPA and MA DEP inspections, an innovative on-site plan was presented to regulatory authorities which allowed for the reuse of a former foundation located on site for encapsulation of impacted soil and debris. Following engineered inspections and preparation of the former foundation, 8,000 cubic yards of impacted soil and metallic debris was isolated and encapsulated within the foundation. The impacted wetland area was restored to historic grade. Two AUL's allowed for the Class A closure of the Site.

Chemical Oxidation, Sr. Project Manager of Remediation design and operation, Boston Harbor Island. Completed extensive permitting as required by MassDEP, US Coast Guard and local Conservation Commission for Notice of Intent and Wetlands Protection Emergency Certification for soil excavation and biological and chemical oxidation applications. Coordinated and managed the transportation of bulk hydrogen peroxide and associated equipment to the island for remedial actions. Remedial actions returned the shoreline impacts to levels below applicable standards, closure of the site and full reuse of the facility.

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Edward F. Giordano, LSP
Project Manger, EHS Services
21 B Street
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Emergency Response, Sr. Project Manager for 10,000 gallon fuel release, Attleboro MA. Oversaw Emergency Response actions on Route 95S subsequent to a tanker truck accident. Oversaw interstate cleanup and reopening after tanker rollover released 10,000 gallons of fuel oil into wetland and residential neighborhood. Coordinated remedial efforts with EPA, MA DEP and local officials for cleanup of impacted soil, groundwater, sediment and surface water. Designed assessment protocol for impacted media ranging from soil and groundwater to sediment and indoor air.

Private Gasoline Station, Sr. Project Manager, Chelmsford, MA. Provided management in remedial efforts and oversight of Soil Vapor / Air Sparge remedial system of three comingled plumes; two gasoline station releases and one dry cleaner solvent release. Coordinated cleanup of downgradient impacted properties including a child day care center.

Private Residence, Sr. Project Manager in charge of Remedial Services, Bourne, MA. Managed remedial actions and Site closure of fuel oil release at residential house due to Oil Company over pressurization of AST located in basement. Designed and oversaw the lifting of the residential structure to allow timely soil excavation of impacted soil. Responsive management limited impact to residential properties and saved nesting bird habitat on coastal wetland.

Commercial / Private, Sr. Project Manager in charge of Remedial / LSP Services, Swampscott, MA. Managed LSP services and remedial actions at a gasoline release impacting four commercial, five residential and two public right-of-ways. Interacted with downgradient property owners and their legal counsel in addressing risk, access and remedial actions. Conducted multiple assessment events including soil, groundwater, soil vapor and indoor air impacts. Designed and implemented remedial plan that reduced footprint of impact area by 80% to levels below applicable standards.

EDUCATION

B.S. Environmental Science (Geology), 1994, Salem State College, Salem, MA

PROFESSIONAL AFFILIATIONS

PROFESSIONAL GEOLOGIST - TENNESSEE
LICENSED SITE PROFESSIONAL ASSOCIATION - MASSACHUSETTS

Philip M. Peterson
Director of Business Development –
Site Investigation and Remediation Services
21 B Street
Burlington, MA 01803
Office: 617.715.1865

SUMMARY OF EXPERIENCE

Mr. Peterson has more than 12 years of experience in the environmental consulting and services industry, with a proven ability to multi-task across a broad range of projects at every stage of development and execution.

Specific experience includes the development, proposal preparation, planning, executing, managing, and documenting various environmental projects requiring site investigation, assessment, and remediation services. Mr. Peterson has successfully completed and/or managed hundreds of individual projects, including site investigations, containment, and remedial actions such as contaminated soil removal, treatment/stabilization, reuse, recycling, and disposal of soil and groundwater including health and safety programs, landfill closures, asbestos in soil, and operation/maintenance of groundwater extraction, treatment, and discharge systems. Regulatory compliance including Massachusetts Contingency Plan, Massachusetts Solid Waste Regulations, EPA RCRA and TSCA regulations, NPDES Storm water, and NPDES Remediation General Permits. Project experience includes real estate development for both private and public owners, universities, major infrastructure improvement projects, and landfill closures.

At EBI Consulting, Mr. Peterson is currently responsible maintaining and developing existing and new clients for EBI's Site Investigation and Remediation (SIR) Services. Mr. Peterson is responsible for developing and implementing a comprehensive strategic sales and marketing plan for the SIR service line, while supporting both EBI and its clients. Mr. Peterson directly manages the sales efforts for the division's growth and ensures that all sales activities are in coordination with EBI's strategic growth plan. Responsibilities include business development and client management for general contractors, developers, and state agencies. Provides senior level managerial, technical, and operational project coordination. Mr. Peterson is currently located at EBI Consulting's Corporate Headquarters in Burlington, Massachusetts.

