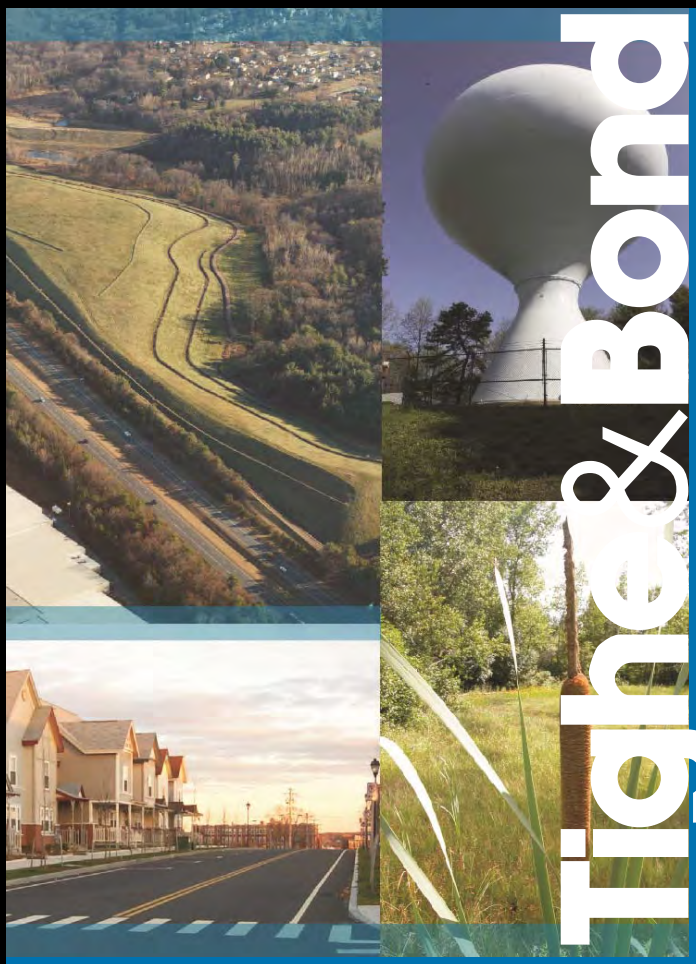


55 – 71 Needham Street
Newton, Massachusetts
MassDEP RTN 3-32062

RAM Plan Modification No. 2 / TSCA PCB Cleanup Plan

Prepared For:

Needham Street Village Shops, LLC
Lexington, Massachusetts

April 2014

Tighe&Bond

CONTENTS

Section 1 Introduction

1.1 Site Background and History 1-1
1.2 Conceptual Site Model 1-2
1.2.1 PCBs in Soil 1-2
1.2.2 Urban Fill 1-3

Section 2 Site Activities

2.1 Site Construction Activities to Date 2-1
2.2 Initial PCB Release Area Characterization 2-1
2.3 Supplemental PCB Release Area Characterization 2-2
2.4 Initial Soil Excavation 2-3
2.5 Excavation of PCB-Impacted Soil within the Foundation of Building 1 ... 2-3
2.6 Temporary Ground Cover 2-4

Section 3 Release Abatement Measure Plan Modification / TSCA Cleanup Plan

3.1 Proposed PCB-Impacted Soil Excavation and Verification Sampling 3-1
3.2 Dust Monitoring and Control Measures 3-2
3.3 PCB Capping Design and Implementation 3-2
3.4 PCB Soil Volume Management Contingency 3-3
3.5 Remediation Waste Management 3-3
3.6 Health & Safety Plan 3-3
3.7 AUL / TSCA Deed Restriction 3-4
3.8 Equipment Decontamination 3-4
3.9 Recordkeeping and Documentation 3-4
3.10 Urban Fill Impacts, Excavation and Management (non TSCA) 3-4
3.11 Required Federal, State and Local Permits 3-5
3.12 Implementation Schedule 3-6

Appendices

Appendix A RAM Modification Transmittal Form (BWSC-106); Revised Release Notification Form (BWSC-103)
Appendix B Site Figures
Appendix C Soil Analytical Data Tables
Appendix D Laboratory Analytical Reports

Tables

Table 1 Urban Fill Data Summary Table
Table 2 PCB Soil Data Summary Table

Figures

Figure 1 Site Locus Map
Figure 2 MassGIS Resource Map
Figure 3 Orthophotograph
Figure 4 Site Plan
Figure 5 PCB Cap Plan

Tighe&Bond

SECTION 1

Section 1
Introduction

Tighe & Bond has prepared this *Release Abatement Measure* (RAM) *Plan Modification and Toxic Substances Control Act (TSCA) Notification related to proposed PCB Cleanup* on behalf of the Needham Street Village Shops, LLC, to describe additional remedial actions proposed for polychlorinated biphenyls (PCB) and separate/unrelated arsenic impacts to soil at the 55-71 Needham Street property located in Newton, Massachusetts. Specifically, this *RAM Modification* will document the horizontal and vertical extent of PCB impacts, proposed PCB and arsenic-related urban fill excavation limits and to provide construction details for the proposed cap to be implemented as a measure of controlling potential exposure to PCB-impacted soils. The TSCA low occupancy cleanup goal with a cap is 100 parts-per-million (ppm) per 40 CFR 761.61(a). In addition, this EPA Notification proposes an alternative site characterization pursuant to 40 CFR 761.61(c).

A Release Notification Form (RNF) was submitted the Massachusetts Department of Environmental Protection (MassDEP) for the PCB release on March 28, 2104. The site was subsequently assigned Release Tracking Number 3-32062. The original *RAM Plan* was submitted to MassDEP on April 1, 2014. A *RAM Plan Modification* was submitted to MassDEP on April 4, 2014. This Report also includes a Revised RNF to address the elevated arsenic concentrations detected at the site.

The original conditions stated in the April 1, 2014 *RAM Plan* still apply to the Site. As described later in this submittal, this *RAM Modification and TSCA PCB Cleanup Plan* is being submitted to describe remedial actions relative to the management of PCB-impacted soils, management of urban fill-impacted soils and cap implementation to limit potential exposure to PCB-impacted soil to remain at the site.

A RAM Modification Transmittal Form (BWSC-106), Licensed Site Professional (LSP) Opinion and Revised RNF (BWSC-103) are attached in Appendix A of this report.

A Site Locus Map, Massachusetts Geographic Information Systems (MassGIS) Resource Map, Orthophotograph, Site Plan and PCB Cap Plan are included as Figures 1 through 5, respectively, in Appendix B. Updated soil analytical data tables and additional laboratory analytical data reports are included as Appendix C and D, respectively.

This information is being provided in accordance with the Massachusetts Contingency Plan (MCP) at 310 CMR 40.0440 for RAM submittals.

1.1 Site Background and History

The site is currently comprised of three City of Newton parcels, 49 Needham Street, 55 Needham Street and 71 Needham Street. The 49 Needham Street parcel was most recently utilized as a paved parking lot and was formerly subject to response actions completed under RTN 3-11543. RTN 3-11543 was assigned to the site in 1994 for the detection of vinyl chloride above RCs in site groundwater. The site was closed out because it was determined that the release to groundwater did not pose a significant risk in accordance with the MCP. The 55 Needham Street parcel was most recently occupied by a restaurant. The 71 Needham Street parcel was most recently occupied by a commercial property that sold bicycles. The 71 Needham Street parcel was subject to

RTN 3-3552. RTN 3-3552 was issued in April 1991 and this release was closed out in June 1996 with a Class A-2 RAO Statement.

It should also be noted that urban fill materials have been documented across the site. Previous due diligence activities completed at the site and reviewed by Tighe & Bond indicate the site was part of an undeveloped area of low lying wetlands prior to 1930. Previous investigations have identified elevated metals and polycyclic aromatic hydrocarbon (PAH) concentrations that have been attributed to the presence of coal, coal ash, and wood ash present in the fill and were therefore exempt from MassDEP reporting. The PAHs and metals associated with the urban fill materials is not the subject of this RAM Plan.

The former site buildings have been raised and the property is currently an active construction site. The proposed development for the Site includes the construction of two new commercial buildings; the proposed footprints are shown on Figure 4 in Appendix B.

The Site is located in a mixed use section of Newton, mainly developed with residential and commercial properties. The properties immediately abutting the site to north, south and east are used for commercial purposes; the site abutting to the west is developed with residential apartments.

1.2 Conceptual Site Model

1.2.1 PCBs in Soil

To date, PCB concentrations exceeding the RCS-1 value of 2 ppm have been identified in several test pit locations located across the central portion of the property. PCBs have been identified in site soils at concentrations as high as 340 ppm. Concentrations greater than 2 ppm have been identified at depths ranging from 0 to 1 foot down to 5 to 6 feet below grade. As described in *Section 3* of this submittal, soil borings were advanced at the Site on April 1, 2014, to further delineate PCB impacts at the Site. Based on information contained herein, PCBs in soil have been delineated to concentrations less than 1 ppm. *It should be noted that all soil sample analyses* for PCBs have been completed to date using by USEPA Method 3540C (Soxhlet extraction) and USEPA Method 8082 *as prescribed under TSCA.*

The site has been filled between the late 1920s and 1930s to aid in the development and construction of the two former on-site buildings. Based on field data, the elevated concentrations of PCBs appear to be limited primarily to the areas outside the footprints of the former buildings, as shown in Figure 4. Historically, the 55 Needham Street property (former northerly building) operated in the early 1960s as a paint manufacturing facility and warehouse building. Although this portion of the site is currently improved with incompetent asphalt pavement, it is likely these areas were unpaved during the anticipated timeframe over which the releases most likely occurred.

The elevated PCB concentrations appear indicative of surficial or near surficial releases between the two former site buildings. Based upon field observations and site data, it appears that the potential source of PCBs may be associated with PCB-impacted paint as well as PCB oils that may have been used in the paint manufacturing processes. Evidence of these potential releases has been observed as a layer(s) of yellow paint-impacted soils that are present intermittently throughout the specific PCB release area at the site. Furthermore, our research has revealed no other potential sources of PCBs

at the site. Additionally, in areas where PCB concentrations are low to non-detect, there is an absence of yellow paint evidence in the soil profile.

In an attempt to confirm the connection between the paint and the observed site impacts, a solidified yellow paint sample was submitted for analysis which yielded a total PCB concentration of 50 mg/kg.

The majority of the PCB release limits is limited to areas outside of the former building footprints and was confirmed through additional delineation of the PCB impacts conducted on April 1, 2014. Based on the additional information collected (described in *Section 2.1*) the horizontal extents of the PCB impacts have been delineated at the Site to less than 1 ppm and are limited to the exterior of the former building footprints (north and south limits). The western extent of the impacts appears to be very close to the property boundary as defined by soil boring B-19 and the eastern extent of the impacts PCB impacts is defined by soil boring B-2 and test pit TB-14. The vertical limits are limited to a depth of down to approximately 6 feet below surface grade. PCBs were not detected above the laboratory method detection limits in two soil samples collected from within the PCB source area (B-17 and B-18) at a depth of 7 to 9 feet below grade. Based on the delineation activities completed to date, the dimensions of the PCB-impacted area are approximately 80 feet by 80 feet and limited to a depth of approximately 6 feet below grade.

For the purposes of the proposed TSCA cleanup, the impacted areas at the site exhibiting PCB concentrations in soil at or above 100 ppm are two distinct areas measuring approximately 20 feet long by 20 feet wide by 3 to 4 feet deep, are located within the above-referenced 80 feet by 80 feet area, and are roughly defined by sample locations TB-5, TB-7, B-10, B-11, B-12, B-13, TB-8 and TB-11, as shown on Figure 4.

The assessment plan of the PCB-impacted area has included the collection of 75 samples over an area of 5,800 ft^2. The distribution of PCBs is presented below:

- 75 soil samples collected and analyzed for PCBs from within the delineated PCB-impacted zone
- 2 samples contained PCBs ≥100 ppm (2.6%) - ~800 ft^2 impacted area
- 8 soil samples contained PCBs ≥50 ppm (10.6%)
- 65 soil samples contained PCBs ≤50 ppm (86.6%)
- 24 soil samples contained PCBs >1 ppm and ≤50 ppm (32%)
- 41 soil samples contained PCBs ≤1 ppm (54.6%)

The site is an active construction site and is currently improved with an 8-foot high locked temporary construction chain-link fence that restricts access to the site thereby eliminating potential Imminent Hazard conditions relative to elevated PCB concentrations that may be present in the top 12 inches of soil in central portion of the site. As described later in this submittal, additional conservative measures have been implemented at the site to limit potential exposure to PCB-impacted soil that may be present near the ground surface.

1.2.2 Urban Fill

Urban fill materials have also been identified throughout the site to depths of approximately 6 to 8 feet below grade. This material consists of sand/gravel/silt, coal, coal ash, and wood ash, metal and glass debris, brick and other materials typically observed in urban fill environments. Based upon the site history, the site and abutting properties were filled with urban fill/ash materials. These materials have exhibited

elevated concentrations of Polycyclic Aromatic Hydrocarbons (PAHs), lead, arsenic, cadmium and chromium and are further discussed below in *Section 3*.

Upon evaluation of the data received from the initial site pre-characterization activities, five of the test pit soil samples were submitted for laboratory analysis for pesticides and herbicides in order to comply with one of the selected soil disposal facilities operating permit requirements. The data obtained from those analyses indicated that elevated concentrations of several chlorinated pesticides were detected in three of those samples. Two of those samples exhibited only one pesticide compound at concentrations only slightly above their reporting limits; however, a third sample reported higher concentrations of several pesticide compounds (TP-9). That sample was collected from beneath the former building footprint whereas other two samples with lower pesticide concentrations were collected from the former parking lot area immediately adjacent to the former building footprint.

The two remaining samples exhibited non-detectable concentrations and were collected from site areas further away from either of the former building footprints. Based on an initial screening of those sample data and their collection locations, it appears that the elevated concentrations may be consistent with historical practices of applying pesticides to building footprints as a means of insect control prior to or following building construction. Based on the urban fill soil placement that occurred in the 1920s/1930s and the introduction and use of the chlorinated pesticides in the late 1940's that were detected, the presence of the pesticides has been attributed to the use of pesticides at the site and not associated with the historic placement of anthropogenic urban fill. Pesticide uses that were consistent with their labeling are not MassDEP reportable. TP-9 had elevated pesticides that were higher in concentration than other samples at the site. Although this was observed, we currently have no site indications to suggest that the pesticides at TP-9 were associated with improper pesticides usage. However, additional assessments within this area are proposed. If necessary, subsequent written notification will be provided to MassDEP and additional modifications to this RAM may be made to address additional pesticide response actions that may be warranted.

Tighe&Bond

SECTION 2

Section 2 Site Activities

2.1 Site Construction Activities to Date

Construction activities conducted to date have included the following:

- Demolition of two previous site buildings, including below grade foundations.
- Installation of rammed aggregate piers (RAPs) with the footprint of the two proposed buildings. The RAPs included the installation of stone columns to depths of approximately 15 feet placed approximately 6 feet on-center. Each RAP is about 18 inches in diameter. RAPs displace (through subsurface consolidation) below grade soils and do not generate excess soils.
- Installation of perimeter building foundations for the two proposed buildings. Both buildings will be slab on grade construction. Non PCB Soils generated from the foundation excavation (to an approximate depth of approximately 4 feet below grade) was either placed directly next to the foundation excavation for reuse as backfill or stockpiled on-site. PCB soils encountered during foundation excavation are discussed further herein.

Soils initially excavated from proximity to the identified PCB release area (less than 75 cubic yards) were covered with poly sheeting for further characterization. These soils were initially excavated and stockpiled prior to the knowledge of the PCB release condition. No additional soil excavation from the proximity to the release area occurred until additional soil characterization was completed.

2.2 Initial PCB Release Area Characterization

On March 11, 2014, Rebco, Inc. (the site contractor), under the observation of Tighe & Bond personnel, excavated a total of 11 test pits (TP-1 to To-11) across the site designed to pre-characterize soils that would be excavated during future construction at the site. The pre-characterization data will be used to evaluate and facilitate future off-site disposal of soils that could not be re-used on-site during construction. The location of the 11 test pits is shown on Figure 4 in Appendix B.

Materials encountered at the site generally included urban fill at depths ranging from zero to approximately 8 feet below surface grade. A layer of peat approximately 1.5 feet in thickness underlies the fill. Beneath the peat is a layer of clayey silt that extends to at least 15 feet below grade. The urban fill generally appeared uniform in nature and consisted of coal/coal ash, glass, and metal debris intermixed with fine sand and silt.

Eight composite soil samples were submitted from the 11 test pits, based on their distribution across the site. The soil samples were submitted to Alpha Analytical Labs of Westborough, Massachusetts for total petroleum hydrocarbon (TPH), extractable petroleum hydrocarbon (EPH), semi-volatile organic compound (SVOC), volatile organic compound (VOC), Resource Conservation and Recovery Act (RCRA) Metals and PCB analysis. Analytical results are summarized in Table 1 in Appendix C.

Reportable concentrations of PCBs, greater than 2 ppm, were identified in samples S-3 (61.2 ppm) collected from TP-5, S-4 (6.01 ppm) collected from TP-6 and S-8 (12.3

ppm) collected from TP-11. In addition, low levels of PCBs (below 1 ppm) were identified in the remaining five samples.

Analytical results indicated elevated metals and PAH concentrations that have been attributed to the presence of coal and coal ash present in the urban fill. A TPH concentration of 1,260 ppm was identified in sample S-1, exceeding the RCS-1 value of 1,000 ppm, however, this sample was also submitted for EPH analysis and the neither the C_{11}-C_{22} aromatic hydrocarbon, the C_{19}-C_{36} aliphatic hydrocarbon nor the C_9-C_{18} aliphatic hydrocarbon concentration, exceeded the individual RCS-1 values. Therefore, the identified TPH concentration is not considered reportable to MassDEP. No other RCS-1 exceedences were identified in the eight samples collected from the site on March 11, 2014.

Based on the initial discovery of PCB concentrations exceeding the RCS-1 values, 17 additional test pits (TB-1 to TB-14, TP-5A, TP-6A, and TP-11A) were completed at the site on March 21, 2014 by Rebco, Inc. under the observation of Tighe & Bond personnel. The excavation of the additional test pits was completed to further delineate the extent of the PCB impacts at the site. The locations of the test pits are shown on Figure 4 in Appendix B; complete PCB analytical results are summarized in Table 2 in Appendix B.

Three test pits, TP-5A, TP-6A and TP-11A, were excavated in the immediate area of test pits TP-5, TP-6 and TP-11, respectively, to further characterize the reportable PCB concentrations at smaller depth intervals. Soil samples were collected from these three locations at 1 foot intervals in order to establish a vertical profile of PCB concentrations in soil. In addition to these three test pits, 15 additional test pits TB-1 through TB-14 were excavated in the areas surrounding TP-5A, TP-6A and TP-11A. The locations of these test pits are shown on Figure 4 in Appendix B.

These supplemental data also support the fact that PCB concentrations above 1 ppm are not present in urban fill materials located outside of the central PCB release area. Initial sampling was completed via the collection of large depth composite samples (0 to 7 feet) that were initially observed to have detectable PCBs less than 1 ppm. The supplemental sampling and analyses confirm that PCB concentrations were not diluted out in other site samples collected (for example, TB-1 results as compared to the abutting composite TP-4 results).

Soil samples from TB-1 through TB-14, were collected from 1 to 3 feet and 4 to 6 feet below grade to further define the extent of PCBs at the site. PCB concentrations less than 1 ppm were identified in several test pit locations including TB-1, TB-4, TB-9, TB-13 and TB-14. These 5 locations are located on the south and east sides of the areas of elevated PCB concentrations and serve to help define the horizontal extent of the PCB impacts at the site.

TB-15 was collected from the sidewall (1-3 feet) and base (4-6 feet) of the foundation excavation that was initiated for the building. PCBs were not detected at the TB-15 sample location.

2.3 Supplemental PCB Release Area Characterization

On April 1, 2014, Technical Drilling Services of Sterling, Massachusetts under the observation of Tighe & Bond advanced 19 soil borings (B-1 through B-19) at the Site to further delineate the PCB impacts to Site soil. Two of the soil borings B-17 and B-18

were completed as temporary groundwater monitoring wells (B-17/OW and B-18/OW). The soil boring locations are shown on Figure 4 included in Appendix B.

Select soil samples were submitted to Con-Test Analytical Laboratory for PCB analysis by USEPA Method 3540C (Soxhlet extraction) and USEPA Method 8082. The results are shown on Table 2 in Appendix C. A complete laboratory analytical report is included in Appendix D. Based on the results of the additional soil samples sent for PCB analysis, the vertical and horizontal extents of the PCB impacts have been delineated to less than 1 ppm.

A summary of the delineation samples is included below;

- North – B-13, B-14 and TB-15
- South – TB-4, TB-9, and B-3
- East - TB-13, TB-14, B-2 and B-4
- West – TB-1 and B-19
- Vertical – the 7 to 9 foot samples submitted from B-17 and B-18

In addition, two groundwater samples were collected from temporary groundwater monitoring wells B-17/OW and B-18/OW. Those groundwater data indicated that PCBs were not detected above the minimum laboratory method detection limits in either groundwater sample collected form the site. The complete groundwater analytical data report is included in Appendix D.

2.4 Initial Soil Excavation

As stated in the initial *RAM Plan*, soils were initially excavated from proximity to the identified PCB release area (less than 75 cubic yards) and were covered with 6-mil poly sheeting for further characterization. These soils were initially excavated and stockpiled prior to the knowledge of the PCB release condition.

On April 2, 2013, the site contractor, under the observation of Tighe & Bond personnel, completed initial limited soil excavation activities to excavate for the balance of the foundation area that was in proximity of the identified PCB release area. The soil generated during the RAM excavation was added to the existing stockpiled soil on-site and covered with 6-mil poly-sheeting.

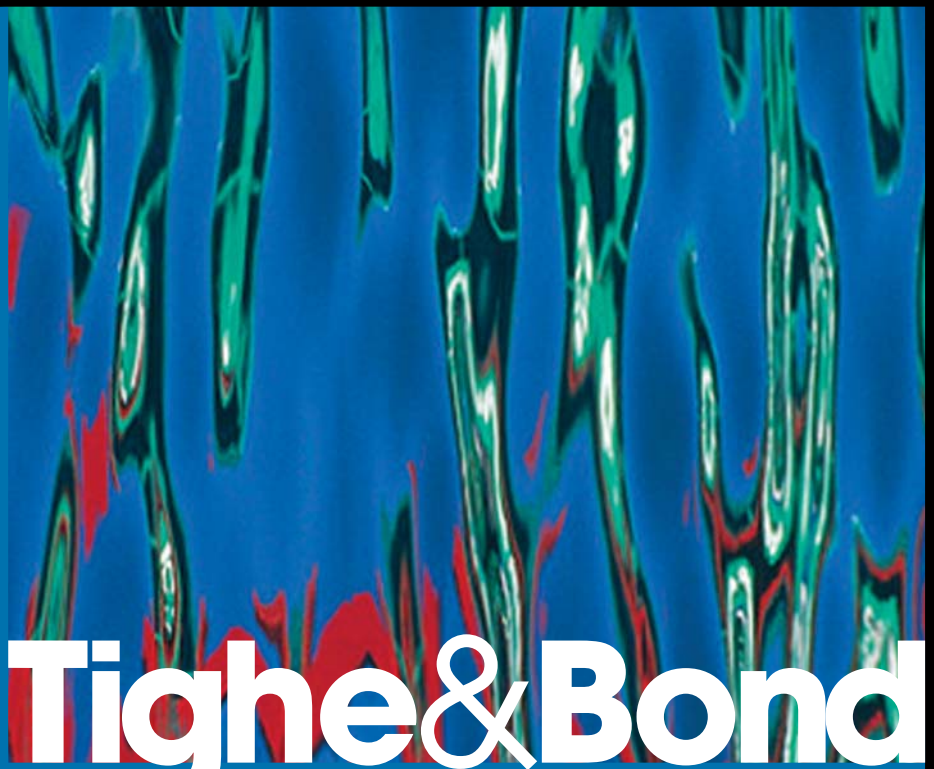
2.5 Excavation of PCB-Impacted Soil within the Foundation of Building 1

Additional limited soil excavation was completed within the footprint of Building 1 on April 5, 2014. The excavation of PCB-impacted soil was completed in accordance with *RAM Plan Modification 1*. The soils were moist due to recent precipitation and migration of dust was not observed during the limited excavation. At the completion of soil excavation, two post-excavation soil samples (PX-1 and PX-2) were collected from the base of the excavation at a depth of approximately 4-5 feet below surface grade. Soil sample locations are shown on Figure 4. Those samples were submitted for laboratory analysis for PCBs; analytical data is summarized in Table 2 in Appendix C. The additional RAM excavation was conducted to remove the remaining PCB-impacted soil from within the footprint of Building 1 that was identified from the samples collected from B-1. The goal was to limit the remaining PCB impacts to areas outside of the footprints of the proposed new buildings at the site and within the proposed cap area. The extents of the PCB impacts in the area to be occupied by the Building No. 1 footprint

have been confirmed by data from soil samples B-2, B-3, B-4 PX-1 and PX-2. Based on samples collected to date, residual PCB impacts above 1 ppm are not present within or beneath the proposed Building 1 footprint. The soil excavated from within the building footprint was placed inside the PCB impact area adjacent to the exterior of northeastern foundation wall of Building 1 and within the existing PCB soil stockpile.