RELEVANT PROJECT EXPERIENCE

ENVIRONMENTAL MANAGEMENT AND REGULATORY COMPLIANCE: Project experience includes local, state, and federal regulatory compliance, remediation design/management, UST/AST and hazardous materials management, and construction management services at industrial/manufacturing facilities, commercial, residential, and agricultural properties, municipal and state infrastructure projects sites. Management of the financial and technical aspects of environmental investigations, supervision of field personnel and subcontractors, field data acquisition, data analysis, and report preparation and presentation. Preparation of proposals and cost estimates, client billing and collections, and revenue tracking and projections. Massachusetts Contingency Plan (MCP) 310 CMR 40.0000 Compliance, including preparation and/or management of:

- Limited Removal Actions (LRA)
- Immediate Response Actions (IRA)
- Release Abatement Measures (RAM)
- Utility-Related Abatement Measures (URAM)
- Phase I Initial Site Investigation (ISI)
- Phase II Comprehensive Site Assessment (CSA)
- Phase III Remedial Action Plan (RAP)
- Phase IV Remedy Implementation

Method 1, 2, and 3 Risk Characterization
- § Response Action Outcome (RAO) Statements
- § Soil & Groundwater Assessment, Design, & Remediation Plan (RIP)
- § Phase V Operation and Maintenance (O&M)

REMEDIATION DESIGN AND/OR MANAGEMENT:
- § Management of design, construction, operation and maintenance of soil and groundwater remediation systems, including in-situ treatment, stabilization, bioremediation, and hydrogen peroxide oxidation.
- § Oversight of excavation and disposal of contaminated soils during construction activities.
- § Evaluation of Innovative Technologies, including treatment/stabilization of lead-impacted soils.

UST/AST AND HAZARDOUS MATERIALS MANAGEMENT: conduct inspections; oversight of tank tightness-testing, tank closure, and OHM disposal; soil and groundwater characterization; development of contract specifications, UST/AST Closure Reports, and site-specific Health and Safety Plans.

CONSTRUCTION MANAGEMENT: ensure compliance with environmental regulations during construction and demolition projects, including: oversight of remediation activities; development of contract specifications and cost estimates for removal and disposal of soil, USTS/ASTS, OHM, electrical transformers, etc.; review of contract submittals.

WASTEWATER DISCHARGE AND CONSTRUCTION DEWATERING COMPLIANCE: including Massachusetts Water Resource Authority (MWRA) SMART Report preparation, EPA's Remediation General Permit (RGP) for discharges from remediation projects and EPA's NPDES construction general permit.

EDUCATION
BS Urban and Regional Planning, Westfield State College, 1995
MS, Engineering Management, Tufts University, 2010

PROFESSIONAL AFFILIATIONS
CERTIFICATIONS
Licensed Site Professional, Application in Process

PROFESSIONAL REGISTRATIONS
American Red Cross Adult CPR, certified
Green cross-wilderness first aid, certified
Swift water rescue technician level iii, certified
OSHA 29 CFR 1910.120 40-hour hazardous waste operations & rescue training & refreshers
OSHA 29 CFR 1910.120 8-hour hazardous waste operations supervisor training

ADDITIONAL EXPERIENCE

NATURAL RESOURCE PLANNING

§ **US DEPARTMENT OF THE INTERIOR - BUREAU OF LAND MANAGEMENT, GLENNALLEN DISTRICT, ALASKA. RESOURCE PLANNING/BACK-COUNTRY RIVER RANGER:** Assisted resource and recreation management personnel in patrolling monitoring and maintaining two national wild and scenic river corridors. Designed, constructed and maintained multi-use trails. Utilized Global Positioning software to map hiking, automobile and water trails within the District.

§ **US DEPARTMENT OF THE INTERIOR - NATIONAL CENTER FOR RECREATION AND CONSERVATION, WASHINGTON, DC. NATURAL RESOURCES PLANNING-INTERN.** Oversaw federal funding programs pertaining to the nps's national center for recreation and conservation. Met with nps designers and cartographers to revise logos for each congressionally designated national historic and scenic long-distance trails. Created congressional committee rosters which have oversight of the national park service districts. Publication was made available to the non-profit counterparts of the national long-distance trails program.

PUBLICATION/ PRESENTATIONS

§ Peterson, P.M., 1995. "Necklace Park Planning: A Case Study in Holyoke, MA." Proceedings, NEER, USDA-FS, pages 260-262. Presented Necklace Park and Trail System for the City of Holyoke, MA at the Northeast Recreational Symposium (NERR) in April 1995.

§ Consulting Project Holyoke, MA: Project Team Leader: Prepared Report of Recommendations for the Planning Department, City Alderman and General Public to better utilize the City's resources by the implementation of a "Necklace Park and Trail System.

§ Consulting Project Peabody, MA: Researched and Prepared recommendations for the City of Peabody's Designated Development District which simplified the permitting process and dimensional requirements; Amended by City Council March 1995.

§ Independent Study: Organization and implementation of the first symposium on the Westfield Rivers Designation under the National Wild and Scenic Rivers Protection Act.

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Daniel Bellucci
Environmental Scientist
21 B Street
Burlington, MA 01803
Office: 781.418.2344 Mobile: 845.803.4347

Summary of Experience

Mr. Bellucci is a staff scientist specializing in Phase I and Phase II Environmental Site Assessments in the commercial real estate and telecommunications industry. Mr. Bellucci has conducted numerous pre-acquisition/due diligence environmental assessments for a wide range of properties throughout the Northeast, Southeast and Midwest. These assessments have been performed to evaluate site conditions, potential off-site liabilities, historic site and vicinity usage, environmental control systems, and site remediation costs in order to advise prospective buyers, lenders, current operators, and owners of potential and existing environmental concerns. Sites inspected include multi-family residential, commercial, retail and industrial properties.

Additionally, Mr. Bellucci has experience in Land Surveying, performing subsurface investigations, and creating As-Built drawings.

Relevant Project Experience

Phase II Subsurface Investigation: Mr. Bellucci has completed numerous Phase II and Phase III subsurface investigation and remediation projects, with extensive field and project management experience associated with the following: soil, groundwater, soil vapor, and surface water monitoring; UST closure; monitoring well elevation surveys; monitoring well abandonments; operation and maintenance of groundwater pump and treat systems; construction site air monitoring; and mapping using GIS and autocad; ground penetrating radar and terrestrial laser scanning surveys. Daniel has prepared project schedules, work plans, spill prevention control and countermeasure plans, state and city municipal water discharge permits, soil management plans, MCP Response Action Outcome Plans and stormwater NPDES permitting compliance.

Phase I Environmental Site Assessments: Mr. Bellucci has conducted ASTM Phase I Environmental Site Assessments in the Northeast and Midwest. These properties have included commercial, retail, and telecommunications properties. ASTM investigations include correspondence and consultation with Federal, state, and local government offices.

Education

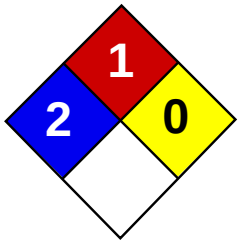
B.S. Environmental Engineering, University of New Hampshire, Durham, NH, 2011

Professional Registrations

- Certified engineer-in-training (EIT), April 2011
- 40 hour HAZWOPER training certification- 29 CFR 1910.120
- Confined space training certification- 29 CFR 1910.146
- ASTM e 1527 Phase I environmental site assessment (ESA) training, 2012
- AHERA 24-hour asbestos inspector accreditation, 2012
- U.S. department of housing and urban development (HUD) lead based paint visual assessment training course, 2012
- National Groundwater Association Certified Well Driller

APPENDIX D

MATERIAL SAFETY DATA SHEETS



Health	2
Fire	1
Reactivity	0
Personal Protection	E

Material Safety Data Sheet
Biphenyl MSDS

Section 1: Chemical Product and Company Identification

Product Name: Biphenyl

Catalog Codes: SLB1906

CAS#: 92-52-4

RTECS: DU8050000

TSCA: TSCA 8(b) inventory: Biphenyl

CI#: Not applicable.

Synonym: Phenyl benzene

Chemical Name: Diphenyl

Chemical Formula: (C6H5)2

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Biphenyl	92-52-4	100

Toxicological Data on Ingredients: Biphenyl: ORAL (LD50): Acute: 2400 mg/kg [Rat.].

Section 3: Hazards Identification

Potential Acute Health Effects:
Very hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (sensitizer). Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to the nervous system, liver. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention immediately.

Skin Contact:
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: 540°C (1004°F)

Flash Points: CLOSED CUP: 112.8°C (235°F).

Flammable Limits: LOWER: 0.6% UPPER: 5.8%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances:
Flammable in presence of open flames and sparks. Slightly flammable to flammable in presence of oxidizing materials, of reducing materials.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Keep container tightly closed.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, reducing agents.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 0.2 from ACGIH (TLV) [United States] [1995] TWA: 1.3 from ACGIH (TLV) [United States] [1995] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Crystals solid.)

Odor: Characteristic. (Slight.)

Taste: Not available.

Molecular Weight: 154.21 g/mole

Color: White.

pH (1% soln/water): Not applicable.

Boiling Point: 254.5°C (490.1°F)

Melting Point: 68.9 (156°F)

Critical Temperature: Not available.

Specific Gravity: 1.04 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: 5.8 (Air = 1)

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, diethyl ether.

Solubility:

Soluble in diethyl ether. Very slightly soluble in n-octanol. Insoluble in cold water, hot water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances:
Reactive with oxidizing agents, reducing agents. Slightly reactive to reactive with acids, alkalis.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 2400 mg/kg [Rat.].

Chronic Effects on Humans: Causes damage to the following organs: the nervous system, liver.

Other Toxic Effects on Humans:
Very hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation. Slightly hazardous in case of skin contact (sensitizer).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Material is irritating to mucous membranes and upper respiratory tract.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:
Pennsylvania RTK: Biphenyl Massachusetts RTK: Biphenyl TSCA 8(b) inventory: Biphenyl CERCLA: Hazardous substances.: Biphenyl

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):
R38- Irritating to skin. R41- Risk of serious damage to eyes.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

References:
-Material safety data sheet emitted by: la Commission de la SantÃ© et de la SÃ©curitÃ© du Travail du QuÃ©bec. -The Sigma-Aldrich Library of Chemical Safety Data, Edition II. -Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987.