2.6 Temporary Ground Cover

The PCB-impacted areas of the Site are limited to the central portion of the site as shown on Figure 4 in Appendix B. This area is currently used as an access way for construction equipment during site redevelopment. The majority of this area is covered with a cracked asphalt layer and gravel/stone that remained after the demolition of the former site buildings and installation of nearby rammed aggregate pier (RAP) stone foundations. The PCB impacted area was covered with filter fabric and 4 inches of stone/gravel on April 7, 2014 as part of the April 4, 2014 *RAM Plan Modification*. The addition of the fabric and stone will prevent potential contact with near-surface PCB-impacted soils at the Site during routine construction activities being conducted at the site.



Tighe&Bond

SECTION 3

Section 3
Release Abatement Measure Plan Modification / TSCA Cleanup Plan

The objectives under this *RAM Modification* and TSCA Cleanup Plan are the excavation and management of urban fill materials PCB-impacted soils and capping of the PCB-impacted soil release area.

3.1 Proposed PCB-Impacted Soil Excavation and Verification Sampling

Based on the delineation data we have obtained from the site, the greater PCB impacts, (measured by PCB concentrations in soil above 100 ppm), are located in the north-central portions of the PCB-impacted area. The majority of the PCB-impacted area has PCBs that are less than 50 ppm. Soil with concentrations of PCBs greater than 100 ppm will be excavated and disposed of off-site in a TSCA chemical waste landfill per §761.75.

The 100 ppm area is defined by soil samples collected from TB-6 at a depth of 1 to 3 feet and B-12 at a depth of 1 to 3 feet. Soil samples collected from areas outside this perimeter contain significantly lower PCB concentrations. These two discrete areas will be excavated separately, and based on the sample spacing and the analytical results of neighboring samples; each area is expected to be approximately 20 feet long by 20 feet wide and approximately 3 to 4 feet deep. Each area will likely account for approximately 50 cubic yards. Soils excavated from these areas are anticipated to be disposed at Model City, New York; a TSCA chemical waste landfill facility. The total volume if PCB-impacted soil in excess of 100 ppm comprises approximately 100 cubic yards, or roughly 150 tons.

Upon completion of the excavation activities in this area, post-excavation verification soil samples will be collected. Four base samples will be collected from the from the 3 to 4 foot range throughout the base of each of the completed excavations. Approximately eight soil samples will be collected from along the sidewalls from the 1 to 2 feet depth interval at a spacing frequency of one sample per 10 feet of excavation sidewall. Those samples will be submitted for laboratory analysis for PCBs by USEPA Method 3540C (Soxhlet extraction) and USEPA Method 8082.

Once confirmation is received that soil concentrations are less than 100 ppm, the excavation will be backfilled with a portion of the current low-level PCB-impacted soil currently stockpiled on-site. The soils in that stockpile have been excavated from other areas of the site that have documented PCB concentrations less than 50 ppm. In addition, a composite soil sample was collected from the existing stockpile which reported a total PCB concentration of 4.5 ppm. It is expected that a portion of the PCB soil stockpile that cannot be reused on-site will require off-site removal and disposal.

Based on our knowledge and direct observation of where the existing PCB soil stockpile was generated (less than 50 ppm site areas from sample areas TB-12, B-1, and interior of Building 1 excavation) and the stockpile containing PCBs well below 50 ppm PCBs, this stockpile is proposed to managed at a non-TSCA Subtitle D landfill per 40 CFR 761.61(a)(5)(v)(A)(1). The anticipated landfill is Turnkey located in Rochester, New Hampshire.

Within the PCB-impacted area, certain site utilities are proposed including site drainage, water and electric. The majority of these utilities will be installed at depths of approximately 3 to 4 feet. The majority of the soils excavated will be returned to the excavation with little to no excess soils to be generated associated with the proposed water, electric, and natural gas utilities.

It is expected that excess soils will be generated as part of the proposed drainage lines/catch basin and drain manhole to be installed within the PCB impacted area, as shown on Figure 5. The main drainage line traverses the center of the PCB impacted area (east-west direction) and along the westerly limits of the PCB impacted area (north-south traverse line). Based on sampling completed to date, PCB soils within the proposed drainage corridors are less than 50 ppm.

Excess soils that cannot be returned to the drainage utility trenches noted above will be stockpiled for further facility acceptance characterization. Since these excess soils will have been generated from known areas that contained PCBs less than 50 ppm, these soils will be managed in a non-TSCA Subtitle D landfill per 40 CFR 761.61(a)(5)(v)(A)(1).

It is estimated that less than 200 cubic yards (300 tons) total of excess PCB soils with concentrations less than 50 ppm will be generated during drainage utility trenching and from the existing stockpile that will require off-site removal.

3.2 Dust Monitoring and Control Measures

Dust (particulate) monitoring will be conducted during the commencement of excavation activities to determine the potential for off-site migration of airborne dust particles. Monitoring will be conducted using an aerosol monitor capable of real-time readings and measurement of airborne particulate matter ranging between the 0.1 to 10 micron sizes. Following the initial monitoring event, given that no off-site migration potential exists, periodic monitoring will be conducted for the duration of the excavation activities or upon a significant change in site conditions. Tighe & Bond will use the National Ambient Air Quality Criteria of 0.15 milligrams-per-cubic-meter (mg/m^3) over a period of 24-hours as the action level for the site. If elevated particulate readings are identified, additional dust control options will be evaluated at that time. The options that could be considered include wet suppression, application of soil stabilization agents, or other measures to control dust generated by construction activities.

3.3 PCB Capping Design and Implementation

Upon satisfactory completion of the soil excavation activities in the PCB area, an impervious asphalt and concrete cap will be installed to limit potential exposure to the PCB-impacted soils to remain in place on-site.

The cap design includes a base layer of woven/non-biodegradable geotextile fabric installed on top of the PCB-impacted soils overlain with 12 inches of sub-base gravel. At the 6-inch interval within the gravel, a warning barrier consisting of orange construction fencing to serve as a warning material will be placed to alert potential future workers of the presence of buried hazards. The cap will be finished with a 6-inch layer of bituminous asphalt pavement or 6 inches of concrete. The cap will extend approximately 10 feet horizontally beyond the PCB-impacted soil area in paved portions

of the capped area; the cap limits and construction details are shown on Figures 4 and 5. The proposed cap is in accordance with 40 CFR 761.61(a)(7).

This RAM capping activity is being implemented at a site where new building construction is proposed adjacent to areas where PCB-impacted soils are present. Based on the removal of PCB soil from within the limits of the proposed buildings, building construction over PCB soils is not currently being performed, therefore compliance with 310 CMR 40.0442(3) is not necessary.

3.4 PCB Soil Volume Management Contingency

Since the proposed PCB remedy includes removal of PCBs greater than 100 ppm from two small areas of the impacted zone, it is not expected that the verification sampling will identify additional PCB soils above 100 ppm. If the quantity of excess PCBs soils less than 50 ppm greatly exceeds the estimates above, consideration may be given to excavating non-PCB urban fill adjacent to the PCB impacted zone to allow for the on-site placement of the PCB soils, followed by an expansion of the cap limits. If this situation is identified, we will notify the EPA to discuss a potential modification to the closure strategy.

3.5 Remediation Waste Management

The contractor will be required to adhere to the following provisions regarding waste management:

- Secure, lined and covered waste containers will be utilized for the collection of PCB wastes generated during the work activities in accordance with 40 CFR 761.65;
- All containers will be properly labeled and marked in accordance with 40 CFR 761.40;
- PCB wastes will be transported from the Site in accordance with applicable Department of Transportation Regulations under appropriate waste shipment documentation; and
- Copies of manifests, waste shipment records and certificates of disposal will be compiled and submitted as part of the final report to EPA.

3.6 Health & Safety Plan

Work completed under the RAM/TSCA Cleanup Plan will be completed in accordance with the Site-Specific Health and Safety Plan prepared by the site contractor to conform with 310 CMR 40.0018. Health and safety activities will include, but will not be limited to, the following:

- Installing fencing and posting signage to establish the exclusion zone work area
- Dust monitoring will be completed at upwind and downwind perimeter locations
- Application of dust suppression and control measures as needed to maintain the air quality below established dust standards

- Other typical health and safety protocols conducted during remediation activities, such as use of personal protective equipment to protect remediation workers and localized dust monitoring

3.7 AUL / TSCA Deed Restriction

Once the excavation and capping activities have been completed, Tighe & Bond will prepare, submit and record an Activity and Use Limitation (AUL) / TSCA Deed Restriction for the property to comply with both the MCP and EPA requirements for deed restrictions. As a conservative measure the area of the property to be covered under the AUL / TSCA Deed Restriction will extend well beyond the capped area. The approximate boundaries of the area to be covered under the deed restriction are shown on Figure 4 in Appendix B.

The deed restriction documents will be recorded at the Registry of Deeds in Middlesex County as well as with MassDEP as part of the Response Action Outcome (RAO) Statement to be prepared for the site upon completion of MCP activities and with the EPA.

3.8 Equipment Decontamination

Construction equipment that will come in contact with PCB-impacted materials will be decontaminated in accordance with 40 CFR 761.79(c
2) by swabbing the potentially contaminated surfaces (i.e., excavator tracks, excavator buckets) with a PCB soluble solvent and wipes. Prior to decontamination, any visible dust/debris on the equipment will first be removed.

As an alternative to 40 CFR761.79(c)(2), verification sampling through a standard wipe test per 40 CFR 761.79(b)(3) may be performed on equipment that visible debris has been removed. The unrestricted use standard for decontaminated equipment is ≤10 µg/100 cm^2.

3.9 Recordkeeping and Documentation

Following completion of the remediation activities, records and documents required by 40 CFR 761 will be generated, compiled at one location and made available to EPA if requested. A final report documenting the completion of remediation activities will be prepared for submittal to EPA within 60 days of recording of the final AUL/TSCA deed notice. The report will include a description of the work activities, verification analytical results, volumes of disposed materials and waste disposal documentation.

3.10 Urban Fill Impacts, Excavation and Management (non TSCA)

During the initial soil pre-characterization activities completed at the site, significant quantities of ash and urban fill were observed in the top 6 feet of soil at the site. The materials consisted of coal and wood ash, metal and glass debris, brick and other assorted anthropogenic materials common in urban fill but unrelated to municipal waste. Samples collected from these materials exhibited elevated concentrations of PAHs, lead, arsenic, cadmium and chromium above the RCS-1 Criteria. It should be noted that additional Total Characteristic Leaching Procedure (TCLP) analyses were performed on

the samples exhibiting metals concentrations over the hazardous waste 20x rule. Further, additional analyses were performed on the soil sample that exhibited elevated chromium concentrations to confirm that hexavalent chromium was not present at elevated concentrations above applicable standards. These data are presented in Table 1 in Appendix C.

Based on the observations made throughout the site, the presence of the PAHs, lead arsenic, cadmium and chromium can be considered exempt from the reporting requirements under the MCP in accordance with 310 CMR 40.0317(9) and the MassDEP's technical guidance document entitled *Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil* published in 2002. This exemption is being applied across the site with the exception of a limited area of soil that exhibited 160 ppm of arsenic in the vicinity of test pits TP-1 and TP-2. PAHs, lead, cadmium and chromium were all reported at concentrations that are consistent with their respective detected ranges that are commonly observed in urban fill materials. Although the constituents of the ash vary, the ashy material is consistently present as deep as 6 feet below grade throughout the site.

The area of TP-1/TP-2 is proposed to be excavated for the installation of site drainage utilities. During this excavation, a portion of the area contains elevated arsenic and is initially estimated to encompass approximately 40 feet long by 40 feet wide by 6 feet deep and accounts for approximately 350 cubic yards, or roughly 440 tons. Soils from this area are anticipated to be managed at the Waste Management Turnkey landfill in Rochester, NH. Soils will be shipped under a BWSC bill-of-lading (BOL).

Upon completion of the excavation activities, post excavation soil samples will be collected and analyzed for lead and arsenic. Although lead is being considered exempt from reporting, we are documenting concentrations that will remain upon completion of the RAM activities. The excavation limits at this location is defined by the limits necessary to install the site utilities. Elevated metals that remain will be documented in Response Action Outcome as conditions that are associated with anthropogenic background fill. The attached Revised RNF identifies the arsenic detections as an additional compound of concern for this site.

As noted, the remaining areas of documented urban fill outside the current PCB and arsenic disposal site boundaries established herein are considered exempt in accordance with 310 CMR 40.0317(9) and will be managed outside of the MCP and this RAM Plan. The detection of pesticides at TP-9 will be further evaluated and management of soils from this location are not currently part of the RAM. Excavated urban fill soils (non PCB and non-elevated arsenic) soils will be transported off-site under Material Shipping Record (MSR) to an approved facility for disposal.

3.11 Required Federal, State and Local Permits

This PCB-impacted area is subject to TSCA, and this plan is being submitted to satisfy the notification requirements under 40 CFR 761.61(a) and (c) for PCB Cleanup and Risk-Based Closure.

The written certification required by §761.61(a)(3)(E) is included below.

As required by 40 CRF 761.61(c)(1) and 40 CFR 761.61(a)(3), a written certification, signed by the owner of the property where the cleanup 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 and are available for EPA review with:

Needham Street Village Shops, LLC
420 Bedford Street
Lexington, MA 02420
(781) 863-1800

Signature

Printed C. Russell DeMartino

Date 4/18/14

3.12 Implementation Schedule

The implementation schedule for the RAM Modification/TSCA PCB Cleanup Plan is presented below:

April to May 2014 – Excavate PCB-impacted soils from the PCB area and urban fill excavation activities.

May 2014 – Utility installations.

June to July 2014 – Construction of the cap for the PCB-impacted area.

J:\B\B0631 Bierbrier Development, 71 Needham St\Reports_Environmental\RAM PLAN\April 14 2014 RAM Modification-EPA Report\RAM Modification.doc

Tighe&Bond

APPENDIX A

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
RELEASE NOTIFICATION & NOTIFICATION RETRACTION FORM
Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

BWSC 103

Release Tracking Number
3 - 32062

A. RELEASE OR THREAT OF RELEASE LOCATION:

1. Release Name/Location Aid: 55 - 71 NEEDHAM STREET
2. Street Address: 55 - 71 NEEDHAM STREET
3. City/Town: NEWTON 4. Zip Code: 024610000
5. Coordinates: a. Latitude: N 4687170 b. Longitude: W 317788

B. THIS FORM IS BEING USED TO: (check one)

☐ 1. Submit a **Release Notification**

☑ 2. Submit a **Revised Release Notification**

☐ 3. Submit a **Retraction of a Previously Reported Notification** of a release or threat of release including supporting documentation required pursuant to 310 CMR 40.0335 (Section C is not required)

(All sections of this transmittal form must be filled out unless otherwise noted above)

C. INFORMATION DESCRIBING THE RELEASE OR THREAT OF RELEASE (TOR):

1. Date and time of Oral Notification, if applicable: _____ (mm/dd/yyyy) Time: _____ (hh:mm) ☐ AM ☐ PM
2. Date and time you obtained knowledge of the Release or TOR: 3/15/2014 (mm/dd/yyyy) Time: 05:00 (hh:mm) ☐ AM ☑ PM
3. Date and time release or TOR occurred, if known: _____ (mm/dd/yyyy) Time: _____ (hh:mm) ☐ AM ☐ PM

Check all Notification Thresholds that apply to the Release or Threat of Release:
(for more information see 310 CMR 40.0310 - 40.0315)

4. 2 HOUR REPORTING CONDITIONS	5. 72 HOUR REPORTING CONDITIONS	6. 120 DAY REPORTING CONDITIONS
☐ a. Sudden Release	☐ a. Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/2 Inch (.04 feet)	☑ a. Release of Hazardous Material(s) to Soil or Groundwater Exceeding Reportable Concentration(s)
☐ b. Threat of Sudden Release	☐ b. Underground Storage Tank (UST) Release	☐ b. Release of Oil to Soil Exceeding Reportable Concentration(s) and Affecting More than 2 Cubic Yards
☐ c. Oil Sheen on Surface Water	☐ c. Threat of UST Release	☐ c. Release of Oil to Groundwater Exceeding Reportable Concentration(s)
☐ d. Poses Imminent Hazard	☐ d. Release to Groundwater near Water Supply	☐ d. Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/8 Inch (.01 feet) and Less than 1/2 Inch (.04 feet)
☐ e. Could Pose Imminent Hazard	☐ e. Substantial Release Migration	
☐ f. Release Detected in Private Well		
☐ g. Release to Storm Drain		
☐ h. Sanitary Sewer Release (Imminent Hazard Only)		

C. INFORMATION DESCRIBING THE RELEASE OR THREAT OF RELEASE (TOR): (cont.)

7. List below the Oils (O) or Hazardous Materials (HM) that exceed their Reportable Concentration (RC) or Reportable Quantity (RQ) by the greatest amount.

☐ Check here if an amount or concentration is unknown or less than detectable.

O or HM Released	CAS Number, if known	O or HM	Amount or Concentration	Units	RCs Exceeded, if Applicable (RCS-1, RCS-2,RCGW-1, RCGW-2)
POLYCHLORINATED BIPHENYLS (PCBS)		HM	340	PPM	RCS-1
ARSENIC		HM	160	PPM	RCS-1

☐ Check here if a list of additional Oil and Hazardous Materials subject to reporting, or any other documentation relating to this notification is attached.

D. PERSON REQUIRED TO NOTIFY:

1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person notifying

2. Name of Organization: NEEDHAM STREET VILLAGE SHOPS LLC

3. Contact First Name: C. RUSSEL 4. Last Name: DEMARTINO

5. Street: 420 BEDFORD STREET 6. Title:

7. City/Town: LEXINGTON 8. State: MA 9. ZIP Code: 024200000

10. Telephone: 7818637800 11. Ext.: 12. Email:

☐ 13. Check here if attaching names and addresses of owners of properties affected by the Release or Threat of Release, other than an owner who is submitting this Release Notification (required).

E. RELATIONSHIP OF PERSON TO RELEASE OR THREAT OF RELEASE: ☐ Check here to change relationship

☑ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☑ e. Other RP or PRP Specify: OTHER PRPS

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E. s. 5(j))

☐ 4. Any Other Person Otherwise Required to Notify Specify Relationship:

F. CERTIFICATION OF PERSON REQUIRED TO NOTIFY:

1. I, _____, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: _____ (Signature) 3. Title: _____

4. For: NEEDHAM STREET VILLAGE SHOPS LLC (Name of person or entity recorded in Section D) 5. Date: _____ mm/dd/yyyy

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section D.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. Email: _____

YOU ARE SUBJECT TO ANNUAL COMPLIANCE ASSURANCE FEES FOR EACH BILLABLE YEAR FOR TIER CLASSIFIED DISPOSAL SITES. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

RELEASE ABATEMENT MEASURE (RAM) TRANSMITTAL FORM
Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

BWSC 106

Release Tracking Number
3 - 32062

A. SITE LOCATION:

1. Site Name/Location Aid: 55 - 71 NEEDHAM STREET

2. Street Address: 55 - 71 NEEDHAM STREET

3. City/Town: NEWTON 4. Zip Code: 024610000

☐ 5. Check here if the disposal site that is the source of the release is Tier Classified. Check the current Tier Classification Category.

☐ a. Tier I ☐ b. Tier ID ☐ c. Tier II

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of Initial RAM Plan (if previously submitted): 4/1/2014 (mm/dd/yyyy)

☐ 2. Submit an **Initial Release Abatement Measure (RAM) Plan**.

☐ a. Check here if the RAM is being conducted as part of the construction of a permanent structure. If checked, you must specify what type of permanent structure is to be erected in or in the immediate vicinity of the area where the RAM is to be conducted.

b. Specify type of permanent structure: (check all that apply) ☐ i. School ☐ ii. Residential ☐ iii. Commercial

☐ iv. Industrial ☐ v. Other Specify:

☑ 3. Submit a **Modified RAM Plan** of a previously submitted RAM Plan.

☐ 4. Submit a **RAM Status Report**.

☐ 5. Submit a **Remedial Monitoring Report**. (This report can only be submitted through eDEP, concurrent with a RAM Status Report.)

a. Type of Report: (check one) ☐ i. Initial Report ☐ ii. Interim Report ☐ iii. Final Report

b. Frequency of Submittal:

☐ i. A Remedial Monitoring Report(s) submitted every six months, concurrent with a RAM Status Report.

☐ ii. A Remedial Monitoring Report(s) submitted annually, concurrent with a RAM Status Report.

c. Number of Remedial Systems and/or Monitoring Programs:

A separate BWSC106A, RAM Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.

☐ 6. Submit a **RAM Completion Statement**.

☐ 7. Submit a **Revised RAM Completion Statement**.

8. Provide Additional RTNs:

☐ a. Check here if this RAM Submittal covers additional Release Tracking Numbers (RTNs). RTNs that have been previously linked to a Primary Tier Classified RTN do not need to be listed here. This section is intended to allow a RAM to cover more than one unclassified RTN and not show permanent linkage to a Primary Tier Classified RTN.

b. Provide the additional Release Tracking Number(s) covered by this RAM Submittal. ☐ - ☐ ☐ - ☐

☐ 9. Submit a **Plan for the Application of Remedial Additives** near a sensitive receptor. pursuant to 310 CMR 40.0046(3).

(All sections of this transmittal form must be filled out unless otherwise noted above)

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT RAM:

1. Media Impacted and Receptors Affected: (check all that apply)

☐ a. Paved Surface ☐ b. Basement ☐ c. School
☐ d. Public Water Supply ☐ e. Surface Water ☐ f. Zone 2 ☐ g. Private Well ☐ h. Residence ☑ i. Soil
☐ j. Ground Water ☐ k. Sediments ☐ l. Wetland ☐ m. Storm Drain ☐ n. Indoor Air ☐ o. Air
☐ p. Soil Gas ☐ q. Sub-Slab Soil Gas ☐ r. Critical Exposure Pathway ☐ s. NAPL ☐ t. Unknown
☐ u. Others Specify: _____

2. Sources of the Release or TOR: (check all that apply)

☐ a. Transformer ☐ b. Fuel Tank ☐ c. Pipe
☐ d. OHM Delivery ☐ e. AST ☐ f. Drums ☐ g. Tanker Truck ☐ h. Hose ☐ i. Line
☐ j. UST Describe: _____ ☐ k. Vehicle ☐ l. Boat/Vessel
☑ m. Unknown ☐ n. Other: _____

3. Type of Release or TOR: (check all that apply)

☐ a. Dumping ☐ b. Fire ☐ c. AST Removal ☐ d. Overfill
☐ e. Rupture ☐ f. Vehicle Accident ☐ g. Leak ☐ h. Spill ☐ i. Test Failure ☐ j. TOR Only
☐ k. UST Removal Describe: _____
☑ l. Unknown ☐ m. Other: _____

4. Identify Oils and Hazardous Materials Released: (check all that apply)

☐ a. Oils ☐ b. Chlorinated Solvents
☑ c. Heavy Metals ☑ d. Others Specify: POLYCHLORINATED BIPHENYLS (PCBS)

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulative amounts)

☑ 1. Assessment and/or Monitoring Only
☑ 2. Temporary Covers or Caps
☐ 3. Deployment of Absorbent or Containment Materials
☐ 4. Temporary Water Supplies
☐ 5. Structure Venting System/HVAC Modification System
☐ 6. Temporary Evacuation or Relocation of Residents
☐ 7. Product or NAPL Recovery
☐ 8. Fencing and Sign Posting
☐ 9. Groundwater Treatment Systems
☐ 10. Soil Vapor Extraction
☐ 11. Remedial Additives
☐ 12. Air Sparging
☐ 13. Active Exposure Pathway Mitigation System
☐ 14. Passive Exposure Pathway Mitigation System
☐ 15. Monitored Natural Attenuation
☐ 16. In-Situ Chemical Oxidation

D. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply, for volumes list cumulative amounts)

☑ 17. Excavation of Contaminated Soils

☐ a. Re-use, Recycling or Treatment ☐ i. On Site Estimated volume in cubic yards _____

☐ ii. Off Site Estimated volume in cubic yards _____

iia. Receiving Facility: _____ Town: _____ State: _____

iib. Receiving Facility: _____ Town: _____ State: _____

iii. Describe: _____

☐ b. Store ☐ i. On Site Estimated volume in cubic yards _____

☐ ii. Off Site Estimated volume in cubic yards _____

iia. Receiving Facility: _____ Town: _____ State: _____

iib. Receiving Facility: _____ Town: _____ State: _____

☑ c. Landfill ☐ i. Cover Estimated volume in cubic yards _____

Receiving Facility: _____ Town: _____ State: _____

☑ ii. Disposal Estimated volume in cubic yards 750

Receiving Facility: FITCHBURG LANDFILL Town: WESTMINSTER State: MA

☐ 18. Removal of Drums, Tanks or Containers:

a. Describe Quantity and Amount: _____

b. Receiving Facility: _____ Town: _____ State: _____

c. Receiving Facility: _____ Town: _____ State: _____

☐ 19. Removal of Other Contaminated Media:

a. Specify Type and Volume: _____

b. Receiving Facility: _____ Town: _____ State: _____

c. Receiving Facility: _____ Town: _____ State: _____

☑ 20. Other Response Actions:

Describe: ADDITIONAL LANDFILL INFO FROM D.17.C, 100 CUBIC YARDS OF SOIL TO MODEL CITY, YOUNGSTOWN, NY

☐ 21. Use of Innovative Technologies:

Describe: _____

E. LSP SIGNATURE AND STAMP :

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B of this form indicates that a **Release Abatement Measure Plan** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Release Abatement Measure Status Report** and/or **Remedial Monitoring Report** is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply (ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Release Abatement Measure Completion Statement** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal:

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #:	5211				
2. First Name:	MARC J	3. Last Name:	RICHARDS		
4. Telephone:	5084719642	5. Ext.:		6. Email:	MJRichards@tigheBond.
7. Signature:					
8. Date:	(mm/dd/yyyy)	9. LSP Stamp:			

F. PERSON UNDERTAKING RAM:

1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions

2. Name of Organization: NEEDHAM STREET VILLAGE SHOPS LLC

3. Contact First Name: C. RUSSEL 4. Last Name: DEMARTINO

5. Street: 420 BEDFORD STREET 6. Title:

7. City/Town: LEXINGTON 8. State: MA 9. ZIP Code: 024200000

10. Telephone: 7818637800 11. Ext.: 12. Email:

G. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING RAM:

☐ Check here to change relationship

☑ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☑ e. Other RP or PRP Specify: OTHER PRPS

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ 4. Any Other Person Undertaking RAM Specify Relationship:

H. REQUIRED ATTACHMENT AND SUBMITTALS:

☐ 1. Check here if any Remediation Waste, generated as a result of this RAM, will be stored, treated, managed, recycled or reused at the site following submission of the RAM Completion Statement. You must submit a Phase IV Remedy Implementation Plan along with the appropriate transmittal form (BWSC108).

☐ 2. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

☑ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the implementation of a Release Abatement Measure.

☐ 4. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to bwsc.edep@state.ma.us.

☐ 5. If a RAM Compliance Fee is required for this RAM, check here to certify that a RAM Compliance Fee was submitted to DEP, P. O. Box 4062, Boston, MA 02211.

☑ 6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

RELEASE ABATEMENT MEASURE (RAM) TRANSMITTAL FORM
Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

BWSC 106

Release Tracking Number
3 - 32062

I. CERTIFICATION OF PERSON UNDERTAKING RAM:

1. I, _____, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: _____ (Signature) 3. Title: PROJECT MANAGER

4. For: NEEDHAM STREET VILLAGE SHOPS LLC (Name of person or entity recorded in Section F) 5. Date: _____ (mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section F.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. Email: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE

Date Stamp (DEP USE ONLY:)

Tighe&Bond

APPENDIX B

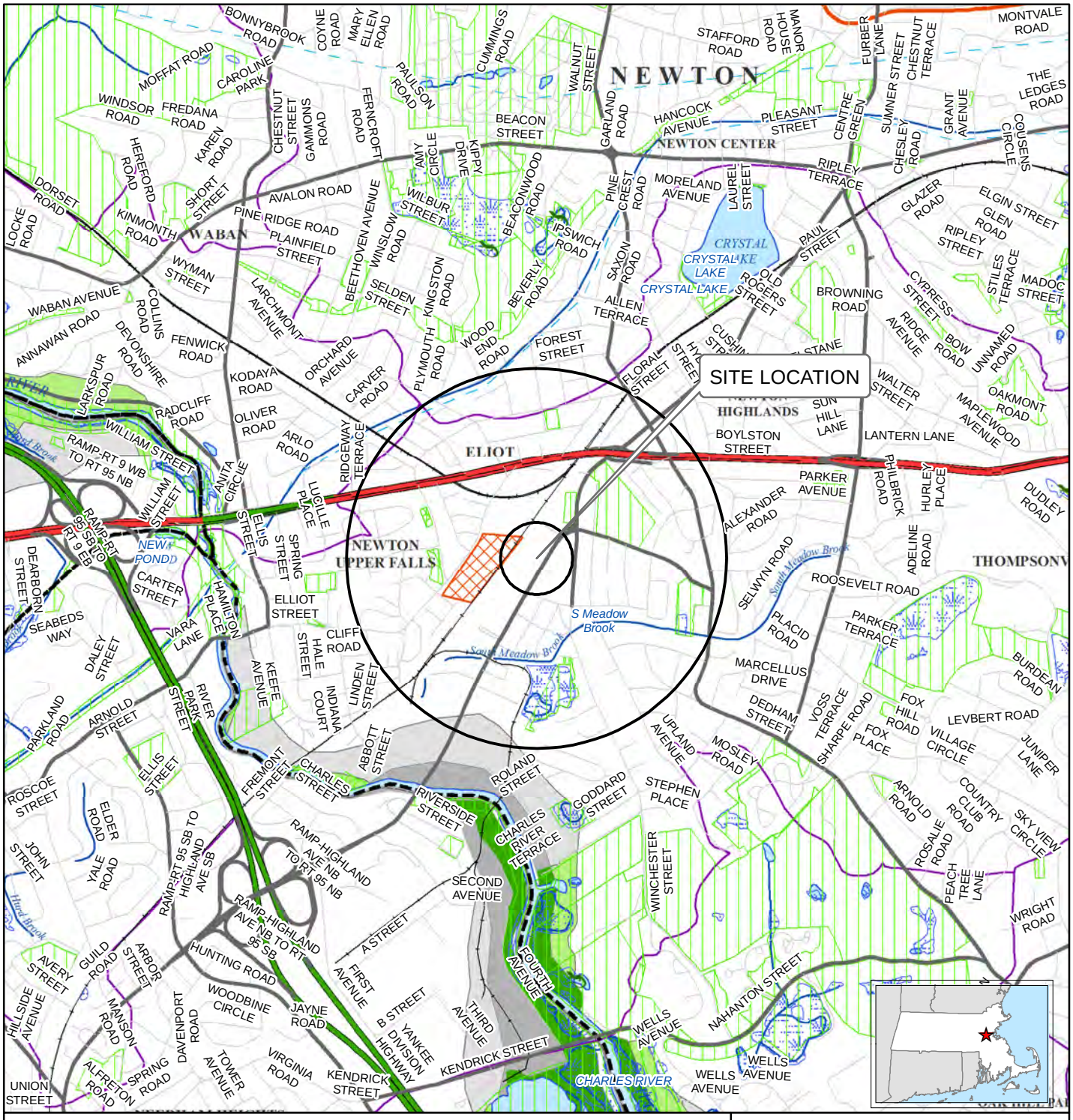
FIGURE 1
SITE LOCATION MAP

Needham Street Village Shops, LLC
55-71 Needham Street
Newton, Massachusetts
MassDEP RTN 3-32062

April 2014

G:\GIS\MA\SiteLocus\Newton\topo_55-71NeedhamSt.mxd

B-0631



LEGEND

- NHESP Certified Vernal Pools
- Community Public Water Supply - Surface Water
- Community Public Water Supply - Groundwater
- Non-Community Non-Transient Public Water Supply
- Non-Community Transient Public Water Supply
- Non-Potential Drinking Water Source Area - High Yield
- Non-Potential Drinking Water Source Area - Medium Yield
- Potentially Productive Medium Yield Aquifer
- Potentially Productive High Yield Aquifer
- EPA Designated Sole Source Aquifer
- DEP Approved Wellhead Protection Area (Zone II)
- DEP Interim Wellhead Protection Area (IWPA)
- NHESP Priority Habitats for Rare Species
- NHESP Estimated Habitats for Rare Wildlife
- Public Surface Water Supply Protection Area (Zone A)
- Protected and Recreational Open Space
- Area of Critical Environmental Concern (ACEC)
- Solid Waste Landfill
- Public Surface Water Supply (PSWS)
- Inland Wetlands (MA DEP)
- Coastal Wetlands (MA DEP)
- Waterbodies
- Major Drainage Basin
- Sub Drainage Basin
- Limited Access Highway
- Multi-Lane Highway, NOT Limited Access
- Other Numbered Highway
- Major Road - Collector
- Minor Street or Road
- Town Boundary
- County Boundary
- Quad Sheet Boundary
- Track or Trail
- Train
- Powerline
- Pipeline
- Aquaduct

1:24,000

0 1,000 2,000

Feet

N

FIGURE 2
PRIORITY RESOURCE MAP

Needham Street Village Shops, LLC
55-71 Needham Street
Newton, Massachusetts
MassDEP RTN 3-32062

Data source: Office of Geographic and Environmental Information(MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs.
Circles indicate 500-foot and half-mile radii.
Data valid as of March 2014.

April 2014

Tighe&Bond
Consulting Engineers
Environmental Specialists

G:\GIS\MA\SiteLocus\Newton\MassGIS_55-71NeedhamSt.mxd

B-0631

Property Boundary

Tighe&Bond
Consulting Engineers
Environmental Specialists

Based on MassGIS Color Orthophotography (April 2011-2012)

1:2,400

0 100 200

Feet

N

FIGURE 3
AERIAL PHOTOGRAPH

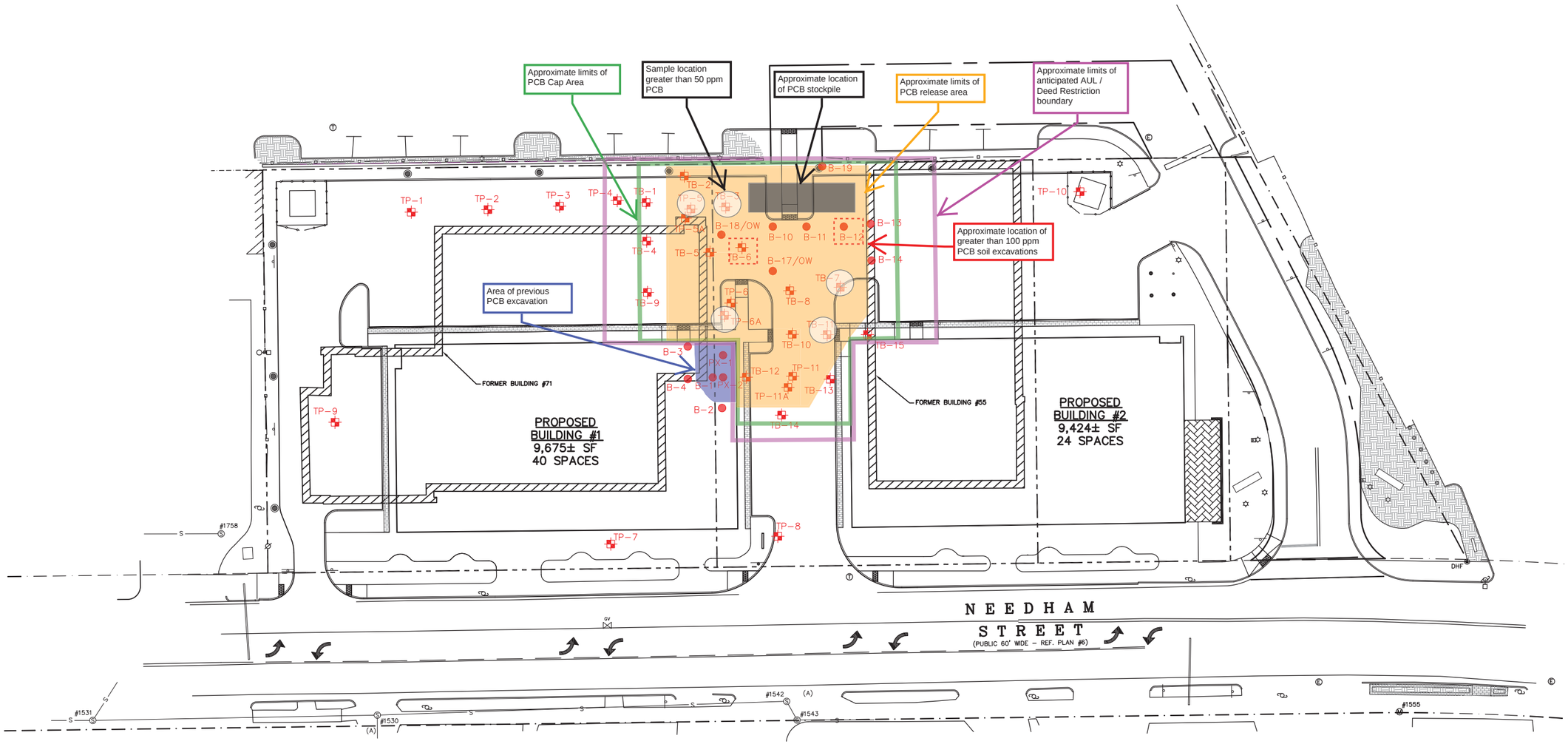
Needham Street Village Shops, LLC
55-71 Needham Street
Newton, Massachusetts
MassDEP RTN 3-32062

April 2014

G:\GIS\MA\SiteLocus\Newton\aerial_55-71NeedhamSt.mxd

B-0631

Tighe&Bond
Consulting Engineers
177 CORPORATE DRIVE
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 433-8818 info@tighebond.com



LEGEND

TB-9 TP-9	TEST PIT IDENTIFICATION
B-1	SOIL BORING LOCATION
PX-1	POST-EXCAVATION SAMPLE
	FORMER BUILDING

N

SCALE IN FEET
0 20' 40'
GRAPHIC SCALE

Figure 4
Site Plan

Needham Street Village Shops, LLC

55-71 Needham Street

Newton, Massachusetts

MassDEP
RTN 3-32062

April 2014

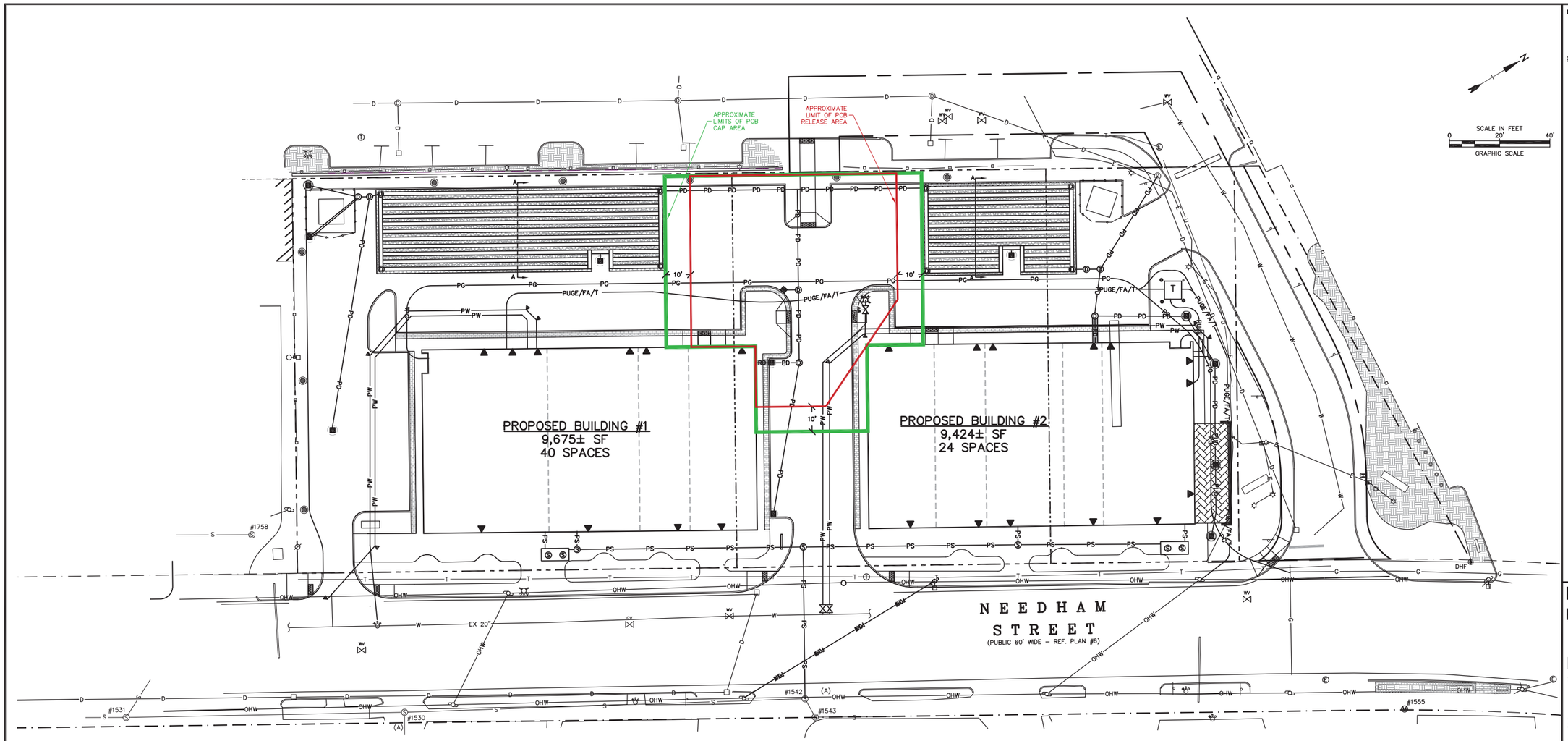
Mark	Date	Description

PROJECT NO:	B0631
FILE:	B-0631_CONST.dwg
DRAWN BY:	GWH
CHECKED:	JLV
APPROVED BY:	GMM

SCALE: AS SHOWN

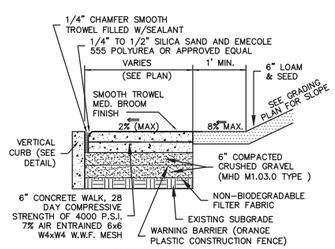
Apr 15, 2014-10:10am Plotted By: bjl
Tighe & Bond, Inc. J:\B\B0631 Berkfer Development, 71 Needham St\CAD\Construction\B-0631_CONST.dwg Layout: SUBSURFACE

Tighe&Bond
Consulting Engineers
177 CORPORATE DRIVE
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 433-8818 info@tighebond.com



LEGEND

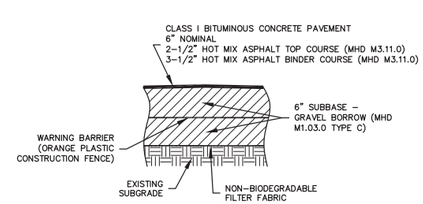
- UTILITY POLE & GUY WIRE
- UTILITY POLE W/ LIGHT
- GROUND LIGHT
- LIGHT POLE (ONE ARM)
- SIGN
- GRANITE BOUND FOUND
- METAL POST
- FIRE HYDRANT
- GAS GATE VALVE
- WATER GATE VALVE
- IRRIGATION CONTROL VALVE
- WATER SHUTOFF VALVE
- ELECTRIC BOX
- TELEPHONE BOX
- UTILITY BOX
- CATCH BASIN
- ROOF DRAIN
- DRAIN MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- WATER MANHOLE
- SEWER MANHOLE
- MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE
- PROPOSED AREA DRAIN
- OHW — OVERHEAD WIRES
- S — SEWER LINE
- D — DRAIN LINE
- G — GAS LINE
- W — WATER LINE
- E — UNDERGROUND ELECTRIC LINE
- PS — PROPOSED SEWER
- PW — PROPOSED WATER SERVICE
- PUGE/T/FA — PROPOSED UNDERGROUND ELECTRIC, FIRE ALARM, TELECOMMUNICATIONS SERVICE



SECTION

CONCRETE SIDEWALK WITH GRANITE CURB WITHIN CAP AREA

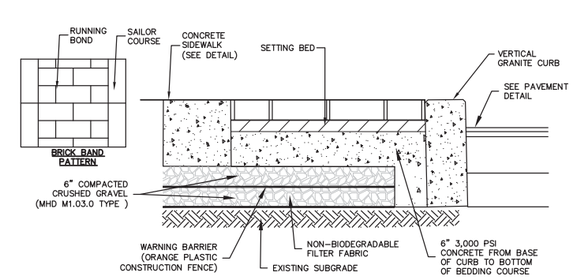
NOT TO SCALE



NOTES:
1. SEE PAVEMENT CONSTRUCTION PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR PAVEMENT SLOPES AND CROSS SLOPES.
3. TACK COAT (MHD 3.11.03 d) (0.05 GALLONS PER SQUARE YARD) SHALL BE APPLIED TO BINDER COURSE PRIOR TO INSTALLING TOP COURSE.
4. PLACE HOT POURED RUBBERIZED ASPHALT SEALER (MHD M.3.05.0) ALONG JOINTS OF THE HOT MIX ASPHALT TOP COURSE.
5. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR WARNING BARRIER AND NON-BIODEGRADABLE FILTER FABRIC TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

PAVEMENT SECTION WITHIN CAP AREA

NOT TO SCALE



NOTE:
1. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
2. ALL BASE AND SUBBASE MATERIALS SHALL BE WASHED.