Other Special Considerations: Not available.

Created: 10/11/2005 11:25 AM

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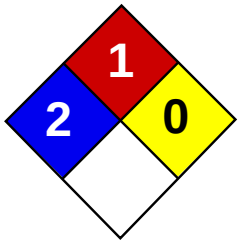

Health	2
Fire	1
Reactivity	0
Personal Protection	E

Material Safety Data Sheet
Antimony MSDS

Section 1: Chemical Product and Company Identification

Product Name: Antimony

Catalog Codes: SLA1453, SLA4462

CAS#: 7440-36-0

RTECS: CC4025000

TSCA: TSCA 8(b) inventory: Antimony

CI#: Not available.

Synonym: Stibium

Chemical Name: Not available.

Chemical Formula: Sb

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Antimony	7440-36-0	100

Toxicological Data on Ingredients: Antimony: ORAL (LD50): Acute: 7000 mg/kg [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:
Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator).

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to blood, kidneys, lungs, the nervous system, liver, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Some metallic oxides.

Fire Hazards in Presence of Various Substances: Not available.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In

case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 0.5 Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid.

Odor: Not available.

Taste: Not available.

Molecular Weight: 121.75 g/mole

Color: Not available.

pH (1% soln/water): Not applicable.

Boiling Point: 1635°C (2975°F)

Melting Point: 630°C (1166°F)

Critical Temperature: Not available.

Specific Gravity: 6.691 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Insoluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Not available.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 7000 mg/kg [Rat].

Chronic Effects on Humans: Causes damage to the following organs: blood, kidneys, lungs, the nervous system, liver, mucous membranes.

Other Toxic Effects on Humans:
Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Human: passes through the placenta, excreted in maternal milk.

Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification: CLASS 6.1: Poisonous material.

Identification: : Antimony powder UNNA: UN2871 PG: III

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
Pennsylvania RTK: Antimony Massachusetts RTK: Antimony TSCA 8(b) inventory: Antimony

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada):
CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC): R36/38- Irritating to eyes and skin.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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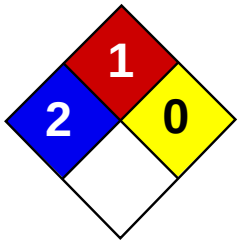

Health	2
Fire	1
Reactivity	0
Personal Protection	E

Material Safety Data Sheet
Chromium MSDS

Section 1: Chemical Product and Company Identification

Product Name: Chromium

Catalog Codes: SLC4711, SLC3709

CAS#: 7440-47-3

RTECS: GB4200000

TSCA: TSCA 8(b) inventory: Chromium

CI#: Not applicable.

Synonym: Chromium metal; Chrome; Chromium Metal Chips 2" and finer

Chemical Name: Chromium

Chemical Formula: Cr

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Chromium	7440-47-3	100

Toxicological Data on Ingredients: Chromium LD50: Not available. LC50: Not available.

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Slightly hazardous in case of ingestion.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to kidneys, lungs, liver, upper respiratory tract. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: 580°C (1076°F)

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Some metallic oxides.

Fire Hazards in Presence of Various Substances:
Slightly flammable to flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards:
Moderate fire hazard when it is in the form of a dust (powder) and burns rapidly when heated in flame. Chromium is attacked vigorously by fused potassium chlorate producing vivid incandescence. Pyrophoric chromium unites with nitric oxide with incandescence. Incandescent reaction with nitrogen oxide or sulfur dioxide.

Special Remarks on Explosion Hazards:
Powdered Chromium metal +fused ammonium nitrate may react violently or explosively. Powdered Chromium will explode spontaneously in air.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids, alkalis.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 0.5 (mg/m3) from ACGIH (TLV) [United States] TWA: 1 (mg/m3) from OSHA (PEL) [United States] TWA: 0.5 (mg/m3) from NIOSH [United States] TWA: 0.5 (mg/m3) [United Kingdom (UK)] TWA: 0.5 (mg/m3) [Canada]Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Metal solid.)

Odor: Odorless.

Taste: Not available.

Molecular Weight: 52 g/mole

Color: Silver-white to Grey.

pH (1% soln/water): Not applicable.

Boiling Point: 2642°C (4787.6°F)

Melting Point: 1900°C (3452°F) +/- !0 deg. C

Critical Temperature: Not available.

Specific Gravity: 7.14 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility:
Insoluble in cold water, hot water. Soluble in acids (except Nitric), and strong alkalies.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, acids, alkalis.

Corrosivity: Not available.