STANDARD PAVER DETAIL WITHIN CAP AREA

NOT TO SCALE

Figure 5
Proposed Cap Plan

Needham Street Village Shops, LLC

55-71 Needham Street

Newton, Massachusetts

MassDEP
RTN 3-32062

April 2014

Mark	Date	Description

PROJECT NO:	B0631
FILE:	B-0631_CONST.dwg
DRAWN BY:	GWH
CHECKED:	JLV
APPROVED BY:	GMM

SCALE: AS SHOWN

Apr 16, 2014-9:27am Plotted By: cml
Tighe & Bond, Inc. \\srv\projects\B\B0631 Bierbrier Development, 71 Needham St\CAD\Construction\B-0631_CONST.dwg Layout: FIG5

Tighe&Bond

APPENDIX C

Table 1
Needham Street Village Shops, LLC
Test Pit Soil Results
55 - 71 Needham Street
Newton, MA
MassDEP RTN 3-32062

Sample Identification	**S-1**	**S-2**	**S-3**	**S-4**	**S-5**	**S-6**	**S-7**	**S-8**	**MA Unlined Landfill**	**MA Lined Landfill**	**RCS-1 Reportable Concentrations**
Date	**11-MAR-14**	**11-MAR-14**	**11-MAR-14**	**11-MAR-14**	**11-MAR-14**	**11-MAR-14**	**11-MAR-14**	**11-MAR-14**			
Sample Location	**TP-1, TP-2**	**TP-3, TP-4**	**TP-5**	**TP-6**	**TP-7, TP-8**	**TP-9**	**TP-10**	**TP-11**			
Depth	**0-7**	**0-7**	**0-7**	**0-7**	**0-7**	**0-7**	**0-7**	**0-6**			
General Chemistry											
Specific Conductance (umhos/cm)	88	78	78	76	150	91	51	23	**4,000**	**8,000**	
Solids, Total (%)	76.7	83.8	86.6	74.9	84.8	70.4	81.3	75.3			
pH (H) (SU)	7.5	7.6	8.6	8	8	7.6	8	7.9			
Oxidation/Reduction Potential (mv)	230	240	200	210	210	220	200	220			
Cyanide, Reactive (mg/kg)	< 10	< 10	NA	NA	< 10	< 10	< 10	NA			
Sulfide, Reactive (mg/kg)	< 10	< 10	NA	NA	< 10	< 10	< 10	NA			
Ignitability	Not Ignitable	Not Ignitable	NA	NA	Not Ignitable	Not Ignitable	Not Ignitable	NA			
Total Metals (mg/kg)											
Arsenic, Total	**160**	**25**	11	14	**24**	**37**	**21**	15	**40**	**40**	**20**
TCLP Arsenic	< 1	NA	NA	NA	NA	NA	NA	NA	**5**	**5**	
Barium, Total	180	95	65	150	100	140	74	170	**NS**	**NS**	**1,000**
Cadmium, Total	**2.5**	0.63	< 0.45	1.2	< 0.46	1	0.86	0.67	**30**	**80**	**2**
Chromium, Total	24	26	16	34	16	36	15	120	**1,000**	**1,000**	**30**
TCLP Chromium	NA	NA	NA	NA	NA	NA	NA	< 0.21	**5**	**5**	
Hexavalent Chromium	NA	NA	NA	< 1.1	NA	< 1.1	NA	23	**NS**	**NS**	**30**
Lead, Total	3,000	370	55	470	370	530	250	610	**1,000**	**2,000**	**300**
TCLP Lead	2.8	0.66	NA	0.82	2.8	1.6	< 0.5	< 0.5	**5**	**5**	
Mercury, Total	2.4	1.87	< 0.084	0.814	0.186	3	0.293	0.412	**10**	**10**	**20**
Selenium, Total	62	< 2.3	< 2.3	< 2.6	< 2.3	< 2.8	< 2.4	< 2.5	**NS**	**NS**	**400**
TCLP Selenium	< 0.5	NA	NA	NA	NA	NA	NA	NA	**1**	**1**	
Silver, Total	17	1.4	< 0.45	< 0.52	< 0.46	< 0.55	< 0.48	< 0.5	**NS**	**NS**	**100**
Volatile Organics by 8260/5035 (mg/kg)											
Acetone	< 0.032	< 0.032	< 0.043	< 0.052	0.067	< 0.064	< 0.058	< 0.054			**6**
Methyl ethyl ketone	< 0.009	< 0.009	< 0.012	< 0.014	0.016	< 0.018	< 0.016	< 0.015			**4**
Naphthalene	< 0.0036	< 0.0036	< 0.0048	0.016	< 0.0058	< 0.0071	< 0.0065	< 0.006			**4**
	< CS	< CS	< CS	< CS	< CS	< CS	< CS	< CS			
Total	<	<	<	0.016	0.083	<	<	<	**4**	**10**	
MCP Semivolatile Organics (mg/kg)											
Acenaphthene	2.9	0.61	< 0.3	0.58	< 0.31	< 0.38	0.33	< 0.35			**4**
Acenaphthylene	0.67	1.4	1.3	0.36	0.61	< 0.38	0.82	< 0.35			**1**
Anthracene	9.2	2.3	0.6	1.6	1.1	0.56	1.4	< 0.26			**1,000**
Benzo(a)anthracene	23	5.9	1.5	2.4	4.3	1.2	4.1	< 0.26			**7**
Benzo(a)pyrene	14	3.9	1.5	1.9	3.2	1.1	3.3	0.39			**2**
Benzo(b)fluoranthene	18	4.6	1.5	2.3	4.8	1.3	4	0.43			**7**
Benzo(ghi)perylene	9.3	2.5	1.2	1.3	2.4	0.83	2.4	0.39			**1,000**
Benzo(k)fluoranthene	9	2.1	0.58	0.84	1.8	0.46	1.6	< 0.26			**70**
Bis(2-Ethylhexyl)phthalate	2.6	0.75	< 0.38	< 0.43	< 0.39	< 0.47	< 0.4	1.3			**200**
Butyl benzyl phthalate	< 0.43	0.82	< 0.38	< 0.43	< 0.39	< 0.47	< 0.4	< 0.43			**100**
Chrysene	20	5.3	1.5	2.1	4.1	0.98	3.7	< 0.26			**70**
Di-n-octylphthalate	0.76	< 0.4	< 0.38	< 0.43	< 0.39	< 0.47	< 0.4	< 0.43			**1,000**
Dibenzo(a,h)anthracene	2.9	0.85	0.46	0.55	0.95	0.44	0.8	0.26			**1**
Dibenzofuran	1.9	< 0.4	< 0.38	< 0.43	< 0.39	< 0.47	< 0.4	< 0.43			**100**
Fluoranthene	48	11	1.7	5.5	6.1	2.5	8.4	0.4			**1,000**
Fluorene	3.8	0.92	< 0.38	0.76	0.39	< 0.47	0.43	< 0.43			**1,000**
Indeno(1,2,3-cd)Pyrene	11	3	1.3	1.6	3	1.1	2.9	0.54			**7**
Naphthalene	0.82	< 0.4	< 0.38	< 0.43	< 0.39	< 0.47	< 0.4	< 0.43			**4**
Phenanthrene	33	7.6	0.69	4.5	3.5	1.8	4.2	0.33			**10**
Pyrene	37	10	2.4	4.4	5.1	2	7.2	0.3			**1,000**
All Other SVOCs	< CS	< CS	< CS	< CS	< CS	< CS	< CS	< CS			
Total	248.28	64.75	18.81	32.84	43.61	17.85	47.58	8.23	**100**	**100**	
Polychlorinated Biphenyls (mg/kg)											
Aroclor 1248	0.0642	0.209	61.2	4.75	0.076	0.462	0.138	12.3			
Aroclor 1254	< 0.0427	0.0721	< 3.63	1.26	< 0.0375	< 0.462	0.14	< 2.14			
Aroclor 1260	< 0.0427	0.0433	< 3.63	< 0.428	< 0.0375	< 0.462	0.104	< 2.14			
Total	0.0642	0.324	**61.2**	**6.01**	0.076	0.462	0.38	**12.3**	**2**	**2**	**2**
Petroleum Hydrocarbon Quantitation (mg/kg)											
TPH	1,260	892	766	609	537	954	899	249	**2,500**	**5,000**	**1,000**
Extractable Petroleum Hydrocarbons (mg/kg)											
C11-C22 Aromatics, Adjusted	334	202	502	110	91.5	269	261	82.6			**1,000**
C19-C36 Aliphatics	60.1	104	728	76	67.1	300	139	56.7			**3,000**
C9-C18 Aliphatics	< 42.2	< 7.59	< 15.1	< 8.57	< 7.65	< 9.36	< 8.16	< 8.56			**1,000**
2-Methylnaphthalene	< 2.11	< 0.379	< 0.757	< 0.429	< 0.382	< 0.468	< 0.408	< 0.428			**1**
Acenaphthene	2.86	< 0.379	< 0.757	0.655	< 0.382	< 0.468	0.432	< 0.428			**4**
Acenaphthylene	2.11	0.892	< 0.757	< 0.429	< 0.382	0.657	0.609	< 0.428			**1**
Anthracene	7.29	1.32	< 0.757	2.77	0.517	1.7	1.56	0.475			**1,000**
Benzo(a)anthracene	20.2	4.42	1.55	3.31	2.18	6.52	6.49	< 0.428			**7**
Benzo(a)pyrene	17.3	5.02	2.38	3.32	2.64	7.92	7.51	< 0.428			**2**
Benzo(b)fluoranthene	15.2	3.71	1.79	2.59	2.42	6.96	6.43	< 0.428			**7**
Benzo(ghi)perylene	9.23	3.12	2.13	1.95	2.03	5.28	4.72	< 0.428			**1,000**
Benzo(k)fluoranthene	15.6	3.72	2.05	2.81	2.06	6.09	5.93	< 0.428			**70**
Chrysene	23	5.23	2.37	3.71	2.74	7.87	7.35	< 0.428			**70**
Dibenzo(a,h)anthracene	2.74	0.707	< 0.757	0.482	0.426	1.34	0.99	< 0.428			**1**
Fluoranthene	47.2	7.94	2.16	7.07	3.8	14.3	13.4	0.858			**1,000**
Fluorene	3.09	0.401	< 0.757	0.93	< 0.382	0.509	0.466	< 0.428			**1,000**
Indeno(1,2,3-cd)Pyrene	10.5	2.81	1.7	2.01	2.04	5.66	5	< 0.428			**7**
Phenanthrene	36.1	5.06	0.844	6.42	2.4	6.44	6.06	< 0.428			**10**
Pyrene	37	8.89	2.95	5.94	3.35	12.8	12	0.44			**1,000**
Chlorinated Herbicides (mg/kg)											
Total	< CS	< CS	< CS	< CS	< CS	< CS	< CS	NA			**100**
Organochlorine Pesticides (mg/kg)											
4,4'-DDE	< 0.0103	< 0.00895	NA	NA	< 0.00943	**5.39**	< 0.00935	NA			**3**
4,4'-DDT	< 0.0192	< 0.0168	NA	NA	< 0.0177	**4.71**	0.0805	NA			**3**
Aldrin	**0.0426**	< 0.00895	NA	NA	< 0.00943	**6.66**	< 0.00935	NA			**0.04**
Chlordane	< 0.0834	< 0.0727	NA	NA	< 0.0766	**160**	< 0.076	NA			**0.7**
Dieldrin	< 0.00642	**0.0504**	NA	NA	< 0.00589	**4.81**	< 0.00584	NA			**0.05**
Endrin	< 0.00428	< 0.00373	NA	NA	< 0.00393	1.42	< 0.00389	NA			**8**
Heptachlor	< 0.00513	< 0.00447	NA	NA	< 0.00471	**0.728**	< 0.00467	NA			**0.2**
Heptachlor epoxide	< 0.0192	< 0.0168	NA	NA	< 0.0177	< 0.211	< 0.0175	NA			**0.09**
Lindane	< 0.00342	< 0.00298	NA	NA	< 0.00314	< 0.0375	< 0.00312	NA			**0.003**

Results reported in milligrams-per-kilogram (mg/kg) unless otherwise noted on the table
< xx indictes that the analyte was not deteceted at the listed detection limit
Bolded value exceeds a MassDEP reportable concentration
Shaded cells indicate results that are reportable to the MADEP
NA = not analyzed
NS = no standard
CS = compound specific

Table 2

PCB Soil Analytical Table

Needham Street Village Shops, LLC

55 -71 Needham Street

Newton, MA

MassDEP RTN 3-32062

Parameter	SAMPLING LOCATION																										MassDEP Reportable Concentrations (RCs)
	S-1	**S-2**	**S-3**	**S-4**	**S-5**	**S-6**	**S-7**	**S-8**	**TP-5A (0-1)**	**TP-5A (1-2)**	**TP-5A (2-3)**	**TP-5A (3-4)**	**TP-5A (4-5)**	**TP-5A (5-6)**	**TP-6A (0-1)**	**TP-6A (1-2)**	**TP-6A (2-3)**	**TP-6A (3-4)**	**TP-6A (4-5)**	**TP-6A (5-6)**	**TP-11A (0-1)**	**TP-11A (1-2)**	**TP-11A (2-3)**	**TP-11A (3-4)**	**TP-11A (4-5)**	**TP-11A (5-6)**	
Sampling Date	3/11/2014	3/11/2014	3/11/2014	3/11/2014	3/11/2014	3/11/2014	3/11/2014	3/11/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	**RCS-1**
Sample Depth (feet)	0-7 feet	0-7 feet	0-7 feet	0-7 feet	0-7 feet	0-7 feet	0-7 feet	0-6 feet	0-1 Feet	1-2 Feet	2-3 Feet	3-4 Feet	4-5 Feet	5-6 Feet	0-1 Feet	1-2 Feet	2-3 Feet	3-4 Feet	4-5 Feet	5-6 Feet	0-1 Feet	1-2 Feet	2-3 Feet	3-4 Feet	4-5 Feet	5-6 Feet	
Sampe Location	TP-1, TP-2	TP-3, TP-4	TP-5	TP-6	TP-7, TP-8	TP-9	TP-10	TP-11																			
Polychlorinated Biphenyls (PCBs) (mg/Kg dry)																											
Total PCBs	0.0642	0.3244	**61.2**	**6.01**	0.076	0.462	0.382	**12.3**	0.51	**3.8**	**4.4**	0.49	0.38	0.69	**64**	**8.0**	**26**	**32**	**1.8**	**4.2**	**2.9**	**1.0**	**3.5**	**2.6**	**2.2**	0.22	**2**

Parameter	SAMPLING LOCATION																														MassDEP Reportable Concentrations (RCs)
	TB-1 (1-3)	**TB-1 (4-6)**	**TB-2 (1-3)**	**TB-2 (4-6)**	**TB-3 (1-3)**	**TB-3 (4-6)**	**TB-4 (1-3)**	**TB-4 (4-6)**	**TB-5 (1-3)**	**TB-5 (4-6)**	**TB-6 (1-3)**	**TB-6 (4-6)**	**TB-7 (1-3)**	**TB-7 (4-6)**	**TB-8 (1-3)**	**TB-8 (4-6)**	**TB-9 (1-3)**	**TB-9 (4-6)**	**TB-10 (1-3)**	**TB-10 (4-6)**	**TB-11 (1-3)**	**TB-11 (4-6)**	**TB-12 (1-3)**	**TB-12 (4-6)**	**TB-13 (1-3)**	**TB-13 (4-6)**	**TB-14 (1-3)**	**TB-14 (4-6)**	**TB-15 (1-3)**	**TB-15 (4-6)**	
Sampling Date	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/21/2014	3/27/2014	3/27/2014	**RCS-1**
Sample Depth (feet)	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	
Sample Location																															
Polychlorinated Biphenyls (PCBs) (mg/Kg dry)																															
Total PCBs	0.31	0.14	**16**	**6.1**	**56**	**67**	< 0.11	< 0.11	0.47	0.84	**340**	**21**	**8.2**	**92**	**11**	**10**	< 0.12	0.17	0.14	**2.6**	**14**	**78**	**3.4**	0.43	0.38	< 0.14	0.90	**1.0**	< 0.12	< 0.12	**2**

Parameter	SAMPLING LOCATION																									MassDEP Reportable Concentrations (RCs)
	B-1 (1-3)	**B-1 (4-6)**	**B-2 (1-3)**	**B-2 (4-6)**	**B-3 (1-3)**	**B-3 (4-6)**	**B-4 (1-3)**	**B-4 (4-6)**	**B-10 (1-3)**	**B-10 (4-6)**	**B-11 (1-3)**	**B-11 (4-6)**	**B-12 (1-3)**	**B-12 (4-6)**	**B-13 (1-3)**	**B-13 (4-6)**	**B-14 (1-3)**	**B-14 (4-6)**	**B-17 (7-9)**	**B-18 (7-9)**	**B-19 (1-3)**	**B-19 (4-6)**	**Bldg 1-1**	**PX-Bldg 1-2**	**PX-**	
Sampling Date	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/1/2014	4/5/2014	4/5/2014		**RCS-1**
Sample Depth (feet)	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	1-3 Feet	4-6 Feet	7-9 Feet	7-9 Feet	1-3 Feet	4-6 Feet	4 Feet	4 feet		
Sample Location																										
Polychlorinated Biphenyls (PCBs) (mg/Kg dry)																										
Total PCBs	**4.7**	**6.2**	< 0.14	< 0.2	0.84	< 0.14	< 0.12	< 0.15	**39**	0.32	< 0.016	**1.3**	**210**	**1.0**	< 0.11	< 0.12	0.26	< 0.15	< 0.11	< 0.11	0.76	< 0.12	< 0.17	< 0.14		**2**

< xx indictes that the analyte was not deteceted at the listed detection limit

Shaded cells indicate results that exceed TSCA Standards or RCS-1 values

NA = not analyzed

NS = no standard

Tighe&Bond

APPENDIX D

ANALYTICAL REPORT

Lab Number:	L1405044
Client:	Tighe & Bond, Inc. 446 Main Street Worcester, MA 01608
ATTN:	Matt Abraham
Phone:	(508) 754-2201
Project Name:	NEEDHAM ST
Project Number:	11-0631
Report Date:	03/18/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405044-01	S-1	NEWTON, MA	03/11/14 08:00
L1405044-02	S-2	NEWTON, MA	03/11/14 09:00
L1405044-03	S-3	NEWTON, MA	03/11/14 09:30
L1405044-04	S-4	NEWTON, MA	03/11/14 10:00
L1405044-05	S-5	NEWTON, MA	03/11/14 10:30
L1405044-06	S-6	NEWTON, MA	03/11/14 12:30
L1405044-07	S-7	NEWTON, MA	03/11/14 13:30
L1405044-08	S-8	NEWTON, MA	03/11/14 14:30

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F 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
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
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
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
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
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I 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)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: NEEDHAM ST **Lab Number:** L1405044
Project Number: 11-0631 **Report Date:** 03/18/14

Case Narrative (continued)

MCP Related Narratives

Sample Receipt

In reference to question H:

A Matrix Spike was not submitted for the analysis of Total Metals.

Volatile Organics

In reference to question H:

The initial calibration, associated with L1405044-01 through -08, did not meet the method required minimum response factor on the lowest calibration standard for tetrahydrofuran (0.05659) and 4-methyl-2-pentanone (0.06807) as well as the average response factor for acetone, tetrahydrofuran and 4-methyl-2-pentanone. The initial calibration verification was outside acceptance criteria for acetone (58%), but within overall method criteria. The continuing calibration standards, associated with L1405044-01 through -08, are outside the acceptance criteria for several compounds; however, they are within overall method allowances. A copy of the continuing calibrations standard is included as an addendum to this report.

Semivolatile Organics

L1405044-01 through -08 have elevated detection limits due to the dilutions required by matrix interferences encountered during the concentration of the samples.

EPH

L1405044-03 has elevated detection limits due to the dilution required by matrix interferences encountered during the concentration of the sample.

In reference to question G:

1405044-01 and -03: One or more of the target analytes did not achieve the requested CAM reporting limits.

PCBs

L1405044-06 has elevated detection limits due to the dilution required by the sample matrix.

In reference to question G:

Project Name: NEEDHAM ST **Lab Number:** L1405044
Project Number: 11-0631 **Report Date:** 03/18/14

Case Narrative (continued)

1405044-03, -04, -06 and -08: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The surrogate recoveries for L1405044-03, -04, -06 and -08 are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (all 0%) and decachlorobiphenyl (all 0%) due to the dilutions required to quantitate the samples. Re-extraction was not required; therefore, the results of the original analyses are reported.

Total Metals

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

Non-MCP Related Narratives

Specific Conductance

The WG675431-2 Laboratory Duplicate RPD (44%), performed on L1405044-01, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the sample utilized for the laboratory duplicate.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Lisa Westerlind

Title: Technical Director/Representative Date: 03/18/14

ORGANICS

VOLATILES

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-01	Date Collected:	03/11/14 08:00
Client ID:	S-1	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	97,8260C		
Analytical Date:	03/12/14 13:37		
Analyst:	BN		
Percent Solids:	77%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.0	--	1
1,1-Dichloroethane	ND		ug/kg	1.4	--	1
Chloroform	ND		ug/kg	1.4	--	1
Carbon tetrachloride	ND		ug/kg	0.90	--	1
1,2-Dichloropropane	ND		ug/kg	3.2	--	1
Dibromochloromethane	ND		ug/kg	0.90	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	--	1
Tetrachloroethene	ND		ug/kg	0.90	--	1
Chlorobenzene	ND		ug/kg	0.90	--	1
Trichlorofluoromethane	ND		ug/kg	3.6	--	1
1,2-Dichloroethane	ND		ug/kg	0.90	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.90	--	1
Bromodichloromethane	ND		ug/kg	0.90	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.90	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.90	--	1
1,1-Dichloropropene	ND		ug/kg	3.6	--	1
Bromoform	ND		ug/kg	3.6	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.90	--	1
Benzene	ND		ug/kg	0.90	--	1
Toluene	ND		ug/kg	1.4	--	1
Ethylbenzene	ND		ug/kg	0.90	--	1
Chloromethane	ND		ug/kg	3.6	--	1
Bromomethane	ND		ug/kg	1.8	--	1
Vinyl chloride	ND		ug/kg	1.8	--	1
Chloroethane	ND		ug/kg	1.8	--	1
1,1-Dichloroethene	ND		ug/kg	0.90	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	--	1
Trichloroethene	ND		ug/kg	0.90	--	1
1,2-Dichlorobenzene	ND		ug/kg	3.6	--	1
1,3-Dichlorobenzene	ND		ug/kg	3.6	--	1
1,4-Dichlorobenzene	ND		ug/kg	3.6	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-01 Date Collected: 03/11/14 08:00

Client ID: S-1 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.8	--	1
p/m-Xylene	ND		ug/kg	1.8	--	1
o-Xylene	ND		ug/kg	1.8	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.90	--	1
Dibromomethane	ND		ug/kg	3.6	--	1
1,2,3-Trichloropropane	ND		ug/kg	3.6	--	1
Styrene	ND		ug/kg	1.8	--	1
Dichlorodifluoromethane	ND		ug/kg	9.0	--	1
Acetone	ND		ug/kg	32	--	1
Carbon disulfide	ND		ug/kg	3.6	--	1
Methyl ethyl ketone	ND		ug/kg	9.0	--	1
Methyl isobutyl ketone	ND		ug/kg	9.0	--	1
2-Hexanone	ND		ug/kg	9.0	--	1
Bromochloromethane	ND		ug/kg	3.6	--	1
Tetrahydrofuran	ND		ug/kg	3.6	--	1
2,2-Dichloropropane	ND		ug/kg	4.5	--	1
1,2-Dibromoethane	ND		ug/kg	3.6	--	1
1,3-Dichloropropane	ND		ug/kg	3.6	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.90	--	1
Bromobenzene	ND		ug/kg	4.5	--	1
n-Butylbenzene	ND		ug/kg	0.90	--	1
sec-Butylbenzene	ND		ug/kg	0.90	--	1
tert-Butylbenzene	ND		ug/kg	3.6	--	1
o-Chlorotoluene	ND		ug/kg	3.6	--	1
p-Chlorotoluene	ND		ug/kg	3.6	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	--	1
Hexachlorobutadiene	ND		ug/kg	3.6	--	1
Isopropylbenzene	ND		ug/kg	0.90	--	1
p-Isopropyltoluene	ND		ug/kg	0.90	--	1
Naphthalene	ND		ug/kg	3.6	--	1
n-Propylbenzene	ND		ug/kg	0.90	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.6	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.6	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.6	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.6	--	1
Diethyl ether	ND		ug/kg	4.5	--	1
Diisopropyl Ether	ND		ug/kg	3.6	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	3.6	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	3.6	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-01	Date Collected:	03/11/14 08:00
Client ID:	S-1	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
1,4-Dioxane	ND		ug/kg	36	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	100		70-130

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-02	Date Collected:	03/11/14 09:00
Client ID:	S-2	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	97,8260C		
Analytical Date:	03/12/14 14:05		
Analyst:	BN		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.0	--	1
1,1-Dichloroethane	ND		ug/kg	1.4	--	1
Chloroform	ND		ug/kg	1.4	--	1
Carbon tetrachloride	ND		ug/kg	0.90	--	1
1,2-Dichloropropane	ND		ug/kg	3.2	--	1
Dibromochloromethane	ND		ug/kg	0.90	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	--	1
Tetrachloroethene	ND		ug/kg	0.90	--	1
Chlorobenzene	ND		ug/kg	0.90	--	1
Trichlorofluoromethane	ND		ug/kg	3.6	--	1
1,2-Dichloroethane	ND		ug/kg	0.90	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.90	--	1
Bromodichloromethane	ND		ug/kg	0.90	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.90	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.90	--	1
1,1-Dichloropropene	ND		ug/kg	3.6	--	1
Bromoform	ND		ug/kg	3.6	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.90	--	1
Benzene	ND		ug/kg	0.90	--	1
Toluene	ND		ug/kg	1.4	--	1
Ethylbenzene	ND		ug/kg	0.90	--	1
Chloromethane	ND		ug/kg	3.6	--	1
Bromomethane	ND		ug/kg	1.8	--	1
Vinyl chloride	ND		ug/kg	1.8	--	1
Chloroethane	ND		ug/kg	1.8	--	1
1,1-Dichloroethene	ND		ug/kg	0.90	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	--	1
Trichloroethene	ND		ug/kg	0.90	--	1
1,2-Dichlorobenzene	ND		ug/kg	3.6	--	1
1,3-Dichlorobenzene	ND		ug/kg	3.6	--	1
1,4-Dichlorobenzene	ND		ug/kg	3.6	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-02 Date Collected: 03/11/14 09:00

Client ID: S-2 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.8	--	1
p/m-Xylene	ND		ug/kg	1.8	--	1
o-Xylene	ND		ug/kg	1.8	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.90	--	1
Dibromomethane	ND		ug/kg	3.6	--	1
1,2,3-Trichloropropane	ND		ug/kg	3.6	--	1
Styrene	ND		ug/kg	1.8	--	1
Dichlorodifluoromethane	ND		ug/kg	9.0	--	1
Acetone	ND		ug/kg	32	--	1
Carbon disulfide	ND		ug/kg	3.6	--	1
Methyl ethyl ketone	ND		ug/kg	9.0	--	1
Methyl isobutyl ketone	ND		ug/kg	9.0	--	1
2-Hexanone	ND		ug/kg	9.0	--	1
Bromochloromethane	ND		ug/kg	3.6	--	1
Tetrahydrofuran	ND		ug/kg	3.6	--	1
2,2-Dichloropropane	ND		ug/kg	4.5	--	1
1,2-Dibromoethane	ND		ug/kg	3.6	--	1
1,3-Dichloropropane	ND		ug/kg	3.6	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.90	--	1
Bromobenzene	ND		ug/kg	4.5	--	1
n-Butylbenzene	ND		ug/kg	0.90	--	1
sec-Butylbenzene	ND		ug/kg	0.90	--	1
tert-Butylbenzene	ND		ug/kg	3.6	--	1
o-Chlorotoluene	ND		ug/kg	3.6	--	1
p-Chlorotoluene	ND		ug/kg	3.6	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	--	1
Hexachlorobutadiene	ND		ug/kg	3.6	--	1
Isopropylbenzene	ND		ug/kg	0.90	--	1
p-Isopropyltoluene	ND		ug/kg	0.90	--	1
Naphthalene	ND		ug/kg	3.6	--	1
n-Propylbenzene	ND		ug/kg	0.90	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.6	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.6	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.6	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.6	--	1
Diethyl ether	ND		ug/kg	4.5	--	1
Diisopropyl Ether	ND		ug/kg	3.6	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	3.6	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	3.6	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-02	Date Collected:	03/11/14 09:00
Client ID:	S-2	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
1,4-Dioxane	ND		ug/kg	36	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	99		70-130

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-03	Date Collected:	03/11/14 09:30
Client ID:	S-3	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	97,8260C		
Analytical Date:	03/12/14 14:33		
Analyst:	BN		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	--	1
1,1-Dichloroethane	ND		ug/kg	1.8	--	1
Chloroform	ND		ug/kg	1.8	--	1
Carbon tetrachloride	ND		ug/kg	1.2	--	1
1,2-Dichloropropane	ND		ug/kg	4.2	--	1
Dibromochloromethane	ND		ug/kg	1.2	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	--	1
Tetrachloroethene	ND		ug/kg	1.2	--	1
Chlorobenzene	ND		ug/kg	1.2	--	1
Trichlorofluoromethane	ND		ug/kg	4.8	--	1
1,2-Dichloroethane	ND		ug/kg	1.2	--	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	--	1
Bromodichloromethane	ND		ug/kg	1.2	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	--	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	--	1
1,1-Dichloropropene	ND		ug/kg	4.8	--	1
Bromoform	ND		ug/kg	4.8	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	--	1
Benzene	ND		ug/kg	1.2	--	1
Toluene	ND		ug/kg	1.8	--	1
Ethylbenzene	ND		ug/kg	1.2	--	1
Chloromethane	ND		ug/kg	4.8	--	1
Bromomethane	ND		ug/kg	2.4	--	1
Vinyl chloride	ND		ug/kg	2.4	--	1
Chloroethane	ND		ug/kg	2.4	--	1
1,1-Dichloroethene	ND		ug/kg	1.2	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	--	1
Trichloroethene	ND		ug/kg	1.2	--	1
1,2-Dichlorobenzene	ND		ug/kg	4.8	--	1
1,3-Dichlorobenzene	ND		ug/kg	4.8	--	1
1,4-Dichlorobenzene	ND		ug/kg	4.8	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-03 Date Collected: 03/11/14 09:30

Client ID: S-3 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.4	--	1
p/m-Xylene	ND		ug/kg	2.4	--	1
o-Xylene	ND		ug/kg	2.4	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	--	1
Dibromomethane	ND		ug/kg	4.8	--	1
1,2,3-Trichloropropane	ND		ug/kg	4.8	--	1
Styrene	ND		ug/kg	2.4	--	1
Dichlorodifluoromethane	ND		ug/kg	12	--	1
Acetone	ND		ug/kg	43	--	1
Carbon disulfide	ND		ug/kg	4.8	--	1
Methyl ethyl ketone	ND		ug/kg	12	--	1
Methyl isobutyl ketone	ND		ug/kg	12	--	1
2-Hexanone	ND		ug/kg	12	--	1
Bromochloromethane	ND		ug/kg	4.8	--	1
Tetrahydrofuran	ND		ug/kg	4.8	--	1
2,2-Dichloropropane	ND		ug/kg	6.0	--	1
1,2-Dibromoethane	ND		ug/kg	4.8	--	1
1,3-Dichloropropane	ND		ug/kg	4.8	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	--	1
Bromobenzene	ND		ug/kg	6.0	--	1
n-Butylbenzene	ND		ug/kg	1.2	--	1
sec-Butylbenzene	ND		ug/kg	1.2	--	1
tert-Butylbenzene	ND		ug/kg	4.8	--	1
o-Chlorotoluene	ND		ug/kg	4.8	--	1
p-Chlorotoluene	ND		ug/kg	4.8	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.8	--	1
Hexachlorobutadiene	ND		ug/kg	4.8	--	1
Isopropylbenzene	ND		ug/kg	1.2	--	1
p-Isopropyltoluene	ND		ug/kg	1.2	--	1
Naphthalene	ND		ug/kg	4.8	--	1
n-Propylbenzene	ND		ug/kg	1.2	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.8	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.8	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.8	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.8	--	1
Diethyl ether	ND		ug/kg	6.0	--	1
Diisopropyl Ether	ND		ug/kg	4.8	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.8	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.8	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-03	Date Collected:	03/11/14 09:30
Client ID:	S-3	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
1,4-Dioxane	ND		ug/kg	48	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	100		70-130

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-04	Date Collected:	03/11/14 10:00
Client ID:	S-4	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	97,8260C		
Analytical Date:	03/12/14 15:01		
Analyst:	BN		
Percent Solids:	75%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	14	--	1
1,1-Dichloroethane	ND		ug/kg	2.2	--	1
Chloroform	ND		ug/kg	2.2	--	1
Carbon tetrachloride	ND		ug/kg	1.4	--	1
1,2-Dichloropropane	ND		ug/kg	5.1	--	1
Dibromochloromethane	ND		ug/kg	1.4	--	1
1,1,2-Trichloroethane	ND		ug/kg	2.2	--	1
Tetrachloroethene	ND		ug/kg	1.4	--	1
Chlorobenzene	ND		ug/kg	1.4	--	1
Trichlorofluoromethane	ND		ug/kg	5.8	--	1
1,2-Dichloroethane	ND		ug/kg	1.4	--	1
1,1,1-Trichloroethane	ND		ug/kg	1.4	--	1
Bromodichloromethane	ND		ug/kg	1.4	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	--	1
cis-1,3-Dichloropropene	ND		ug/kg	1.4	--	1
1,1-Dichloropropene	ND		ug/kg	5.8	--	1
Bromoform	ND		ug/kg	5.8	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.4	--	1
Benzene	ND		ug/kg	1.4	--	1
Toluene	ND		ug/kg	2.2	--	1
Ethylbenzene	ND		ug/kg	1.4	--	1
Chloromethane	ND		ug/kg	5.8	--	1
Bromomethane	ND		ug/kg	2.9	--	1
Vinyl chloride	ND		ug/kg	2.9	--	1
Chloroethane	ND		ug/kg	2.9	--	1
1,1-Dichloroethene	ND		ug/kg	1.4	--	1
trans-1,2-Dichloroethene	ND		ug/kg	2.2	--	1
Trichloroethene	ND		ug/kg	1.4	--	1
1,2-Dichlorobenzene	ND		ug/kg	5.8	--	1
1,3-Dichlorobenzene	ND		ug/kg	5.8	--	1
1,4-Dichlorobenzene	ND		ug/kg	5.8	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-04 Date Collected: 03/11/14 10:00

Client ID: S-4 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.9	--	1
p/m-Xylene	ND		ug/kg	2.9	--	1
o-Xylene	ND		ug/kg	2.9	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	--	1
Dibromomethane	ND		ug/kg	5.8	--	1
1,2,3-Trichloropropane	ND		ug/kg	5.8	--	1
Styrene	ND		ug/kg	2.9	--	1
Dichlorodifluoromethane	ND		ug/kg	14	--	1
Acetone	ND		ug/kg	52	--	1
Carbon disulfide	ND		ug/kg	5.8	--	1
Methyl ethyl ketone	ND		ug/kg	14	--	1
Methyl isobutyl ketone	ND		ug/kg	14	--	1
2-Hexanone	ND		ug/kg	14	--	1
Bromochloromethane	ND		ug/kg	5.8	--	1
Tetrahydrofuran	ND		ug/kg	5.8	--	1
2,2-Dichloropropane	ND		ug/kg	7.2	--	1
1,2-Dibromoethane	ND		ug/kg	5.8	--	1
1,3-Dichloropropane	ND		ug/kg	5.8	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.4	--	1
Bromobenzene	ND		ug/kg	7.2	--	1
n-Butylbenzene	ND		ug/kg	1.4	--	1
sec-Butylbenzene	ND		ug/kg	1.4	--	1
tert-Butylbenzene	ND		ug/kg	5.8	--	1
o-Chlorotoluene	ND		ug/kg	5.8	--	1
p-Chlorotoluene	ND		ug/kg	5.8	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.8	--	1
Hexachlorobutadiene	ND		ug/kg	5.8	--	1
Isopropylbenzene	ND		ug/kg	1.4	--	1
p-Isopropyltoluene	ND		ug/kg	1.4	--	1
Naphthalene	16		ug/kg	5.8	--	1
n-Propylbenzene	ND		ug/kg	1.4	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.8	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.8	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.8	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.8	--	1
Diethyl ether	ND		ug/kg	7.2	--	1
Diisopropyl Ether	ND		ug/kg	5.8	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	5.8	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	5.8	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-04	Date Collected:	03/11/14 10:00
Client ID:	S-4	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
1,4-Dioxane	ND		ug/kg	58	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	99		70-130

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-05	Date Collected:	03/11/14 10:30
Client ID:	S-5	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	97,8260C		
Analytical Date:	03/12/14 15:30		
Analyst:	BN		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	14	--	1
1,1-Dichloroethane	ND		ug/kg	2.2	--	1
Chloroform	ND		ug/kg	2.2	--	1
Carbon tetrachloride	ND		ug/kg	1.4	--	1
1,2-Dichloropropane	ND		ug/kg	5.0	--	1
Dibromochloromethane	ND		ug/kg	1.4	--	1
1,1,2-Trichloroethane	ND		ug/kg	2.2	--	1
Tetrachloroethene	ND		ug/kg	1.4	--	1
Chlorobenzene	ND		ug/kg	1.4	--	1
Trichlorofluoromethane	ND		ug/kg	5.8	--	1
1,2-Dichloroethane	ND		ug/kg	1.4	--	1
1,1,1-Trichloroethane	ND		ug/kg	1.4	--	1
Bromodichloromethane	ND		ug/kg	1.4	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	--	1
cis-1,3-Dichloropropene	ND		ug/kg	1.4	--	1
1,1-Dichloropropene	ND		ug/kg	5.8	--	1
Bromoform	ND		ug/kg	5.8	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.4	--	1
Benzene	ND		ug/kg	1.4	--	1
Toluene	ND		ug/kg	2.2	--	1
Ethylbenzene	ND		ug/kg	1.4	--	1
Chloromethane	ND		ug/kg	5.8	--	1
Bromomethane	ND		ug/kg	2.9	--	1
Vinyl chloride	ND		ug/kg	2.9	--	1
Chloroethane	ND		ug/kg	2.9	--	1
1,1-Dichloroethene	ND		ug/kg	1.4	--	1
trans-1,2-Dichloroethene	ND		ug/kg	2.2	--	1
Trichloroethene	ND		ug/kg	1.4	--	1
1,2-Dichlorobenzene	ND		ug/kg	5.8	--	1
1,3-Dichlorobenzene	ND		ug/kg	5.8	--	1
1,4-Dichlorobenzene	ND		ug/kg	5.8	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-05 Date Collected: 03/11/14 10:30

Client ID: S-5 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.9	--	1
p/m-Xylene	ND		ug/kg	2.9	--	1
o-Xylene	ND		ug/kg	2.9	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	--	1
Dibromomethane	ND		ug/kg	5.8	--	1
1,2,3-Trichloropropane	ND		ug/kg	5.8	--	1
Styrene	ND		ug/kg	2.9	--	1
Dichlorodifluoromethane	ND		ug/kg	14	--	1
Acetone	67		ug/kg	52	--	1
Carbon disulfide	ND		ug/kg	5.8	--	1
Methyl ethyl ketone	16		ug/kg	14	--	1
Methyl isobutyl ketone	ND		ug/kg	14	--	1
2-Hexanone	ND		ug/kg	14	--	1
Bromochloromethane	ND		ug/kg	5.8	--	1
Tetrahydrofuran	ND		ug/kg	5.8	--	1
2,2-Dichloropropane	ND		ug/kg	7.2	--	1
1,2-Dibromoethane	ND		ug/kg	5.8	--	1
1,3-Dichloropropane	ND		ug/kg	5.8	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.4	--	1
Bromobenzene	ND		ug/kg	7.2	--	1
n-Butylbenzene	ND		ug/kg	1.4	--	1
sec-Butylbenzene	ND		ug/kg	1.4	--	1
tert-Butylbenzene	ND		ug/kg	5.8	--	1
o-Chlorotoluene	ND		ug/kg	5.8	--	1
p-Chlorotoluene	ND		ug/kg	5.8	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.8	--	1
Hexachlorobutadiene	ND		ug/kg	5.8	--	1
Isopropylbenzene	ND		ug/kg	1.4	--	1
p-Isopropyltoluene	ND		ug/kg	1.4	--	1
Naphthalene	ND		ug/kg	5.8	--	1
n-Propylbenzene	ND		ug/kg	1.4	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.8	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.8	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.8	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.8	--	1
Diethyl ether	ND		ug/kg	7.2	--	1
Diisopropyl Ether	ND		ug/kg	5.8	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	5.8	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	5.8	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-05	Date Collected:	03/11/14 10:30
Client ID:	S-5	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
1,4-Dioxane	ND		ug/kg	58	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-06	Date Collected:	03/11/14 12:30
Client ID:	S-6	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	97,8260C		
Analytical Date:	03/12/14 15:58		
Analyst:	BN		
Percent Solids:	70%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	18	--	1
1,1-Dichloroethane	ND		ug/kg	2.7	--	1
Chloroform	ND		ug/kg	2.7	--	1
Carbon tetrachloride	ND		ug/kg	1.8	--	1
1,2-Dichloropropane	ND		ug/kg	6.2	--	1
Dibromochloromethane	ND		ug/kg	1.8	--	1
1,1,2-Trichloroethane	ND		ug/kg	2.7	--	1
Tetrachloroethene	ND		ug/kg	1.8	--	1
Chlorobenzene	ND		ug/kg	1.8	--	1
Trichlorofluoromethane	ND		ug/kg	7.1	--	1
1,2-Dichloroethane	ND		ug/kg	1.8	--	1
1,1,1-Trichloroethane	ND		ug/kg	1.8	--	1
Bromodichloromethane	ND		ug/kg	1.8	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.8	--	1
cis-1,3-Dichloropropene	ND		ug/kg	1.8	--	1
1,1-Dichloropropene	ND		ug/kg	7.1	--	1
Bromoform	ND		ug/kg	7.1	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.8	--	1
Benzene	ND		ug/kg	1.8	--	1
Toluene	ND		ug/kg	2.7	--	1
Ethylbenzene	ND		ug/kg	1.8	--	1
Chloromethane	ND		ug/kg	7.1	--	1
Bromomethane	ND		ug/kg	3.6	--	1
Vinyl chloride	ND		ug/kg	3.6	--	1
Chloroethane	ND		ug/kg	3.6	--	1
1,1-Dichloroethene	ND		ug/kg	1.8	--	1
trans-1,2-Dichloroethene	ND		ug/kg	2.7	--	1
Trichloroethene	ND		ug/kg	1.8	--	1
1,2-Dichlorobenzene	ND		ug/kg	7.1	--	1
1,3-Dichlorobenzene	ND		ug/kg	7.1	--	1
1,4-Dichlorobenzene	ND		ug/kg	7.1	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-06 Date Collected: 03/11/14 12:30

Client ID: S-6 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	3.6	--	1
p/m-Xylene	ND		ug/kg	3.6	--	1
o-Xylene	ND		ug/kg	3.6	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.8	--	1
Dibromomethane	ND		ug/kg	7.1	--	1
1,2,3-Trichloropropane	ND		ug/kg	7.1	--	1
Styrene	ND		ug/kg	3.6	--	1
Dichlorodifluoromethane	ND		ug/kg	18	--	1
Acetone	ND		ug/kg	64	--	1
Carbon disulfide	ND		ug/kg	7.1	--	1
Methyl ethyl ketone	ND		ug/kg	18	--	1
Methyl isobutyl ketone	ND		ug/kg	18	--	1
2-Hexanone	ND		ug/kg	18	--	1
Bromochloromethane	ND		ug/kg	7.1	--	1
Tetrahydrofuran	ND		ug/kg	7.1	--	1
2,2-Dichloropropane	ND		ug/kg	8.9	--	1
1,2-Dibromoethane	ND		ug/kg	7.1	--	1
1,3-Dichloropropane	ND		ug/kg	7.1	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.8	--	1
Bromobenzene	ND		ug/kg	8.9	--	1
n-Butylbenzene	ND		ug/kg	1.8	--	1
sec-Butylbenzene	ND		ug/kg	1.8	--	1
tert-Butylbenzene	ND		ug/kg	7.1	--	1
o-Chlorotoluene	ND		ug/kg	7.1	--	1
p-Chlorotoluene	ND		ug/kg	7.1	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	7.1	--	1
Hexachlorobutadiene	ND		ug/kg	7.1	--	1
Isopropylbenzene	ND		ug/kg	1.8	--	1
p-Isopropyltoluene	ND		ug/kg	1.8	--	1
Naphthalene	ND		ug/kg	7.1	--	1
n-Propylbenzene	ND		ug/kg	1.8	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	7.1	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	7.1	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	7.1	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	7.1	--	1
Diethyl ether	ND		ug/kg	8.9	--	1
Diisopropyl Ether	ND		ug/kg	7.1	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	7.1	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	7.1	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-06	Date Collected:	03/11/14 12:30
Client ID:	S-6	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
1,4-Dioxane	ND		ug/kg	71	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-07	Date Collected:	03/11/14 13:30
Client ID:	S-7	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	97,8260C		
Analytical Date:	03/13/14 15:10		
Analyst:	MV		
Percent Solids:	81%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	16	--	1
1,1-Dichloroethane	ND		ug/kg	2.4	--	1
Chloroform	ND		ug/kg	2.4	--	1
Carbon tetrachloride	ND		ug/kg	1.6	--	1
1,2-Dichloropropane	ND		ug/kg	5.7	--	1
Dibromochloromethane	ND		ug/kg	1.6	--	1
1,1,2-Trichloroethane	ND		ug/kg	2.4	--	1
Tetrachloroethene	ND		ug/kg	1.6	--	1
Chlorobenzene	ND		ug/kg	1.6	--	1
Trichlorofluoromethane	ND		ug/kg	6.5	--	1
1,2-Dichloroethane	ND		ug/kg	1.6	--	1
1,1,1-Trichloroethane	ND		ug/kg	1.6	--	1
Bromodichloromethane	ND		ug/kg	1.6	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.6	--	1
cis-1,3-Dichloropropene	ND		ug/kg	1.6	--	1
1,1-Dichloropropene	ND		ug/kg	6.5	--	1
Bromoform	ND		ug/kg	6.5	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.6	--	1
Benzene	ND		ug/kg	1.6	--	1
Toluene	ND		ug/kg	2.4	--	1
Ethylbenzene	ND		ug/kg	1.6	--	1
Chloromethane	ND		ug/kg	6.5	--	1
Bromomethane	ND		ug/kg	3.2	--	1
Vinyl chloride	ND		ug/kg	3.2	--	1
Chloroethane	ND		ug/kg	3.2	--	1
1,1-Dichloroethene	ND		ug/kg	1.6	--	1
trans-1,2-Dichloroethene	ND		ug/kg	2.4	--	1
Trichloroethene	ND		ug/kg	1.6	--	1
1,2-Dichlorobenzene	ND		ug/kg	6.5	--	1
1,3-Dichlorobenzene	ND		ug/kg	6.5	--	1
1,4-Dichlorobenzene	ND		ug/kg	6.5	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-07 Date Collected: 03/11/14 13:30

Client ID: S-7 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	3.2	--	1
p/m-Xylene	ND		ug/kg	3.2	--	1
o-Xylene	ND		ug/kg	3.2	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.6	--	1
Dibromomethane	ND		ug/kg	6.5	--	1
1,2,3-Trichloropropane	ND		ug/kg	6.5	--	1
Styrene	ND		ug/kg	3.2	--	1
Dichlorodifluoromethane	ND		ug/kg	16	--	1
Acetone	ND		ug/kg	58	--	1
Carbon disulfide	ND		ug/kg	6.5	--	1
Methyl ethyl ketone	ND		ug/kg	16	--	1
Methyl isobutyl ketone	ND		ug/kg	16	--	1
2-Hexanone	ND		ug/kg	16	--	1
Bromochloromethane	ND		ug/kg	6.5	--	1
Tetrahydrofuran	ND		ug/kg	6.5	--	1
2,2-Dichloropropane	ND		ug/kg	8.1	--	1
1,2-Dibromoethane	ND		ug/kg	6.5	--	1
1,3-Dichloropropane	ND		ug/kg	6.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.6	--	1
Bromobenzene	ND		ug/kg	8.1	--	1
n-Butylbenzene	ND		ug/kg	1.6	--	1
sec-Butylbenzene	ND		ug/kg	1.6	--	1
tert-Butylbenzene	ND		ug/kg	6.5	--	1
o-Chlorotoluene	ND		ug/kg	6.5	--	1
p-Chlorotoluene	ND		ug/kg	6.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.5	--	1
Hexachlorobutadiene	ND		ug/kg	6.5	--	1
Isopropylbenzene	ND		ug/kg	1.6	--	1
p-Isopropyltoluene	ND		ug/kg	1.6	--	1
Naphthalene	ND		ug/kg	6.5	--	1
n-Propylbenzene	ND		ug/kg	1.6	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.5	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.5	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.5	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.5	--	1
Diethyl ether	ND		ug/kg	8.1	--	1
Diisopropyl Ether	ND		ug/kg	6.5	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	6.5	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	6.5	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-07	Date Collected:	03/11/14 13:30
Client ID:	S-7	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
1,4-Dioxane	ND		ug/kg	65	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	102		70-130

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-08	Date Collected:	03/11/14 14:30
Client ID:	S-8	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	97,8260C		
Analytical Date:	03/12/14 16:55		
Analyst:	BN		
Percent Solids:	75%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	15	--	1
1,1-Dichloroethane	ND		ug/kg	2.3	--	1
Chloroform	ND		ug/kg	2.3	--	1
Carbon tetrachloride	ND		ug/kg	1.5	--	1
1,2-Dichloropropane	ND		ug/kg	5.3	--	1
Dibromochloromethane	ND		ug/kg	1.5	--	1
1,1,2-Trichloroethane	ND		ug/kg	2.3	--	1
Tetrachloroethene	ND		ug/kg	1.5	--	1
Chlorobenzene	ND		ug/kg	1.5	--	1
Trichlorofluoromethane	ND		ug/kg	6.0	--	1
1,2-Dichloroethane	ND		ug/kg	1.5	--	1
1,1,1-Trichloroethane	ND		ug/kg	1.5	--	1
Bromodichloromethane	ND		ug/kg	1.5	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.5	--	1
cis-1,3-Dichloropropene	ND		ug/kg	1.5	--	1
1,1-Dichloropropene	ND		ug/kg	6.0	--	1
Bromoform	ND		ug/kg	6.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.5	--	1
Benzene	ND		ug/kg	1.5	--	1
Toluene	ND		ug/kg	2.3	--	1
Ethylbenzene	ND		ug/kg	1.5	--	1
Chloromethane	ND		ug/kg	6.0	--	1
Bromomethane	ND		ug/kg	3.0	--	1
Vinyl chloride	ND		ug/kg	3.0	--	1
Chloroethane	ND		ug/kg	3.0	--	1
1,1-Dichloroethene	ND		ug/kg	1.5	--	1
trans-1,2-Dichloroethene	ND		ug/kg	2.3	--	1
Trichloroethene	ND		ug/kg	1.5	--	1
1,2-Dichlorobenzene	ND		ug/kg	6.0	--	1
1,3-Dichlorobenzene	ND		ug/kg	6.0	--	1
1,4-Dichlorobenzene	ND		ug/kg	6.0	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-08 Date Collected: 03/11/14 14:30