Special Remarks on Reactivity:
Incompatible with molten Lithium at 180 deg. C, hydrogen peroxide, hydrochloric acid, sulfuric acid, most caustic alkalies and alkali carbonates, potassium chlorate, sulfur dioxide, nitrogen oxide, bromine pentafluoride. It may react violently or ignite with bromine pentafluoride. Chromium is rapidly attacked by fused sodium hydroxide + potassium nitrate. Potentially hazardous incompatibility with strong oxidizers.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals:
LD50: Not available. LC50: Not available.

Chronic Effects on Humans:
CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC. May cause damage to the following organs: kidneys, lungs, liver, upper respiratory tract.

Other Toxic Effects on Humans:
Hazardous in case of skin contact (irritant), of inhalation. Slightly hazardous in case of ingestion.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:
May cause cancer based on animal data. There is no evidence that exposure to trivalent chromium causes cancer in man.

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: May cause skin irritation. Eyes: May cause mechanical eye irritation. Inhalation: May cause irritation of the respiratory tract and mucous membranes of the respiratory tract. Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea. Chronic Potential Health Effects: Inhalation: The effects of chronic exposure include irritation , sneezing, reddness of the throat, bronchospasm, asthma, cough, polyps, chronic inflammation, emphysema, chronic bronchitis, pharyngitis, bronchopneumonia, pneumoconoisis. Effects on the nose from chronic chromium exposure include irritation, ulceration, and perforation of the nasal septum. Inflammation and ulceration of the larynx may also occur. Ingestion or Inhalation: Chronic exposure may cause liver and kidney damage.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:
Connecticut hazardous material survey.: Chromium Illinois toxic substances disclosure to employee act: Chromium Illinois chemical safety act: Chromium New York release reporting list: Chromium Rhode Island RTK hazardous substances: Chromium Pennsylvania RTK: Chromium Minnesota: Chromium Michigan critical material: Chromium Massachusetts RTK: Chromium Massachusetts spill list: Chromium New Jersey: Chromium New Jersey spill list: Chromium Louisiana spill reporting: Chromium California Director's List of Hazardous Substances: Chromium TSCA 8(b) inventory: Chromium SARA 313 toxic chemical notification and release reporting: Chromium CERCLA: Hazardous substances.: Chromium: 5000 lbs. (2268 kg)

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):
R40- Limited evidence of carcinogenic effect S36/37/39- Wear suitable protective clothing, gloves and eye/face protection. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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Safety Data Sheet

Material Name: No. 6 Fuel Oil

SDS No. 9907
EU/CLP GHS

Synonyms: #6 Fuel Oil; 6 Oil; Bunker C; Bunkers; High Sulfur Residual Fuel Oil; Low Sulfur Residual Fuel Oil; Residual Fuel Oil

* * * Section 1 - Product and Company Identification * * *

Manufacturer Information

Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095-0961

Phone: 732-750-6000 Corporate EHS

Emergency # 800-424-9300 CHEMTREC

* * * Section 2 - Hazards Identification * * *

GHS Classification:

Flammable Liquids – Category 4
Acute Toxicity, Inhalation – Category 2
Skin Corrosion/Irritation – Category 2
Eye Damage/Irritation – Category 2
Sensitization - Skin – Category 1
Carcinogenicity - Category 1B
Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)
Hazardous to the Aquatic Environment, Acute Hazard – Category 2

Additional hazard not resulting in classification:

Material may be heated. If heated, care must be taken to avoid injury from thermal burns. Heating may also release toxic hydrogen sulfide gas.

GHS LABEL ELEMENTS

Symbol(s)

Signal Word

DANGER

Hazard Statements

Combustible liquid.
Fatal if inhaled.
Causes skin irritation.
Causes eye irritation.
May cause an allergic skin reaction.
May cause cancer.
May cause respiratory irritation.
May cause drowsiness and dizziness.
Toxic to aquatic life.

Precautionary Statements

Prevention

Keep away from flames and hot surfaces. – No smoking.
Wear protective gloves/protective clothing/eye protection/face protection.
Do not breathe fume/gas/mist/vapours/spray.
Use only outdoors or in a well-ventilated area.
Wear respiratory protection.
Wash hands and forearms thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid release to the environment.

Response

In case of fire: Use water spray, fog, hand-held dry chemical or foam to extinguish.
If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor.
If on skin: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF exposed or concerned: Get medical advice/attention.

Storage

Store in a well-ventilated place. Keep cool.
Keep container tightly closed.
Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS #	Component	Percent
68476-33-5	Fuel oil	100
7783-06-4	Hydrogen sulfide	<1

Component Information/Information on Non-Hazardous Components

A complex combination of heavy (high boiling point) petroleum hydrocarbons. The amount of sulfur varies with product specification and does not affect the health and safety properties as outlined in this Safety Data Sheet.

Hydrogen Sulfide (H_2S) may be present in trace quantities (by weight), but may accumulate to toxic concentrations such as in tank headspace. The presence of H_2S is highly variable, unpredictable and does not correlate with sulfur content. Studies with similar products have shown that 1 ppm H_2S by weight in liquid may produce 100 ppm or more H_2S in the vapor headspace of the storage tank.