Client ID: S-8 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	3.0	--	1
p/m-Xylene	ND		ug/kg	3.0	--	1
o-Xylene	ND		ug/kg	3.0	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.5	--	1
Dibromomethane	ND		ug/kg	6.0	--	1
1,2,3-Trichloropropane	ND		ug/kg	6.0	--	1
Styrene	ND		ug/kg	3.0	--	1
Dichlorodifluoromethane	ND		ug/kg	15	--	1
Acetone	ND		ug/kg	54	--	1
Carbon disulfide	ND		ug/kg	6.0	--	1
Methyl ethyl ketone	ND		ug/kg	15	--	1
Methyl isobutyl ketone	ND		ug/kg	15	--	1
2-Hexanone	ND		ug/kg	15	--	1
Bromochloromethane	ND		ug/kg	6.0	--	1
Tetrahydrofuran	ND		ug/kg	6.0	--	1
2,2-Dichloropropane	ND		ug/kg	7.5	--	1
1,2-Dibromoethane	ND		ug/kg	6.0	--	1
1,3-Dichloropropane	ND		ug/kg	6.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.5	--	1
Bromobenzene	ND		ug/kg	7.5	--	1
n-Butylbenzene	ND		ug/kg	1.5	--	1
sec-Butylbenzene	ND		ug/kg	1.5	--	1
tert-Butylbenzene	ND		ug/kg	6.0	--	1
o-Chlorotoluene	ND		ug/kg	6.0	--	1
p-Chlorotoluene	ND		ug/kg	6.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.0	--	1
Hexachlorobutadiene	ND		ug/kg	6.0	--	1
Isopropylbenzene	ND		ug/kg	1.5	--	1
p-Isopropyltoluene	ND		ug/kg	1.5	--	1
Naphthalene	ND		ug/kg	6.0	--	1
n-Propylbenzene	ND		ug/kg	1.5	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.0	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.0	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.0	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.0	--	1
Diethyl ether	ND		ug/kg	7.5	--	1
Diisopropyl Ether	ND		ug/kg	6.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	6.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	6.0	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-08	Date Collected:	03/11/14 14:30
Client ID:	S-8	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
1,4-Dioxane	ND		ug/kg	60	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/12/14 09:50
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-06,08 Batch: WG675067-3					
Methylene chloride	ND		ug/kg	10	--
1,1-Dichloroethane	ND		ug/kg	1.5	--
Chloroform	ND		ug/kg	1.5	--
Carbon tetrachloride	ND		ug/kg	1.0	--
1,2-Dichloropropane	ND		ug/kg	3.5	--
Dibromochloromethane	ND		ug/kg	1.0	--
1,1,2-Trichloroethane	ND		ug/kg	1.5	--
Tetrachloroethene	ND		ug/kg	1.0	--
Chlorobenzene	ND		ug/kg	1.0	--
Trichlorofluoromethane	ND		ug/kg	4.0	--
1,2-Dichloroethane	ND		ug/kg	1.0	--
1,1,1-Trichloroethane	ND		ug/kg	1.0	--
Bromodichloromethane	ND		ug/kg	1.0	--
trans-1,3-Dichloropropene	ND		ug/kg	1.0	--
cis-1,3-Dichloropropene	ND		ug/kg	1.0	--
1,1-Dichloropropene	ND		ug/kg	4.0	--
Bromoform	ND		ug/kg	4.0	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	--
Benzene	ND		ug/kg	1.0	--
Toluene	ND		ug/kg	1.5	--
Ethylbenzene	ND		ug/kg	1.0	--
Chloromethane	ND		ug/kg	4.0	--
Bromomethane	ND		ug/kg	2.0	--
Vinyl chloride	ND		ug/kg	2.0	--
Chloroethane	ND		ug/kg	2.0	--
1,1-Dichloroethene	ND		ug/kg	1.0	--
trans-1,2-Dichloroethene	ND		ug/kg	1.5	--
Trichloroethene	ND		ug/kg	1.0	--
1,2-Dichlorobenzene	ND		ug/kg	4.0	--
1,3-Dichlorobenzene	ND		ug/kg	4.0	--

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/12/14 09:50
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-06,08 Batch: WG675067-3					
1,4-Dichlorobenzene	ND		ug/kg	4.0	--
Methyl tert butyl ether	ND		ug/kg	2.0	--
p/m-Xylene	ND		ug/kg	2.0	--
o-Xylene	ND		ug/kg	2.0	--
cis-1,2-Dichloroethene	ND		ug/kg	1.0	--
Dibromomethane	ND		ug/kg	4.0	--
1,2,3-Trichloropropane	ND		ug/kg	4.0	--
Styrene	ND		ug/kg	2.0	--
Dichlorodifluoromethane	ND		ug/kg	10	--
Acetone	ND		ug/kg	36	--
Carbon disulfide	ND		ug/kg	4.0	--
Methyl ethyl ketone	ND		ug/kg	10	--
Methyl isobutyl ketone	ND		ug/kg	10	--
2-Hexanone	ND		ug/kg	10	--
Bromochloromethane	ND		ug/kg	4.0	--
Tetrahydrofuran	ND		ug/kg	4.0	--
2,2-Dichloropropane	ND		ug/kg	5.0	--
1,2-Dibromoethane	ND		ug/kg	4.0	--
1,3-Dichloropropane	ND		ug/kg	4.0	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	--
Bromobenzene	ND		ug/kg	5.0	--
n-Butylbenzene	ND		ug/kg	1.0	--
sec-Butylbenzene	ND		ug/kg	1.0	--
tert-Butylbenzene	ND		ug/kg	4.0	--
o-Chlorotoluene	ND		ug/kg	4.0	--
p-Chlorotoluene	ND		ug/kg	4.0	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.0	--
Hexachlorobutadiene	ND		ug/kg	4.0	--
Isopropylbenzene	ND		ug/kg	1.0	--
p-Isopropyltoluene	ND		ug/kg	1.0	--

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/12/14 09:50
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-06,08 Batch: WG675067-3					
Naphthalene	ND		ug/kg	4.0	--
n-Propylbenzene	ND		ug/kg	1.0	--
1,2,3-Trichlorobenzene	ND		ug/kg	4.0	--
1,2,4-Trichlorobenzene	ND		ug/kg	4.0	--
1,3,5-Trimethylbenzene	ND		ug/kg	4.0	--
1,2,4-Trimethylbenzene	ND		ug/kg	4.0	--
Diethyl ether	ND		ug/kg	5.0	--
Diisopropyl Ether	ND		ug/kg	4.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	--
1,4-Dioxane	ND		ug/kg	40	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	95		70-130

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/13/14 14:42
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 07 Batch: WG675544-3					
Methylene chloride	ND		ug/kg	10	--
1,1-Dichloroethane	ND		ug/kg	1.5	--
Chloroform	ND		ug/kg	1.5	--
Carbon tetrachloride	ND		ug/kg	1.0	--
1,2-Dichloropropane	ND		ug/kg	3.5	--
Dibromochloromethane	ND		ug/kg	1.0	--
1,1,2-Trichloroethane	ND		ug/kg	1.5	--
Tetrachloroethene	ND		ug/kg	1.0	--
Chlorobenzene	ND		ug/kg	1.0	--
Trichlorofluoromethane	ND		ug/kg	4.0	--
1,2-Dichloroethane	ND		ug/kg	1.0	--
1,1,1-Trichloroethane	ND		ug/kg	1.0	--
Bromodichloromethane	ND		ug/kg	1.0	--
trans-1,3-Dichloropropene	ND		ug/kg	1.0	--
cis-1,3-Dichloropropene	ND		ug/kg	1.0	--
1,1-Dichloropropene	ND		ug/kg	4.0	--
Bromoform	ND		ug/kg	4.0	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	--
Benzene	ND		ug/kg	1.0	--
Toluene	ND		ug/kg	1.5	--
Ethylbenzene	ND		ug/kg	1.0	--
Chloromethane	ND		ug/kg	4.0	--
Bromomethane	ND		ug/kg	2.0	--
Vinyl chloride	ND		ug/kg	2.0	--
Chloroethane	ND		ug/kg	2.0	--
1,1-Dichloroethene	ND		ug/kg	1.0	--
trans-1,2-Dichloroethene	ND		ug/kg	1.5	--
Trichloroethene	ND		ug/kg	1.0	--
1,2-Dichlorobenzene	ND		ug/kg	4.0	--
1,3-Dichlorobenzene	ND		ug/kg	4.0	--
1,4-Dichlorobenzene	ND		ug/kg	4.0	--

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/13/14 14:42
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 07 Batch: WG675544-3					
Methyl tert butyl ether	ND		ug/kg	2.0	--
p/m-Xylene	ND		ug/kg	2.0	--
o-Xylene	ND		ug/kg	2.0	--
cis-1,2-Dichloroethene	ND		ug/kg	1.0	--
Dibromomethane	ND		ug/kg	4.0	--
1,2,3-Trichloropropane	ND		ug/kg	4.0	--
Styrene	ND		ug/kg	2.0	--
Dichlorodifluoromethane	ND		ug/kg	10	--
Acetone	ND		ug/kg	36	--
Carbon disulfide	ND		ug/kg	4.0	--
Methyl ethyl ketone	ND		ug/kg	10	--
Methyl isobutyl ketone	ND		ug/kg	10	--
2-Hexanone	ND		ug/kg	10	--
Bromochloromethane	ND		ug/kg	4.0	--
Tetrahydrofuran	ND		ug/kg	4.0	--
2,2-Dichloropropane	ND		ug/kg	5.0	--
1,2-Dibromoethane	ND		ug/kg	4.0	--
1,3-Dichloropropane	ND		ug/kg	4.0	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	--
Bromobenzene	ND		ug/kg	5.0	--
n-Butylbenzene	ND		ug/kg	1.0	--
sec-Butylbenzene	ND		ug/kg	1.0	--
tert-Butylbenzene	ND		ug/kg	4.0	--
o-Chlorotoluene	ND		ug/kg	4.0	--
p-Chlorotoluene	ND		ug/kg	4.0	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.0	--
Hexachlorobutadiene	ND		ug/kg	4.0	--
Isopropylbenzene	ND		ug/kg	1.0	--
p-Isopropyltoluene	ND		ug/kg	1.0	--
Naphthalene	ND		ug/kg	4.0	--
n-Propylbenzene	ND		ug/kg	1.0	--

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/13/14 14:42
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 07 Batch: WG675544-3					
1,2,3-Trichlorobenzene	ND		ug/kg	4.0	--
1,2,4-Trichlorobenzene	ND		ug/kg	4.0	--
1,3,5-Trimethylbenzene	ND		ug/kg	4.0	--
1,2,4-Trimethylbenzene	ND		ug/kg	4.0	--
Diethyl ether	ND		ug/kg	5.0	--
Diisopropyl Ether	ND		ug/kg	4.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	--
1,4-Dioxane	ND		ug/kg	40	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-06,08 Batch: WG675067-1 WG675067-2

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Methylene chloride	86		85		70-130	1		20
1,1-Dichloroethane	89		86		70-130	3		20
Chloroform	90		87		70-130	3		20
Carbon tetrachloride	94		89		70-130	5		20
1,2-Dichloropropane	87		85		70-130	2		20
Dibromochloromethane	88		88		70-130	0		20
1,1,2-Trichloroethane	85		86		70-130	1		20
Tetrachloroethene	93		90		70-130	3		20
Chlorobenzene	89		86		70-130	3		20
Trichlorofluoromethane	95		89		70-130	7		20
1,2-Dichloroethane	83		83		70-130	0		20
1,1,1-Trichloroethane	91		86		70-130	6		20
Bromodichloromethane	87		86		70-130	1		20
trans-1,3-Dichloropropene	89		89		70-130	0		20
cis-1,3-Dichloropropene	87		86		70-130	1		20
1,1-Dichloropropene	92		88		70-130	4		20
Bromoform	88		88		70-130	0		20
1,1,2,2-Tetrachloroethane	85		87		70-130	2		20
Benzene	86		83		70-130	4		20
Toluene	90		86		70-130	5		20
Ethylbenzene	90		86		70-130	5		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-06,08 Batch: WG675067-1 WG675067-2

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Chloromethane	87		84		70-130	4		20
Bromomethane	110		104		70-130	6		20
Vinyl chloride	95		89		70-130	7		20
Chloroethane	92		88		70-130	4		20
1,1-Dichloroethene	93		88		70-130	6		20
trans-1,2-Dichloroethene	90		87		70-130	3		20
Trichloroethene	90		85		70-130	6		20
1,2-Dichlorobenzene	88		87		70-130	1		20
1,3-Dichlorobenzene	89		87		70-130	2		20
1,4-Dichlorobenzene	89		87		70-130	2		20
Methyl tert butyl ether	85		85		70-130	0		20
p/m-Xylene	90		87		70-130	3		20
o-Xylene	89		87		70-130	2		20
cis-1,2-Dichloroethene	87		86		70-130	1		20
Dibromomethane	87		86		70-130	1		20
1,2,3-Trichloropropane	86		82		70-130	5		20
Styrene	88		86		70-130	2		20
Dichlorodifluoromethane	96		90		70-130	6		20
Acetone	125		110		70-130	13		20
Carbon disulfide	96		90		70-130	6		20
Methyl ethyl ketone	98		90		70-130	9		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-06,08 Batch: WG675067-1 WG675067-2								
Methyl isobutyl ketone	82		84		70-130	2		20
2-Hexanone	96		91		70-130	5		20
Bromochloromethane	90		86		70-130	5		20
Tetrahydrofuran	90		94		70-130	4		20
2,2-Dichloropropane	94		89		70-130	5		20
1,2-Dibromoethane	87		88		70-130	1		20
1,3-Dichloropropane	86		86		70-130	0		20
1,1,1,2-Tetrachloroethane	89		87		70-130	2		20
Bromobenzene	88		87		70-130	1		20
n-Butylbenzene	93		89		70-130	4		20
sec-Butylbenzene	93		89		70-130	4		20
tert-Butylbenzene	93		89		70-130	4		20
o-Chlorotoluene	89		86		70-130	3		20
p-Chlorotoluene	91		88		70-130	3		20
1,2-Dibromo-3-chloropropane	89		94		70-130	5		20
Hexachlorobutadiene	96		92		70-130	4		20
Isopropylbenzene	90		88		70-130	2		20
p-Isopropyltoluene	93		89		70-130	4		20
Naphthalene	84		86		70-130	2		20
n-Propylbenzene	91		88		70-130	3		20
1,2,3-Trichlorobenzene	85		87		70-130	2		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-06,08 Batch: WG675067-1 WG675067-2								
1,2,4-Trichlorobenzene	90		89		70-130	1		20
1,3,5-Trimethylbenzene	92		89		70-130	3		20
1,2,4-Trimethylbenzene	92		89		70-130	3		20
Diethyl ether	86		86		70-130	0		20
Diisopropyl Ether	86		85		70-130	1		20
Ethyl-Tert-Butyl-Ether	85		84		70-130	1		20
Tertiary-Amyl Methyl Ether	85		85		70-130	0		20
1,4-Dioxane	81		82		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		97		70-130
Toluene-d8	103		103		70-130
4-Bromofluorobenzene	101		101		70-130
Dibromofluoromethane	99		100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 07 Batch: WG675544-1 WG675544-2

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Methylene chloride	92		91		70-130	1		20
1,1-Dichloroethane	93		90		70-130	3		20
Chloroform	91		90		70-130	1		20
Carbon tetrachloride	95		92		70-130	3		20
1,2-Dichloropropane	90		88		70-130	2		20
Dibromochloromethane	90		89		70-130	1		20
1,1,2-Trichloroethane	87		88		70-130	1		20
Tetrachloroethene	96		93		70-130	3		20
Chlorobenzene	93		91		70-130	2		20
Trichlorofluoromethane	90		85		70-130	6		20
1,2-Dichloroethane	87		86		70-130	1		20
1,1,1-Trichloroethane	94		91		70-130	3		20
Bromodichloromethane	92		89		70-130	3		20
trans-1,3-Dichloropropene	91		90		70-130	1		20
cis-1,3-Dichloropropene	91		88		70-130	3		20
1,1-Dichloropropene	93		91		70-130	2		20
Bromoform	90		88		70-130	2		20
1,1,2,2-Tetrachloroethane	87		86		70-130	1		20
Benzene	90		88		70-130	2		20
Toluene	92		89		70-130	3		20
Ethylbenzene	92		90		70-130	2		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 07 Batch: WG675544-1 WG675544-2

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Chloromethane	85		82		70-130	4		20
Bromomethane	110		108		70-130	2		20
Vinyl chloride	90		87		70-130	3		20
Chloroethane	94		90		70-130	4		20
1,1-Dichloroethene	93		91		70-130	2		20
trans-1,2-Dichloroethene	94		91		70-130	3		20
Trichloroethene	94		91		70-130	3		20
1,2-Dichlorobenzene	93		90		70-130	3		20
1,3-Dichlorobenzene	94		90		70-130	4		20
1,4-Dichlorobenzene	94		89		70-130	5		20
Methyl tert butyl ether	85		86		70-130	1		20
p/m-Xylene	94		91		70-130	3		20
o-Xylene	92		90		70-130	2		20
cis-1,2-Dichloroethene	91		88		70-130	3		20
Dibromomethane	90		89		70-130	1		20
1,2,3-Trichloropropane	82		83		70-130	1		20
Styrene	91		89		70-130	2		20
Dichlorodifluoromethane	78		74		70-130	5		20
Acetone	111		112		70-130	1		20
Carbon disulfide	97		93		70-130	4		20
Methyl ethyl ketone	87		88		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 07 Batch: WG675544-1 WG675544-2								
Methyl isobutyl ketone	81		83		70-130	2		20
2-Hexanone	85		87		70-130	2		20
Bromochloromethane	92		90		70-130	2		20
Tetrahydrofuran	89		92		70-130	3		20
2,2-Dichloropropane	95		91		70-130	4		20
1,2-Dibromoethane	88		89		70-130	1		20
1,3-Dichloropropane	88		89		70-130	1		20
1,1,1,2-Tetrachloroethane	93		90		70-130	3		20
Bromobenzene	92		88		70-130	4		20
n-Butylbenzene	97		92		70-130	5		20
sec-Butylbenzene	97		91		70-130	6		20
tert-Butylbenzene	97		92		70-130	5		20
o-Chlorotoluene	95		90		70-130	5		20
p-Chlorotoluene	95		91		70-130	4		20
1,2-Dibromo-3-chloropropane	85		88		70-130	3		20
Hexachlorobutadiene	98		92		70-130	6		20
Isopropylbenzene	95		90		70-130	5		20
p-Isopropyltoluene	96		92		70-130	4		20
Naphthalene	84		86		70-130	2		20
n-Propylbenzene	95		90		70-130	5		20
1,2,3-Trichlorobenzene	90		89		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 07 Batch: WG675544-1 WG675544-2								
1,2,4-Trichlorobenzene	93		90		70-130	3		20
1,3,5-Trimethylbenzene	97		91		70-130	6		20
1,2,4-Trimethylbenzene	96		92		70-130	4		20
Diethyl ether	90		88		70-130	2		20
Diisopropyl Ether	88		87		70-130	1		20
Ethyl-Tert-Butyl-Ether	87		86		70-130	1		20
Tertiary-Amyl Methyl Ether	86		86		70-130	0		20
1,4-Dioxane	76		80		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		99		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	101		101		70-130

SEMIVOLATILES

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-01	Date Collected:	03/11/14 08:00
Client ID:	S-1	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	97,8270D	Extraction Date:	03/12/14 10:12
Analytical Date:	03/14/14 17:16		
Analyst:	RC		
Percent Solids:	77%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	2900		ug/kg	350	--	2
1,2,4-Trichlorobenzene	ND		ug/kg	430	--	2
Hexachlorobenzene	ND		ug/kg	260	--	2
Bis(2-chloroethyl)ether	ND		ug/kg	390	--	2
2-Chloronaphthalene	ND		ug/kg	430	--	2
1,2-Dichlorobenzene	ND		ug/kg	430	--	2
1,3-Dichlorobenzene	ND		ug/kg	430	--	2
1,4-Dichlorobenzene	ND		ug/kg	430	--	2
3,3'-Dichlorobenzidine	ND		ug/kg	430	--	2
2,4-Dinitrotoluene	ND		ug/kg	430	--	2
2,6-Dinitrotoluene	ND		ug/kg	430	--	2
Azobenzene	ND		ug/kg	430	--	2
Fluoranthene	30000	E	ug/kg	260	--	2
4-Bromophenyl phenyl ether	ND		ug/kg	430	--	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	520	--	2
Bis(2-chloroethoxy)methane	ND		ug/kg	470	--	2
Hexachlorobutadiene	ND		ug/kg	430	--	2
Hexachloroethane	ND		ug/kg	350	--	2
Isophorone	ND		ug/kg	390	--	2
Naphthalene	820		ug/kg	430	--	2
Nitrobenzene	ND		ug/kg	390	--	2
Bis(2-Ethylhexyl)phthalate	2600		ug/kg	430	--	2
Butyl benzyl phthalate	ND		ug/kg	430	--	2
Di-n-butylphthalate	ND		ug/kg	430	--	2
Di-n-octylphthalate	760		ug/kg	430	--	2
Diethyl phthalate	ND		ug/kg	430	--	2
Dimethyl phthalate	ND		ug/kg	430	--	2
Benzo(a)anthracene	23000	E	ug/kg	260	--	2
Benzo(a)pyrene	14000		ug/kg	350	--	2
Benzo(b)fluoranthene	18000	E	ug/kg	260	--	2
Benzo(k)fluoranthene	9000		ug/kg	260	--	2

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-01 Date Collected: 03/11/14 08:00

Client ID: S-1 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Chrysene	20000	E	ug/kg	260	--	2
Acenaphthylene	670		ug/kg	350	--	2
Anthracene	9200		ug/kg	260	--	2
Benzo(ghi)perylene	9300		ug/kg	350	--	2
Fluorene	3800		ug/kg	430	--	2
Phenanthrene	21000	E	ug/kg	260	--	2
Dibenzo(a,h)anthracene	2900		ug/kg	260	--	2
Indeno(1,2,3-cd)Pyrene	11000		ug/kg	350	--	2
Pyrene	26000	E	ug/kg	260	--	2
Aniline	ND		ug/kg	520	--	2
4-Chloroaniline	ND		ug/kg	430	--	2
Dibenzofuran	1900		ug/kg	430	--	2
2-Methylnaphthalene	ND		ug/kg	520	--	2
Acetophenone	ND		ug/kg	430	--	2
2,4,6-Trichlorophenol	ND		ug/kg	260	--	2
2-Chlorophenol	ND		ug/kg	430	--	2
2,4-Dichlorophenol	ND		ug/kg	390	--	2
2,4-Dimethylphenol	ND		ug/kg	430	--	2
2-Nitrophenol	ND		ug/kg	940	--	2
4-Nitrophenol	ND		ug/kg	610	--	2
2,4-Dinitrophenol	ND		ug/kg	2100	--	2
Pentachlorophenol	ND		ug/kg	870	--	2
Phenol	ND		ug/kg	430	--	2
2-Methylphenol	ND		ug/kg	430	--	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	620	--	2
2,4,5-Trichlorophenol	ND		ug/kg	430	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	88		30-130
Phenol-d6	94		30-130
Nitrobenzene-d5	87		30-130
2-Fluorobiphenyl	62		30-130
2,4,6-Tribromophenol	86		30-130
4-Terphenyl-d14	54		30-130

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-01	D	Date Collected:	03/11/14 08:00
Client ID:	S-1		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	97,8270D		Extraction Date:	03/12/14 10:12
Analytical Date:	03/15/14 21:30			
Analyst:	RC			
Percent Solids:	77%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Fluoranthene	48000		ug/kg	1300	--	10
Benzo(a)anthracene	22000		ug/kg	1300	--	10
Benzo(b)fluoranthene	18000		ug/kg	1300	--	10
Chrysene	20000		ug/kg	1300	--	10
Phenanthrene	33000		ug/kg	1300	--	10
Pyrene	37000		ug/kg	1300	--	10

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-02	Date Collected:	03/11/14 09:00
Client ID:	S-2	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	97,8270D	Extraction Date:	03/12/14 10:12
Analytical Date:	03/14/14 17:42		
Analyst:	RC		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	610		ug/kg	320	--	2
1,2,4-Trichlorobenzene	ND		ug/kg	400	--	2
Hexachlorobenzene	ND		ug/kg	240	--	2
Bis(2-chloroethyl)ether	ND		ug/kg	360	--	2
2-Chloronaphthalene	ND		ug/kg	400	--	2
1,2-Dichlorobenzene	ND		ug/kg	400	--	2
1,3-Dichlorobenzene	ND		ug/kg	400	--	2
1,4-Dichlorobenzene	ND		ug/kg	400	--	2
3,3'-Dichlorobenzidine	ND		ug/kg	400	--	2
2,4-Dinitrotoluene	ND		ug/kg	400	--	2
2,6-Dinitrotoluene	ND		ug/kg	400	--	2
Azobenzene	ND		ug/kg	400	--	2
Fluoranthene	11000		ug/kg	240	--	2
4-Bromophenyl phenyl ether	ND		ug/kg	400	--	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	470	--	2
Bis(2-chloroethoxy)methane	ND		ug/kg	430	--	2
Hexachlorobutadiene	ND		ug/kg	400	--	2
Hexachloroethane	ND		ug/kg	320	--	2
Isophorone	ND		ug/kg	360	--	2
Naphthalene	ND		ug/kg	400	--	2
Nitrobenzene	ND		ug/kg	360	--	2
Bis(2-Ethylhexyl)phthalate	750		ug/kg	400	--	2
Butyl benzyl phthalate	820		ug/kg	400	--	2
Di-n-butylphthalate	ND		ug/kg	400	--	2
Di-n-octylphthalate	ND		ug/kg	400	--	2
Diethyl phthalate	ND		ug/kg	400	--	2
Dimethyl phthalate	ND		ug/kg	400	--	2
Benzo(a)anthracene	5900		ug/kg	240	--	2
Benzo(a)pyrene	3900		ug/kg	320	--	2
Benzo(b)fluoranthene	4600		ug/kg	240	--	2
Benzo(k)fluoranthene	2100		ug/kg	240	--	2