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

First Aid: Skin

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or waterless hand cleanser. Obtain medical attention if irritation or redness develops. Thermal burns require immediate medical attention depending on the severity and the area of the body burned.

First Aid: Ingestion

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

First Aid: Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

CAUTION: flammable vapor production at ambient temperature in the open is expected to be minimal unless the oil is heated above its flash point. However, industry experience indicates that light hydrocarbon vapors can build up in the headspace of storage tanks at temperatures below the flash point of the oil, presenting a flammability and explosion hazard. Tank headspaces should be regarded a potentially flammable, since the oil's flash point cannot be regarded as a reliable indicator of the potential flammability in tank headspaces.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, fire fighting foam, CO_2, and other gaseous agents.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Unsuitable Extinguishing Media

None

Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

* * * Section 6 - Accidental Release Measures * * *

Recovery and Neutralization

Carefully contain and stop the source of the spill, if safe to do so.

Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal.

Emergency Measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas.

Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors.

Prevention of Secondary Hazards

None

* * * Section 7 - Handling and Storage * * *

Handling Procedures

Product is generally transported and stored hot (typical 110 - 140 °F). Handle as a combustible liquid. Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Storage Procedures

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks."

Hydrogen sulfide may accumulate in tanks and bulk transport compartments. Consider appropriate respiratory protection (see Section 8). Stand upwind. Avoid vapors when opening hatches and dome covers. Confined spaces should be ventilated prior to entry.

Incompatibilities

Keep away from strong oxidizers.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Component Exposure Limits

Hydrogen sulfide (231-977-3)

ACGIH:	5 ppm STEL 1 ppm TWA
Austria:	10 ppm STEL [KZW]; 15 mg/m3 STEL [KZW] 10 ppm TWA [TMW]; 15 mg/m3 TWA [TMW]
Belgium:	10 ppm STEL; 14 mg/m3 STEL 5 ppm TWA; 7 mg/m3 TWA
Denmark:	10 ppm TWA; 15 mg/m3 TWA
Finland:	10 ppm STEL; 14 mg/m3 STEL; 15 ppm STEL (blasting and quarrying); 20 mg/m3 STEL (blasting and quarrying) 5 ppm TWA; 7 mg/m3 TWA; 10 ppm TWA (blasting and quarrying); 15 mg/m3 TWA (blasting and quarrying)
France:	10 ppm STEL [VLCT]; 14 mg/m3 STEL [VLCT] 5 ppm TWA [VME]; 7 mg/m3 TWA [VME]
Germany:	5 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when MAK and BAT values are observed, exposure factor 2); 7.1 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when MAK and BAT values are observed, exposure factor 2) 5 ppm TWA MAK; 7.1 mg/m3 TWA MAK 10 ppm Peak; 14.2 mg/m3 Peak
Greece:	15 ppm STEL; 21 mg/m3 STEL 10 ppm TWA; 15 mg/m3 TWA
Ireland:	10 ppm STEL; 14 mg/m3 STEL 5 ppm TWA; 7 mg/m3 TWA
Netherlands:	2.3 mg/m3 TWA
Portugal:	10 ppm TWA [VLE-MP]
Spain:	15 ppm STEL [VLA-EC]; 21 mg/m3 STEL [VLA-EC] 10 ppm TWA [VLA-ED]; 14 mg/m3 TWA [VLA-ED]
Sweden:	10 ppm LLV; 14 mg/m3 LLV 15 ppm CLV; 20 mg/m3 CLV

Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

Personal Protective Equipment: Respiratory

If a hydrogen sulfide hazard is present (that is, exposure potential above H2S permissible exposure limit), use a positive-pressure SCBA or Type C supplied air respirator with escape bottle.

Where it has been determined that there is no hydrogen sulfide exposure hazard (that is, exposure potential below H2S permissible exposure limit), a NIOSH-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Personal Protective Equipment: Hands

Gloves constructed of nitrile, neoprene, or PVC are recommended.

Personal Protective Equipment: Eyes

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance:	Black, viscous	**Odor:**	Heavy, petroleum/asphalt-type odor
Physical State:	Liquid	**pH:**	ND
Vapor Pressure:	<0.1 psia @ 70 °F (21 °C)	**Vapor Density:**	NA
Boiling Point:	>500 °F (>260 °C)	**Melting Point:**	ND
Solubility (H2O):	Negligible	**Specific Gravity:**	0.876-1.000 (API 30.0-10.0)
Evaporation Rate:	Negligible	**VOC:**	ND
Octanol/H2O Coeff.:	ND	**Flash Point:**	141 °F (60.5 °C)minimum
Flash Point Method:	ASTM D-93	**Upper Flammability Limit (UFL):**	ND
Lower Flammability Limit (LFL):	ND	**Burning Rate:**	ND
Auto Ignition:	>765°F (>407°C)		

Hydrogen sulfide (H_2S) has a rotten egg “sulfurous” odor. This odor should not be used as a warning property of toxic levels because H_2S can overwhelm and deaden the sense of smell. Also, the odor of H_2S in heavy oils can easily be masked by the petroleum-like odor of the oil. Therefore, the smell of H_2S should not be used as an indicator of a hazardous condition - a H_2S meter or colorimetric indicating tubes are typically used to determine the concentration of H_2S.