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-02 Date Collected: 03/11/14 09:00

Client ID: S-2 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Chrysene	5300		ug/kg	240	--	2
Acenaphthylene	1400		ug/kg	320	--	2
Anthracene	2300		ug/kg	240	--	2
Benzo(ghi)perylene	2500		ug/kg	320	--	2
Fluorene	920		ug/kg	400	--	2
Phenanthrene	7600		ug/kg	240	--	2
Dibenzo(a,h)anthracene	850		ug/kg	240	--	2
Indeno(1,2,3-cd)Pyrene	3000		ug/kg	320	--	2
Pyrene	10000		ug/kg	240	--	2
Aniline	ND		ug/kg	470	--	2
4-Chloroaniline	ND		ug/kg	400	--	2
Dibenzofuran	ND		ug/kg	400	--	2
2-Methylnaphthalene	ND		ug/kg	470	--	2
Acetophenone	ND		ug/kg	400	--	2
2,4,6-Trichlorophenol	ND		ug/kg	240	--	2
2-Chlorophenol	ND		ug/kg	400	--	2
2,4-Dichlorophenol	ND		ug/kg	360	--	2
2,4-Dimethylphenol	ND		ug/kg	400	--	2
2-Nitrophenol	ND		ug/kg	850	--	2
4-Nitrophenol	ND		ug/kg	550	--	2
2,4-Dinitrophenol	ND		ug/kg	1900	--	2
Pentachlorophenol	ND		ug/kg	790	--	2
Phenol	ND		ug/kg	400	--	2
2-Methylphenol	ND		ug/kg	400	--	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	570	--	2
2,4,5-Trichlorophenol	ND		ug/kg	400	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		30-130
Phenol-d6	87		30-130
Nitrobenzene-d5	79		30-130
2-Fluorobiphenyl	59		30-130
2,4,6-Tribromophenol	77		30-130
4-Terphenyl-d14	51		30-130

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-03	Date Collected:	03/11/14 09:30
Client ID:	S-3	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	97,8270D	Extraction Date:	03/12/14 10:12
Analytical Date:	03/14/14 18:08		
Analyst:	RC		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	ND		ug/kg	300	--	2
1,2,4-Trichlorobenzene	ND		ug/kg	380	--	2
Hexachlorobenzene	ND		ug/kg	230	--	2
Bis(2-chloroethyl)ether	ND		ug/kg	340	--	2
2-Chloronaphthalene	ND		ug/kg	380	--	2
1,2-Dichlorobenzene	ND		ug/kg	380	--	2
1,3-Dichlorobenzene	ND		ug/kg	380	--	2
1,4-Dichlorobenzene	ND		ug/kg	380	--	2
3,3'-Dichlorobenzidine	ND		ug/kg	380	--	2
2,4-Dinitrotoluene	ND		ug/kg	380	--	2
2,6-Dinitrotoluene	ND		ug/kg	380	--	2
Azobenzene	ND		ug/kg	380	--	2
Fluoranthene	1700		ug/kg	230	--	2
4-Bromophenyl phenyl ether	ND		ug/kg	380	--	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	450	--	2
Bis(2-chloroethoxy)methane	ND		ug/kg	410	--	2
Hexachlorobutadiene	ND		ug/kg	380	--	2
Hexachloroethane	ND		ug/kg	300	--	2
Isophorone	ND		ug/kg	340	--	2
Naphthalene	ND		ug/kg	380	--	2
Nitrobenzene	ND		ug/kg	340	--	2
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	380	--	2
Butyl benzyl phthalate	ND		ug/kg	380	--	2
Di-n-butylphthalate	ND		ug/kg	380	--	2
Di-n-octylphthalate	ND		ug/kg	380	--	2
Diethyl phthalate	ND		ug/kg	380	--	2
Dimethyl phthalate	ND		ug/kg	380	--	2
Benzo(a)anthracene	1500		ug/kg	230	--	2
Benzo(a)pyrene	1500		ug/kg	300	--	2
Benzo(b)fluoranthene	1500		ug/kg	230	--	2
Benzo(k)fluoranthene	580		ug/kg	230	--	2

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-03 Date Collected: 03/11/14 09:30

Client ID: S-3 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Chrysene	1500		ug/kg	230	--	2
Acenaphthylene	1300		ug/kg	300	--	2
Anthracene	600		ug/kg	230	--	2
Benzo(ghi)perylene	1200		ug/kg	300	--	2
Fluorene	ND		ug/kg	380	--	2
Phenanthrene	690		ug/kg	230	--	2
Dibenzo(a,h)anthracene	460		ug/kg	230	--	2
Indeno(1,2,3-cd)Pyrene	1300		ug/kg	300	--	2
Pyrene	2400		ug/kg	230	--	2
Aniline	ND		ug/kg	450	--	2
4-Chloroaniline	ND		ug/kg	380	--	2
Dibenzofuran	ND		ug/kg	380	--	2
2-Methylnaphthalene	ND		ug/kg	450	--	2
Acetophenone	ND		ug/kg	380	--	2
2,4,6-Trichlorophenol	ND		ug/kg	230	--	2
2-Chlorophenol	ND		ug/kg	380	--	2
2,4-Dichlorophenol	ND		ug/kg	340	--	2
2,4-Dimethylphenol	ND		ug/kg	380	--	2
2-Nitrophenol	ND		ug/kg	810	--	2
4-Nitrophenol	ND		ug/kg	530	--	2
2,4-Dinitrophenol	ND		ug/kg	1800	--	2
Pentachlorophenol	ND		ug/kg	750	--	2
Phenol	ND		ug/kg	380	--	2
2-Methylphenol	ND		ug/kg	380	--	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	540	--	2
2,4,5-Trichlorophenol	ND		ug/kg	380	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	87		30-130
Phenol-d6	92		30-130
Nitrobenzene-d5	80		30-130
2-Fluorobiphenyl	67		30-130
2,4,6-Tribromophenol	84		30-130
4-Terphenyl-d14	68		30-130

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-04	Date Collected:	03/11/14 10:00
Client ID:	S-4	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	97,8270D	Extraction Date:	03/12/14 10:12
Analytical Date:	03/14/14 18:34		
Analyst:	RC		
Percent Solids:	75%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	580		ug/kg	350	--	2
1,2,4-Trichlorobenzene	ND		ug/kg	430	--	2
Hexachlorobenzene	ND		ug/kg	260	--	2
Bis(2-chloroethyl)ether	ND		ug/kg	390	--	2
2-Chloronaphthalene	ND		ug/kg	430	--	2
1,2-Dichlorobenzene	ND		ug/kg	430	--	2
1,3-Dichlorobenzene	ND		ug/kg	430	--	2
1,4-Dichlorobenzene	ND		ug/kg	430	--	2
3,3'-Dichlorobenzidine	ND		ug/kg	430	--	2
2,4-Dinitrotoluene	ND		ug/kg	430	--	2
2,6-Dinitrotoluene	ND		ug/kg	430	--	2
Azobenzene	ND		ug/kg	430	--	2
Fluoranthene	5500		ug/kg	260	--	2
4-Bromophenyl phenyl ether	ND		ug/kg	430	--	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	520	--	2
Bis(2-chloroethoxy)methane	ND		ug/kg	470	--	2
Hexachlorobutadiene	ND		ug/kg	430	--	2
Hexachloroethane	ND		ug/kg	350	--	2
Isophorone	ND		ug/kg	390	--	2
Naphthalene	ND		ug/kg	430	--	2
Nitrobenzene	ND		ug/kg	390	--	2
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	430	--	2
Butyl benzyl phthalate	ND		ug/kg	430	--	2
Di-n-butylphthalate	ND		ug/kg	430	--	2
Di-n-octylphthalate	ND		ug/kg	430	--	2
Diethyl phthalate	ND		ug/kg	430	--	2
Dimethyl phthalate	ND		ug/kg	430	--	2
Benzo(a)anthracene	2400		ug/kg	260	--	2
Benzo(a)pyrene	1900		ug/kg	350	--	2
Benzo(b)fluoranthene	2300		ug/kg	260	--	2
Benzo(k)fluoranthene	840		ug/kg	260	--	2

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-04 Date Collected: 03/11/14 10:00

Client ID: S-4 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Chrysene	2100		ug/kg	260	--	2
Acenaphthylene	360		ug/kg	350	--	2
Anthracene	1600		ug/kg	260	--	2
Benzo(ghi)perylene	1300		ug/kg	350	--	2
Fluorene	760		ug/kg	430	--	2
Phenanthrene	4500		ug/kg	260	--	2
Dibenzo(a,h)anthracene	550		ug/kg	260	--	2
Indeno(1,2,3-cd)Pyrene	1600		ug/kg	350	--	2
Pyrene	4400		ug/kg	260	--	2
Aniline	ND		ug/kg	520	--	2
4-Chloroaniline	ND		ug/kg	430	--	2
Dibenzofuran	ND		ug/kg	430	--	2
2-Methylnaphthalene	ND		ug/kg	520	--	2
Acetophenone	ND		ug/kg	430	--	2
2,4,6-Trichlorophenol	ND		ug/kg	260	--	2
2-Chlorophenol	ND		ug/kg	430	--	2
2,4-Dichlorophenol	ND		ug/kg	390	--	2
2,4-Dimethylphenol	ND		ug/kg	430	--	2
2-Nitrophenol	ND		ug/kg	940	--	2
4-Nitrophenol	ND		ug/kg	610	--	2
2,4-Dinitrophenol	ND		ug/kg	2100	--	2
Pentachlorophenol	ND		ug/kg	870	--	2
Phenol	ND		ug/kg	430	--	2
2-Methylphenol	ND		ug/kg	430	--	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	620	--	2
2,4,5-Trichlorophenol	ND		ug/kg	430	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	89		30-130
Phenol-d6	94		30-130
Nitrobenzene-d5	84		30-130
2-Fluorobiphenyl	67		30-130
2,4,6-Tribromophenol	86		30-130
4-Terphenyl-d14	59		30-130

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-05	Date Collected:	03/11/14 10:30
Client ID:	S-5	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	97,8270D	Extraction Date:	03/12/14 10:12
Analytical Date:	03/14/14 18:59		
Analyst:	RC		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	ND		ug/kg	310	--	2
1,2,4-Trichlorobenzene	ND		ug/kg	390	--	2
Hexachlorobenzene	ND		ug/kg	230	--	2
Bis(2-chloroethyl)ether	ND		ug/kg	350	--	2
2-Chloronaphthalene	ND		ug/kg	390	--	2
1,2-Dichlorobenzene	ND		ug/kg	390	--	2
1,3-Dichlorobenzene	ND		ug/kg	390	--	2
1,4-Dichlorobenzene	ND		ug/kg	390	--	2
3,3'-Dichlorobenzidine	ND		ug/kg	390	--	2
2,4-Dinitrotoluene	ND		ug/kg	390	--	2
2,6-Dinitrotoluene	ND		ug/kg	390	--	2
Azobenzene	ND		ug/kg	390	--	2
Fluoranthene	6100		ug/kg	230	--	2
4-Bromophenyl phenyl ether	ND		ug/kg	390	--	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	460	--	2
Bis(2-chloroethoxy)methane	ND		ug/kg	420	--	2
Hexachlorobutadiene	ND		ug/kg	390	--	2
Hexachloroethane	ND		ug/kg	310	--	2
Isophorone	ND		ug/kg	350	--	2
Naphthalene	ND		ug/kg	390	--	2
Nitrobenzene	ND		ug/kg	350	--	2
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	390	--	2
Butyl benzyl phthalate	ND		ug/kg	390	--	2
Di-n-butylphthalate	ND		ug/kg	390	--	2
Di-n-octylphthalate	ND		ug/kg	390	--	2
Diethyl phthalate	ND		ug/kg	390	--	2
Dimethyl phthalate	ND		ug/kg	390	--	2
Benzo(a)anthracene	4300		ug/kg	230	--	2
Benzo(a)pyrene	3200		ug/kg	310	--	2
Benzo(b)fluoranthene	4800		ug/kg	230	--	2
Benzo(k)fluoranthene	1800		ug/kg	230	--	2

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-05 Date Collected: 03/11/14 10:30

Client ID: S-5 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Chrysene	4100		ug/kg	230	--	2
Acenaphthylene	610		ug/kg	310	--	2
Anthracene	1100		ug/kg	230	--	2
Benzo(ghi)perylene	2400		ug/kg	310	--	2
Fluorene	390		ug/kg	390	--	2
Phenanthrene	3500		ug/kg	230	--	2
Dibenzo(a,h)anthracene	950		ug/kg	230	--	2
Indeno(1,2,3-cd)Pyrene	3000		ug/kg	310	--	2
Pyrene	5100		ug/kg	230	--	2
Aniline	ND		ug/kg	460	--	2
4-Chloroaniline	ND		ug/kg	390	--	2
Dibenzofuran	ND		ug/kg	390	--	2
2-Methylnaphthalene	ND		ug/kg	460	--	2
Acetophenone	ND		ug/kg	390	--	2
2,4,6-Trichlorophenol	ND		ug/kg	230	--	2
2-Chlorophenol	ND		ug/kg	390	--	2
2,4-Dichlorophenol	ND		ug/kg	350	--	2
2,4-Dimethylphenol	ND		ug/kg	390	--	2
2-Nitrophenol	ND		ug/kg	840	--	2
4-Nitrophenol	ND		ug/kg	540	--	2
2,4-Dinitrophenol	ND		ug/kg	1900	--	2
Pentachlorophenol	ND		ug/kg	780	--	2
Phenol	ND		ug/kg	390	--	2
2-Methylphenol	ND		ug/kg	390	--	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	560	--	2
2,4,5-Trichlorophenol	ND		ug/kg	390	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	106		30-130
Phenol-d6	110		30-130
Nitrobenzene-d5	100		30-130
2-Fluorobiphenyl	84		30-130
2,4,6-Tribromophenol	92		30-130
4-Terphenyl-d14	77		30-130

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-06	Date Collected:	03/11/14 12:30
Client ID:	S-6	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	97,8270D	Extraction Date:	03/12/14 10:12
Analytical Date:	03/14/14 19:25		
Analyst:	RC		
Percent Solids:	70%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	ND		ug/kg	380	--	2
1,2,4-Trichlorobenzene	ND		ug/kg	470	--	2
Hexachlorobenzene	ND		ug/kg	280	--	2
Bis(2-chloroethyl)ether	ND		ug/kg	420	--	2
2-Chloronaphthalene	ND		ug/kg	470	--	2
1,2-Dichlorobenzene	ND		ug/kg	470	--	2
1,3-Dichlorobenzene	ND		ug/kg	470	--	2
1,4-Dichlorobenzene	ND		ug/kg	470	--	2
3,3'-Dichlorobenzidine	ND		ug/kg	470	--	2
2,4-Dinitrotoluene	ND		ug/kg	470	--	2
2,6-Dinitrotoluene	ND		ug/kg	470	--	2
Azobenzene	ND		ug/kg	470	--	2
Fluoranthene	2500		ug/kg	280	--	2
4-Bromophenyl phenyl ether	ND		ug/kg	470	--	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	560	--	2
Bis(2-chloroethoxy)methane	ND		ug/kg	510	--	2
Hexachlorobutadiene	ND		ug/kg	470	--	2
Hexachloroethane	ND		ug/kg	380	--	2
Isophorone	ND		ug/kg	420	--	2
Naphthalene	ND		ug/kg	470	--	2
Nitrobenzene	ND		ug/kg	420	--	2
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	470	--	2
Butyl benzyl phthalate	ND		ug/kg	470	--	2
Di-n-butylphthalate	ND		ug/kg	470	--	2
Di-n-octylphthalate	ND		ug/kg	470	--	2
Diethyl phthalate	ND		ug/kg	470	--	2
Dimethyl phthalate	ND		ug/kg	470	--	2
Benzo(a)anthracene	1200		ug/kg	280	--	2
Benzo(a)pyrene	1100		ug/kg	380	--	2
Benzo(b)fluoranthene	1300		ug/kg	280	--	2
Benzo(k)fluoranthene	460		ug/kg	280	--	2

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-06 Date Collected: 03/11/14 12:30

Client ID: S-6 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Chrysene	980		ug/kg	280	--	2
Acenaphthylene	ND		ug/kg	380	--	2
Anthracene	560		ug/kg	280	--	2
Benzo(ghi)perylene	830		ug/kg	380	--	2
Fluorene	ND		ug/kg	470	--	2
Phenanthrene	1800		ug/kg	280	--	2
Dibenzo(a,h)anthracene	440		ug/kg	280	--	2
Indeno(1,2,3-cd)Pyrene	1100		ug/kg	380	--	2
Pyrene	2000		ug/kg	280	--	2
Aniline	ND		ug/kg	560	--	2
4-Chloroaniline	ND		ug/kg	470	--	2
Dibenzofuran	ND		ug/kg	470	--	2
2-Methylnaphthalene	ND		ug/kg	560	--	2
Acetophenone	ND		ug/kg	470	--	2
2,4,6-Trichlorophenol	ND		ug/kg	280	--	2
2-Chlorophenol	ND		ug/kg	470	--	2
2,4-Dichlorophenol	ND		ug/kg	420	--	2
2,4-Dimethylphenol	ND		ug/kg	470	--	2
2-Nitrophenol	ND		ug/kg	1000	--	2
4-Nitrophenol	ND		ug/kg	660	--	2
2,4-Dinitrophenol	ND		ug/kg	2200	--	2
Pentachlorophenol	ND		ug/kg	940	--	2
Phenol	ND		ug/kg	470	--	2
2-Methylphenol	ND		ug/kg	470	--	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	680	--	2
2,4,5-Trichlorophenol	ND		ug/kg	470	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	87		30-130
Phenol-d6	94		30-130
Nitrobenzene-d5	88		30-130
2-Fluorobiphenyl	70		30-130
2,4,6-Tribromophenol	89		30-130
4-Terphenyl-d14	66		30-130

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-07	Date Collected:	03/11/14 13:30
Client ID:	S-7	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	97,8270D	Extraction Date:	03/12/14 10:12
Analytical Date:	03/14/14 19:51		
Analyst:	RC		
Percent Solids:	81%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	330		ug/kg	320	--	2
1,2,4-Trichlorobenzene	ND		ug/kg	400	--	2
Hexachlorobenzene	ND		ug/kg	240	--	2
Bis(2-chloroethyl)ether	ND		ug/kg	360	--	2
2-Chloronaphthalene	ND		ug/kg	400	--	2
1,2-Dichlorobenzene	ND		ug/kg	400	--	2
1,3-Dichlorobenzene	ND		ug/kg	400	--	2
1,4-Dichlorobenzene	ND		ug/kg	400	--	2
3,3'-Dichlorobenzidine	ND		ug/kg	400	--	2
2,4-Dinitrotoluene	ND		ug/kg	400	--	2
2,6-Dinitrotoluene	ND		ug/kg	400	--	2
Azobenzene	ND		ug/kg	400	--	2
Fluoranthene	8400		ug/kg	240	--	2
4-Bromophenyl phenyl ether	ND		ug/kg	400	--	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	480	--	2
Bis(2-chloroethoxy)methane	ND		ug/kg	430	--	2
Hexachlorobutadiene	ND		ug/kg	400	--	2
Hexachloroethane	ND		ug/kg	320	--	2
Isophorone	ND		ug/kg	360	--	2
Naphthalene	ND		ug/kg	400	--	2
Nitrobenzene	ND		ug/kg	360	--	2
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	400	--	2
Butyl benzyl phthalate	ND		ug/kg	400	--	2
Di-n-butylphthalate	ND		ug/kg	400	--	2
Di-n-octylphthalate	ND		ug/kg	400	--	2
Diethyl phthalate	ND		ug/kg	400	--	2
Dimethyl phthalate	ND		ug/kg	400	--	2
Benzo(a)anthracene	4100		ug/kg	240	--	2
Benzo(a)pyrene	3300		ug/kg	320	--	2
Benzo(b)fluoranthene	4000		ug/kg	240	--	2
Benzo(k)fluoranthene	1600		ug/kg	240	--	2

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-07 Date Collected: 03/11/14 13:30

Client ID: S-7 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Chrysene	3700		ug/kg	240	--	2
Acenaphthylene	820		ug/kg	320	--	2
Anthracene	1400		ug/kg	240	--	2
Benzo(ghi)perylene	2400		ug/kg	320	--	2
Fluorene	430		ug/kg	400	--	2
Phenanthrene	4200		ug/kg	240	--	2
Dibenzo(a,h)anthracene	800		ug/kg	240	--	2
Indeno(1,2,3-cd)Pyrene	2900		ug/kg	320	--	2
Pyrene	7200		ug/kg	240	--	2
Aniline	ND		ug/kg	480	--	2
4-Chloroaniline	ND		ug/kg	400	--	2
Dibenzofuran	ND		ug/kg	400	--	2
2-Methylnaphthalene	ND		ug/kg	480	--	2
Acetophenone	ND		ug/kg	400	--	2
2,4,6-Trichlorophenol	ND		ug/kg	240	--	2
2-Chlorophenol	ND		ug/kg	400	--	2
2,4-Dichlorophenol	ND		ug/kg	360	--	2
2,4-Dimethylphenol	ND		ug/kg	400	--	2
2-Nitrophenol	ND		ug/kg	860	--	2
4-Nitrophenol	ND		ug/kg	560	--	2
2,4-Dinitrophenol	ND		ug/kg	1900	--	2
Pentachlorophenol	ND		ug/kg	800	--	2
Phenol	ND		ug/kg	400	--	2
2-Methylphenol	ND		ug/kg	400	--	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	580	--	2
2,4,5-Trichlorophenol	ND		ug/kg	400	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	86		30-130
Phenol-d6	88		30-130
Nitrobenzene-d5	80		30-130
2-Fluorobiphenyl	61		30-130
2,4,6-Tribromophenol	80		30-130
4-Terphenyl-d14	53		30-130

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-08	Date Collected:	03/11/14 14:30
Client ID:	S-8	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	97,8270D	Extraction Date:	03/12/14 10:12
Analytical Date:	03/14/14 20:17		
Analyst:	RC		
Percent Solids:	75%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	ND		ug/kg	350	--	2
1,2,4-Trichlorobenzene	ND		ug/kg	430	--	2
Hexachlorobenzene	ND		ug/kg	260	--	2
Bis(2-chloroethyl)ether	ND		ug/kg	390	--	2
2-Chloronaphthalene	ND		ug/kg	430	--	2
1,2-Dichlorobenzene	ND		ug/kg	430	--	2
1,3-Dichlorobenzene	ND		ug/kg	430	--	2
1,4-Dichlorobenzene	ND		ug/kg	430	--	2
3,3'-Dichlorobenzidine	ND		ug/kg	430	--	2
2,4-Dinitrotoluene	ND		ug/kg	430	--	2
2,6-Dinitrotoluene	ND		ug/kg	430	--	2
Azobenzene	ND		ug/kg	430	--	2
Fluoranthene	400		ug/kg	260	--	2
4-Bromophenyl phenyl ether	ND		ug/kg	430	--	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	520	--	2
Bis(2-chloroethoxy)methane	ND		ug/kg	470	--	2
Hexachlorobutadiene	ND		ug/kg	430	--	2
Hexachloroethane	ND		ug/kg	350	--	2
Isophorone	ND		ug/kg	390	--	2
Naphthalene	ND		ug/kg	430	--	2
Nitrobenzene	ND		ug/kg	390	--	2
Bis(2-Ethylhexyl)phthalate	1300		ug/kg	430	--	2
Butyl benzyl phthalate	ND		ug/kg	430	--	2
Di-n-butylphthalate	ND		ug/kg	430	--	2
Di-n-octylphthalate	ND		ug/kg	430	--	2
Diethyl phthalate	ND		ug/kg	430	--	2
Dimethyl phthalate	ND		ug/kg	430	--	2
Benzo(a)anthracene	ND		ug/kg	260	--	2
Benzo(a)pyrene	390		ug/kg	350	--	2
Benzo(b)fluoranthene	430		ug/kg	260	--	2
Benzo(k)fluoranthene	ND		ug/kg	260	--	2

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-08 Date Collected: 03/11/14 14:30