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

Incompatible Products

Keep away from strong oxidizers.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

* * * Section 11 - Toxicological Information * * *

Acute Toxicity

A: General Product Information

Harmful if swallowed.

B: Component Analysis - LD50/LC50

Hydrogen sulfide (7783-06-4)

Inhalation LC50 Rat 0.701 mg/L 4 h; Inhalation LC50 Rat 0.99 mg/L 1 h

Potential Health Effects: Skin Corrosion Property/Stimulativeness

May cause skin irritation with prolonged or repeated contact. Practically non-toxic if absorbed following acute (single) exposure. May cause dermal sensitization. Liquid may be hot (typically 110 - 120 °F) which could cause 1st, 2nd, or 3rd degree thermal burns.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

Contact with eyes may cause mild to moderate irritation.

Potential Health Effects: Ingestion

This material has a low order of acute toxicity. If large quantities are ingested, nausea, vomiting and diarrhea may result. Ingestion may also cause effects similar to inhalation of the product. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

Potential Health Effects: Inhalation

Because of its low vapor pressure, this product presents a minimal inhalation hazard at ambient temperature. Upon heating, fumes may be evolved. Inhalation of fumes or mist may result in respiratory tract irritation and central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

WARNING: Irritating and toxic hydrogen sulfide gas may be found in confined vapor spaces. Greater than 15 - 20 ppm continuous exposure can cause mucous membrane and respiratory tract irritation. 50 - 500 ppm can cause headache, nausea, and dizziness, loss of reasoning and balance, difficulty in breathing, fluid in the lungs, and possible loss of consciousness. Greater than 500 ppm can cause rapid or immediate unconsciousness due to respiratory paralysis and death by suffocation unless the victim is removed from exposure and successfully resuscitated. The "rotten egg" odor of hydrogen sulfide is not a reliable indicator for warning of exposure, since olfactory fatigue (loss of smell) readily occurs, especially at concentrations above 50 ppm. At high concentrations, the victim may not even recognize the odor before becoming unconscious.

Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

Generative Cell Mutagenicity

May cause genetic defects. Materials of similar composition have been positive in mutagenicity studies.

Carcinogenicity

A: General Product Information

May cause cancer.

This material contains polynuclear aromatic hydrocarbons (PNAs), some of which are animal carcinogens. Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation. The presence of carcinogenic PNAs indicates that precautions should be taken to minimize repeated and prolonged inhalation of fumes or mists.

B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any specific target organ general toxicity single exposure effects.

Specified Target Organ General Toxicity: Repeated Exposure

May cause damage to organs (respiratory system, skin) through prolonged or repeated exposure.

Aspiration Respiratory Organs Hazard

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

Other Toxicological Information

Trace amounts of nickel, vanadium, and other metals in slurry oil can become concentrated in the oxide form in combustion ash deposits. Vanadium is a toxic metal affecting a number of organ systems. Nickel is a suspect human carcinogen (lung, nasal, sinus), an eye, nose, and throat irritant, and can cause allergic skin reaction in some individuals.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Fuel oil (68476-33-5)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	35 mg/L [flow-through]	
96 Hr LC50 Brachydanio rerio	48 mg/L [semi-static]	

Hydrogen sulfide (7783-06-4)

Test & Species		Conditions
96 Hr LC50 Lepomis macrochirus	0.0448 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	0.016 mg/L [flow-through]	
96 Hr LC50 Gammarus pseudolimnaeus	0.022 mg/L	

Persistence/Degradability

No information available.

Bioaccumulation

No information available.

Mobility in Soil

No information available.

* * * Section 13 - Disposal Considerations * * *

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 14 - Transportation Information * * *

IATA Information

Shipping Name: Not Regulated

ICAO Information

Shipping Name: Not Regulated

IMDG Information

Shipping Name: Not Regulated

* * * Section 15 - Regulatory Information * * *

Regulatory Information

Component Analysis – Inventory

Component/CAS	EC #	EEC	CAN	TSCA
Fuel oil 68476-33-5	270-675-6	EINECS	DSL	Yes
Hydrogen sulfide 7783-06-4	231-977-3	EINECS	DSL	Yes

* * * Section 16 - Other Information * * *

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

Literature References

None

Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet

APPENDIX E

HAZARDOUS MATERIALS

Hazardous Materials with potential to be on-site

Material	Location	Proposed storage method/ containment
Acetylene	Contractor's Yard	Secure Storage Shed
Asphalt Emulsions	Contractor's Yard	Drum with Secondary Containment
Gasoline	Contractor's Yard	Secure Storage Shed
Diesel	Contractor's Yard	Secure Storage Shed
Form Release Oils	Contractor's Yard	Drum with Secondary Containment
Hydraulic Oils	Contractor's Yard	Secure Storage Shed
Lubricating Oils	Contractor's Yard	Secure Storage Shed
Oxygen	Contractor's Yard	Secure Storage Shed

APPENDIX F

RESPIRATOR PROGRAM

The following respirator program is in accordance with OSHA 29 CFR 1910.134 Respiratory Protection Program requirements. This program governs the selection and use of respirators on-site.

Respirators for the field sampling team will be provided by contractor. The respirator protection program will be administered by, and is the responsibility of the SSHO for the site. Contractors and their subcontractors will furnish their own respirators and medical surveillance for their employees. The SSHO will be responsible for ensuring that they are in compliance with this respirator program.

The respirators will be selected according to the hazard and level of protection determined by monitoring action levels and the decision of the SSHO. The respirators and levels are:

Level	Respirator
B	Positive Pressure-Pressure Demand SCBA or Supplied Air Respirator with 5-minute escape bottle.
C	Full-face air purifying respirator with combination dust (HEPA) and organic vapor/acid gas cartridge. The full-face piece respirator with combination dust and organic vapor/acid gas cartridge will be appropriate for the dust conditions and organics that may be encountered.
D	No respirator required.

The respirator users will be fit tested with the size, style, and make of the respirator they will be using on-site. The fit test will be recorded and these Fit Test Records will be maintained in the Command Post.

Employee respirator training is provided on an annual basis and at site-specific training sessions. This training includes:

- A discussion of the nature of the respiratory hazards and the dangers if the respirator is not used properly.
- The reasons that respirators are required for protection, along with any engineering controls that may be used.
- Instruction in the selection, use, sanitary care, maintenance, proper storage, and limitation of the full-face piece respirator with combination cartridge, and the SCBA.
- Practice in proper fitting, wearing, adjusting, and checking face seal of the respirator.
- An opportunity to handle the respirator.

- Instruction on how to recognize and cope with emergency situations requiring respiratory protection.
- Explanation of the requirements for a self-contained breathing device for work in unknown concentrations and Immediately Dangerous to Life or Health (IDLH) atmosphere and for fire fighting.
- Explanation of the medical surveillance program and how it relates to respirator use.
- Explanation of the requirements for maintaining a tight seal, why beard and facial hair is prohibited, and why use of contact lenses while wearing respirators is prohibited.

Respirators will be assigned to individual workers. Each individual shall be responsible for cleaning and maintaining their assigned respirator and documenting this using the Respirator Service Log provided by manufacturer and/or the company issuing equipment to its personnel. They will be cleaned and disinfected before being reassigned. Respirators will be cleaned after each day of work according to manufacturer's instructions. The cleaning will be done at the Command Post. Used cartridges will be disposed of and replaced with new ones.

After cleaning, the respirators will be inspected and checked for defects such as excessive dirt, cracks or other distortions, scratches, incorrectly mounted lens, broken or worn cartridge holders on the face piece, breaks, loss of elasticity, broken buckles, and excessively worn serrations on head harness that may cause slippage on the head straps or head harness.

Further checks include:

- A check of the tightness of the connections.
- A check of the face piece, valves, connecting tube, and canisters.
- A check of the regulator and warning devices on SCBA for proper functioning.
- For air purifying:

Check the exhalation valve after removing its cover for:

- Foreign material, such as detergent residue, dust particles, or human hair under the valve seat.
- Cracks, tears, or distortion in the valve material.
- Improper insertion of the valve body in the face piece.
- Cracks, breaks, or chips in the valve body, particularly in the sealing surface.
- Missing or defective valve cover.
- Improper installation of the valve in the valve body.

Check the air purifying elements for:

- Incorrect cartridges, canister, or filter for the hazard.
- Incorrect installation, loose connections, missing or worn gaskets, or cross threading in holder.

- Expired shelf life of cartridge or canister.
- Cracks, dents, or breaks in the cartridge or canisters case.
- Evidence of prior use of cartridge or canister, such as broken seal tape foil or other sealing material.

For air-supplied respirators, check the air supply system for:

- Integrity and condition of air supply lines and hoses, including attachments and end fitting.
- Correct operation and condition of all regulators, valves, or other airflow regulators.
- If SCBA, that the cylinder is sufficiently charged for the intended use, preferably fully charged (mandatory on an emergency device). The emergency SCBA will have a tag for logging in the monthly inspections.

Monitoring of the work area will be performed and the results will be used to select the appropriate level of protection. Refer to air monitoring section of the HASP (Section 9.0).

This Respirator Program will be re-evaluated and revisions and updates added regularly.

Persons will not be assigned to tasks requiring the use of respirators unless it has been determined that they are physically able to perform the work and use the equipment. The contracted physician will determine what health and physical conditions are pertinent.

Only those respirators jointly approved by NIOSH/MSHA shall be used. All component parts (i.e., canister, replacement straps, etc.) will be of the same make.

All of the Contractor's employees shall document their respirator use time on the Record of Respiratory Wear Log presented in Appendix A. This record shall be submitted to the SSHO on a weekly basis.