Client ID: S-8 Date Received: 03/11/14

Sample Location: NEWTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Chrysene	ND		ug/kg	260	--	2
Acenaphthylene	ND		ug/kg	350	--	2
Anthracene	ND		ug/kg	260	--	2
Benzo(ghi)perylene	390		ug/kg	350	--	2
Fluorene	ND		ug/kg	430	--	2
Phenanthrene	330		ug/kg	260	--	2
Dibenzo(a,h)anthracene	ND		ug/kg	260	--	2
Indeno(1,2,3-cd)Pyrene	540		ug/kg	350	--	2
Pyrene	300		ug/kg	260	--	2
Aniline	ND		ug/kg	520	--	2
4-Chloroaniline	ND		ug/kg	430	--	2
Dibenzofuran	ND		ug/kg	430	--	2
2-Methylnaphthalene	ND		ug/kg	520	--	2
Acetophenone	ND		ug/kg	430	--	2
2,4,6-Trichlorophenol	ND		ug/kg	260	--	2
2-Chlorophenol	ND		ug/kg	430	--	2
2,4-Dichlorophenol	ND		ug/kg	390	--	2
2,4-Dimethylphenol	ND		ug/kg	430	--	2
2-Nitrophenol	ND		ug/kg	940	--	2
4-Nitrophenol	ND		ug/kg	610	--	2
2,4-Dinitrophenol	ND		ug/kg	2100	--	2
Pentachlorophenol	ND		ug/kg	870	--	2
Phenol	ND		ug/kg	430	--	2
2-Methylphenol	ND		ug/kg	430	--	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	620	--	2
2,4,5-Trichlorophenol	ND		ug/kg	430	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	84		30-130
Phenol-d6	91		30-130
Nitrobenzene-d5	85		30-130
2-Fluorobiphenyl	81		30-130
2,4,6-Tribromophenol	85		30-130
4-Terphenyl-d14	81		30-130

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 03/14/14 09:29
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 03/12/14 10:12

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01-08 Batch: WG674999-1					
Acenaphthene	ND		ug/kg	130	--
1,2,4-Trichlorobenzene	ND		ug/kg	160	--
Hexachlorobenzene	ND		ug/kg	98	--
Bis(2-chloroethyl)ether	ND		ug/kg	150	--
2-Chloronaphthalene	ND		ug/kg	160	--
1,2-Dichlorobenzene	ND		ug/kg	160	--
1,3-Dichlorobenzene	ND		ug/kg	160	--
1,4-Dichlorobenzene	ND		ug/kg	160	--
3,3'-Dichlorobenzidine	ND		ug/kg	160	--
2,4-Dinitrotoluene	ND		ug/kg	160	--
2,6-Dinitrotoluene	ND		ug/kg	160	--
Azobenzene	ND		ug/kg	160	--
Fluoranthene	ND		ug/kg	98	--
4-Bromophenyl phenyl ether	ND		ug/kg	160	--
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	--
Bis(2-chloroethoxy)methane	ND		ug/kg	180	--
Hexachlorobutadiene	ND		ug/kg	160	--
Hexachloroethane	ND		ug/kg	130	--
Isophorone	ND		ug/kg	150	--
Naphthalene	ND		ug/kg	160	--
Nitrobenzene	ND		ug/kg	150	--
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	160	--
Butyl benzyl phthalate	ND		ug/kg	160	--
Di-n-butylphthalate	ND		ug/kg	160	--
Di-n-octylphthalate	ND		ug/kg	160	--
Diethyl phthalate	ND		ug/kg	160	--
Dimethyl phthalate	ND		ug/kg	160	--
Benzo(a)anthracene	ND		ug/kg	98	--
Benzo(a)pyrene	ND		ug/kg	130	--
Benzo(b)fluoranthene	ND		ug/kg	98	--
Benzo(k)fluoranthene	ND		ug/kg	98	--

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 03/14/14 09:29
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 03/12/14 10:12

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01-08 Batch: WG674999-1					
Chrysene	ND		ug/kg	98	--
Acenaphthylene	ND		ug/kg	130	--
Anthracene	ND		ug/kg	98	--
Benzo(ghi)perylene	ND		ug/kg	130	--
Fluorene	ND		ug/kg	160	--
Phenanthrene	ND		ug/kg	98	--
Dibenzo(a,h)anthracene	ND		ug/kg	98	--
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	--
Pyrene	ND		ug/kg	98	--
Aniline	ND		ug/kg	200	--
4-Chloroaniline	ND		ug/kg	160	--
Dibenzofuran	ND		ug/kg	160	--
2-Methylnaphthalene	ND		ug/kg	200	--
Acetophenone	ND		ug/kg	160	--
2,4,6-Trichlorophenol	ND		ug/kg	98	--
2-Chlorophenol	ND		ug/kg	160	--
2,4-Dichlorophenol	ND		ug/kg	150	--
2,4-Dimethylphenol	ND		ug/kg	160	--
2-Nitrophenol	ND		ug/kg	350	--
4-Nitrophenol	ND		ug/kg	230	--
2,4-Dinitrophenol	ND		ug/kg	780	--
Pentachlorophenol	ND		ug/kg	320	--
Phenol	ND		ug/kg	160	--
2-Methylphenol	ND		ug/kg	160	--
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	--
2,4,5-Trichlorophenol	ND		ug/kg	160	--

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 03/14/14 09:29
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 03/12/14 10:12

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01-08 Batch: WG674999-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		30-130
Phenol-d6	62		30-130
Nitrobenzene-d5	62		30-130
2-Fluorobiphenyl	80		30-130
2,4,6-Tribromophenol	89		30-130
4-Terphenyl-d14	85		30-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-08 Batch: WG674999-2 WG674999-3								
Acenaphthene	83		87		40-140	5		30
1,2,4-Trichlorobenzene	78		85		40-140	9		30
Hexachlorobenzene	96		103		40-140	7		30
Bis(2-chloroethyl)ether	67		68		40-140	1		30
2-Chloronaphthalene	85		93		40-140	9		30
1,2-Dichlorobenzene	76		77		40-140	1		30
1,3-Dichlorobenzene	73		76		40-140	4		30
1,4-Dichlorobenzene	74		78		40-140	5		30
3,3'-Dichlorobenzidine	55		59		40-140	7		30
2,4-Dinitrotoluene	85		91		40-140	7		30
2,6-Dinitrotoluene	81		88		40-140	8		30
Azobenzene	80		87		40-140	8		30
Fluoranthene	85		94		40-140	10		30
4-Bromophenyl phenyl ether	91		99		40-140	8		30
Bis(2-chloroisopropyl)ether	44		46		40-140	4		30
Bis(2-chloroethoxy)methane	69		70		40-140	1		30
Hexachlorobutadiene	85		87		40-140	2		30
Hexachloroethane	69		72		40-140	4		30
Isophorone	69		69		40-140	0		30
Naphthalene	76		80		40-140	5		30
Nitrobenzene	70		75		40-140	7		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-08 Batch: WG674999-2 WG674999-3								
Bis(2-Ethylhexyl)phthalate	84		90		40-140	7		30
Butyl benzyl phthalate	76		85		40-140	11		30
Di-n-butylphthalate	84		90		40-140	7		30
Di-n-octylphthalate	83		88		40-140	6		30
Diethyl phthalate	85		91		40-140	7		30
Dimethyl phthalate	85		90		40-140	6		30
Benzo(a)anthracene	92		95		40-140	3		30
Benzo(a)pyrene	89		96		40-140	8		30
Benzo(b)fluoranthene	90		85		40-140	6		30
Benzo(k)fluoranthene	92		106		40-140	14		30
Chrysene	88		95		40-140	8		30
Acenaphthylene	82		88		40-140	7		30
Anthracene	87		94		40-140	8		30
Benzo(ghi)perylene	89		92		40-140	3		30
Fluorene	87		92		40-140	6		30
Phenanthrene	88		94		40-140	7		30
Dibenzo(a,h)anthracene	91		93		40-140	2		30
Indeno(1,2,3-cd)Pyrene	108		109		40-140	1		30
Pyrene	84		90		40-140	7		30
Aniline	**35**	Q	**36**	Q	40-140	3		30
4-Chloroaniline	54		58		40-140	7		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-08 Batch: WG674999-2 WG674999-3								
Dibenzofuran	90		95		40-140	5		30
2-Methylnaphthalene	86		92		40-140	7		30
Acetophenone	77		79		40-140	3		30
2,4,6-Trichlorophenol	87		94		30-130	8		30
2-Chlorophenol	78		77		30-130	1		30
2,4-Dichlorophenol	82		91		30-130	10		30
2,4-Dimethylphenol	78		77		30-130	1		30
2-Nitrophenol	74		77		30-130	4		30
4-Nitrophenol	62		67		30-130	8		30
2,4-Dinitrophenol	60		66		30-130	10		30
Pentachlorophenol	80		86		30-130	7		30
Phenol	71		72		30-130	1		30
2-Methylphenol	74		74		30-130	0		30
3-Methylphenol/4-Methylphenol	73		76		30-130	4		30
2,4,5-Trichlorophenol	89		97		30-130	9		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-08 Batch: WG674999-2 WG674999-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	72		77		30-130
Phenol-d6	62		64		30-130
Nitrobenzene-d5	73		74		30-130
2-Fluorobiphenyl	84		93		30-130
2,4,6-Tribromophenol	107		114		30-130
4-Terphenyl-d14	85		97		30-130

PETROLEUM HYDROCARBONS

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-01	D	Date Collected:	03/11/14 08:00
Client ID:	S-1		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8015C(M)		Extraction Date:	03/12/14 02:23
Analytical Date:	03/13/14 16:21			
Analyst:	JT			
Percent Solids:	77%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westborough Lab						
TPH	1260000		ug/kg	415000	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	107		40-140

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-02	D	Date Collected:	03/11/14 09:00
Client ID:	S-2		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8015C(M)		Extraction Date:	03/12/14 02:23
Analytical Date:	03/13/14 16:52			
Analyst:	JT			
Percent Solids:	84%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westborough Lab						
TPH	892000		ug/kg	393000	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	104		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-03	D	Date Collected:	03/11/14 09:30
Client ID:	S-3		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8015C(M)		Extraction Date:	03/12/14 02:23
Analytical Date:	03/13/14 17:23			
Analyst:	JT			
Percent Solids:	87%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westborough Lab						
TPH	766000		ug/kg	368000	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	97		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-04	D	Date Collected:	03/11/14 10:00
Client ID:	S-4		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8015C(M)		Extraction Date:	03/12/14 02:23
Analytical Date:	03/13/14 17:54			
Analyst:	JT			
Percent Solids:	75%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westborough Lab						
TPH	609000		ug/kg	436000	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	96		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-05	D	Date Collected:	03/11/14 10:30
Client ID:	S-5		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8015C(M)		Extraction Date:	03/12/14 02:23
Analytical Date:	03/13/14 18:25			
Analyst:	JT			
Percent Solids:	85%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westborough Lab						
TPH	537000		ug/kg	190000	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	101		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-06	D	Date Collected:	03/11/14 12:30
Client ID:	S-6		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8015C(M)		Extraction Date:	03/12/14 02:23
Analytical Date:	03/13/14 18:56			
Analyst:	JT			
Percent Solids:	70%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westborough Lab						
TPH	954000		ug/kg	230000	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	97		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-07	D	Date Collected:	03/11/14 13:30
Client ID:	S-7		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8015C(M)		Extraction Date:	03/12/14 02:23
Analytical Date:	03/13/14 19:27			
Analyst:	JT			
Percent Solids:	81%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westborough Lab						
TPH	899000		ug/kg	396000	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	99		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-08	Date Collected:	03/11/14 14:30
Client ID:	S-8	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8015C(M)	Extraction Date:	03/12/14 02:23
Analytical Date:	03/17/14 17:45		
Analyst:	JT		
Percent Solids:	75%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westborough Lab						
TPH	249000		ug/kg	42600	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	93		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8015C(M)
Analytical Date: 03/13/14 14:49
Analyst: JT

Extraction Method: EPA 3546
Extraction Date: 03/12/14 02:23

Parameter	Result	Qualifier	Units	RL	MDL
Petroleum Hydrocarbon Quantitation - Westborough Lab for sample(s): 01-08 Batch: WG674919-1					
TPH	ND		ug/kg	32900	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	81		40-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEEDHAM ST

Project Number: 11-0631

Lab Number: L1405044

Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Petroleum Hydrocarbon Quantitation - Westborough Lab Associated sample(s): 01-08 Batch: WG674919-2								
TPH	84		-		40-140	-		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
o-Terphenyl	83				40-140

Lab Duplicate Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Petroleum Hydrocarbon Quantitation - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG674919-3 QC Sample: L1405044-05 Client ID: S-5						
TPH	537000	665000	ug/kg	21		40

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	101		96		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-01	D	Date Collected:	03/11/14 08:00
Client ID:	S-1		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	98,EPH-04-1.1		Extraction Date:	03/12/14 01:47
Analytical Date:	03/18/14 12:00		Cleanup Method1:	EPH-04-1
Analyst:	SR		Cleanup Date1:	03/17/14
Percent Solids:	77%			

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	42.2	--	5
C19-C36 Aliphatics	60.1		mg/kg	42.2	--	5
C11-C22 Aromatics	582		mg/kg	42.2	--	5
C11-C22 Aromatics, Adjusted	334		mg/kg	42.2	--	5
Naphthalene	ND		mg/kg	2.11	--	5
2-Methylnaphthalene	ND		mg/kg	2.11	--	5
Acenaphthylene	ND		mg/kg	2.11	--	5
Acenaphthene	2.86		mg/kg	2.11	--	5
Fluorene	3.09		mg/kg	2.11	--	5
Phenanthrene	36.1		mg/kg	2.11	--	5
Anthracene	7.29		mg/kg	2.11	--	5
Fluoranthene	47.2		mg/kg	2.11	--	5
Pyrene	37.0		mg/kg	2.11	--	5
Benzo(a)anthracene	20.2		mg/kg	2.11	--	5
Chrysene	23.0		mg/kg	2.11	--	5
Benzo(b)fluoranthene	15.2		mg/kg	2.11	--	5
Benzo(k)fluoranthene	15.6		mg/kg	2.11	--	5
Benzo(a)pyrene	17.3		mg/kg	2.11	--	5
Indeno(1,2,3-cd)Pyrene	10.5		mg/kg	2.11	--	5
Dibenzo(a,h)anthracene	2.74		mg/kg	2.11	--	5
Benzo(ghi)perylene	9.23		mg/kg	2.11	--	5

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-01	D	Date Collected:	03/11/14 08:00
Client ID:	S-1		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	42		40-140
o-Terphenyl	76		40-140
2-Fluorobiphenyl	79		40-140
2-Bromonaphthalene	76		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-02	Date Collected:	03/11/14 09:00
Client ID:	S-2	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	98,EPH-04-1.1	Extraction Date:	03/12/14 01:48
Analytical Date:	03/17/14 18:23	Cleanup Method1:	EPH-04-1
Analyst:	SR	Cleanup Date1:	03/17/14
Percent Solids:	84%		

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	7.59	--	1
C19-C36 Aliphatics	104		mg/kg	7.59	--	1
C11-C22 Aromatics	255		mg/kg	7.59	--	1
C11-C22 Aromatics, Adjusted	202		mg/kg	7.59	--	1
Naphthalene	ND		mg/kg	0.379	--	1
2-Methylnaphthalene	ND		mg/kg	0.379	--	1
Acenaphthylene	0.892		mg/kg	0.379	--	1
Acenaphthene	ND		mg/kg	0.379	--	1
Fluorene	0.401		mg/kg	0.379	--	1
Phenanthrene	5.06		mg/kg	0.379	--	1
Anthracene	1.32		mg/kg	0.379	--	1
Fluoranthene	7.94		mg/kg	0.379	--	1
Pyrene	8.89		mg/kg	0.379	--	1
Benzo(a)anthracene	4.42		mg/kg	0.379	--	1
Chrysene	5.23		mg/kg	0.379	--	1
Benzo(b)fluoranthene	3.71		mg/kg	0.379	--	1
Benzo(k)fluoranthene	3.72		mg/kg	0.379	--	1
Benzo(a)pyrene	5.02		mg/kg	0.379	--	1
Indeno(1,2,3-cd)Pyrene	2.81		mg/kg	0.379	--	1
Dibenzo(a,h)anthracene	0.707		mg/kg	0.379	--	1
Benzo(ghi)perylene	3.12		mg/kg	0.379	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-02	Date Collected:	03/11/14 09:00
Client ID:	S-2	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	83		40-140
o-Terphenyl	96		40-140
2-Fluorobiphenyl	93		40-140
2-Bromonaphthalene	90		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-03	Date Collected:	03/11/14 09:30
Client ID:	S-3	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	98,EPH-04-1.1	Extraction Date:	03/12/14 01:49
Analytical Date:	03/18/14 08:36	Cleanup Method1:	EPH-04-1
Analyst:	SR	Cleanup Date1:	03/17/14
Percent Solids:	87%		

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	15.1	--	2
C19-C36 Aliphatics	728		mg/kg	15.1	--	2
C11-C22 Aromatics	522		mg/kg	15.1	--	2
C11-C22 Aromatics, Adjusted	502		mg/kg	15.1	--	2
Naphthalene	ND		mg/kg	0.757	--	2
2-Methylnaphthalene	ND		mg/kg	0.757	--	2
Acenaphthylene	ND		mg/kg	0.757	--	2
Acenaphthene	ND		mg/kg	0.757	--	2
Fluorene	ND		mg/kg	0.757	--	2
Phenanthrene	0.844		mg/kg	0.757	--	2
Anthracene	ND		mg/kg	0.757	--	2
Fluoranthene	2.16		mg/kg	0.757	--	2
Pyrene	2.95		mg/kg	0.757	--	2
Benzo(a)anthracene	1.55		mg/kg	0.757	--	2
Chrysene	2.37		mg/kg	0.757	--	2
Benzo(b)fluoranthene	1.79		mg/kg	0.757	--	2
Benzo(k)fluoranthene	2.05		mg/kg	0.757	--	2
Benzo(a)pyrene	2.38		mg/kg	0.757	--	2
Indeno(1,2,3-cd)Pyrene	1.70		mg/kg	0.757	--	2
Dibenzo(a,h)anthracene	ND		mg/kg	0.757	--	2
Benzo(ghi)perylene	2.13		mg/kg	0.757	--	2

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-03	Date Collected:	03/11/14 09:30
Client ID:	S-3	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	63		40-140
o-Terphenyl	83		40-140
2-Fluorobiphenyl	85		40-140
2-Bromonaphthalene	84		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-04	Date Collected:	03/11/14 10:00
Client ID:	S-4	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	98,EPH-04-1.1	Extraction Date:	03/12/14 01:51
Analytical Date:	03/17/14 19:26	Cleanup Method1:	EPH-04-1
Analyst:	SR	Cleanup Date1:	03/17/14
Percent Solids:	75%		

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	8.57	--	1
C19-C36 Aliphatics	76.0		mg/kg	8.57	--	1
C11-C22 Aromatics	154		mg/kg	8.57	--	1
C11-C22 Aromatics, Adjusted	110		mg/kg	8.57	--	1
Naphthalene	ND		mg/kg	0.429	--	1
2-Methylnaphthalene	ND		mg/kg	0.429	--	1
Acenaphthylene	ND		mg/kg	0.429	--	1
Acenaphthene	0.655		mg/kg	0.429	--	1
Fluorene	0.930		mg/kg	0.429	--	1
Phenanthrene	6.42		mg/kg	0.429	--	1
Anthracene	2.77		mg/kg	0.429	--	1
Fluoranthene	7.07		mg/kg	0.429	--	1
Pyrene	5.94		mg/kg	0.429	--	1
Benzo(a)anthracene	3.31		mg/kg	0.429	--	1
Chrysene	3.71		mg/kg	0.429	--	1
Benzo(b)fluoranthene	2.59		mg/kg	0.429	--	1
Benzo(k)fluoranthene	2.81		mg/kg	0.429	--	1
Benzo(a)pyrene	3.32		mg/kg	0.429	--	1
Indeno(1,2,3-cd)Pyrene	2.01		mg/kg	0.429	--	1
Dibenzo(a,h)anthracene	0.482		mg/kg	0.429	--	1
Benzo(ghi)perylene	1.95		mg/kg	0.429	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-04	Date Collected:	03/11/14 10:00
Client ID:	S-4	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	67		40-140
o-Terphenyl	74		40-140
2-Fluorobiphenyl	71		40-140
2-Bromonaphthalene	68		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-05	Date Collected:	03/11/14 10:30
Client ID:	S-5	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	98,EPH-04-1.1	Extraction Date:	03/12/14 01:52
Analytical Date:	03/17/14 19:58	Cleanup Method1:	EPH-04-1
Analyst:	SR	Cleanup Date1:	03/17/14
Percent Solids:	85%		

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	7.65	--	1
C19-C36 Aliphatics	67.1		mg/kg	7.65	--	1
C11-C22 Aromatics	118		mg/kg	7.65	--	1
C11-C22 Aromatics, Adjusted	91.5		mg/kg	7.65	--	1
Naphthalene	ND		mg/kg	0.382	--	1
2-Methylnaphthalene	ND		mg/kg	0.382	--	1
Acenaphthylene	ND		mg/kg	0.382	--	1
Acenaphthene	ND		mg/kg	0.382	--	1
Fluorene	ND		mg/kg	0.382	--	1
Phenanthrene	2.40		mg/kg	0.382	--	1
Anthracene	0.517		mg/kg	0.382	--	1
Fluoranthene	3.80		mg/kg	0.382	--	1
Pyrene	3.35		mg/kg	0.382	--	1
Benzo(a)anthracene	2.18		mg/kg	0.382	--	1
Chrysene	2.74		mg/kg	0.382	--	1
Benzo(b)fluoranthene	2.42		mg/kg	0.382	--	1
Benzo(k)fluoranthene	2.06		mg/kg	0.382	--	1
Benzo(a)pyrene	2.64		mg/kg	0.382	--	1
Indeno(1,2,3-cd)Pyrene	2.04		mg/kg	0.382	--	1
Dibenzo(a,h)anthracene	0.426		mg/kg	0.382	--	1
Benzo(ghi)perylene	2.03		mg/kg	0.382	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-05	Date Collected:	03/11/14 10:30
Client ID:	S-5	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	70		40-140
o-Terphenyl	91		40-140
2-Fluorobiphenyl	83		40-140
2-Bromonaphthalene	81		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-06	Date Collected:	03/11/14 12:30
Client ID:	S-6	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	98,EPH-04-1.1	Extraction Date:	03/12/14 01:53
Analytical Date:	03/17/14 20:29	Cleanup Method1:	EPH-04-1
Analyst:	SR	Cleanup Date1:	03/17/14
Percent Solids:	70%		

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	9.36	--	1
C19-C36 Aliphatics	300		mg/kg	9.36	--	1
C11-C22 Aromatics	354		mg/kg	9.36	--	1
C11-C22 Aromatics, Adjusted	269		mg/kg	9.36	--	1
Naphthalene	ND		mg/kg	0.468	--	1
2-Methylnaphthalene	ND		mg/kg	0.468	--	1
Acenaphthylene	0.657		mg/kg	0.468	--	1
Acenaphthene	ND		mg/kg	0.468	--	1
Fluorene	0.509		mg/kg	0.468	--	1
Phenanthrene	6.44		mg/kg	0.468	--	1
Anthracene	1.70		mg/kg	0.468	--	1
Fluoranthene	14.3		mg/kg	0.468	--	1
Pyrene	12.8		mg/kg	0.468	--	1
Benzo(a)anthracene	6.52		mg/kg	0.468	--	1
Chrysene	7.87		mg/kg	0.468	--	1
Benzo(b)fluoranthene	6.96		mg/kg	0.468	--	1
Benzo(k)fluoranthene	6.09		mg/kg	0.468	--	1
Benzo(a)pyrene	7.92		mg/kg	0.468	--	1
Indeno(1,2,3-cd)Pyrene	5.66		mg/kg	0.468	--	1
Dibenzo(a,h)anthracene	1.34		mg/kg	0.468	--	1
Benzo(ghi)perylene	5.28		mg/kg	0.468	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-06	Date Collected:	03/11/14 12:30
Client ID:	S-6	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	80		40-140
o-Terphenyl	76		40-140
2-Fluorobiphenyl	67		40-140
2-Bromonaphthalene	68		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-07	Date Collected:	03/11/14 13:30
Client ID:	S-7	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	98,EPH-04-1.1	Extraction Date:	03/12/14 01:53
Analytical Date:	03/17/14 21:01	Cleanup Method1:	EPH-04-1
Analyst:	SR	Cleanup Date1:	03/17/14
Percent Solids:	81%		

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	8.16	--	1
C19-C36 Aliphatics	139		mg/kg	8.16	--	1
C11-C22 Aromatics	340		mg/kg	8.16	--	1
C11-C22 Aromatics, Adjusted	261		mg/kg	8.16	--	1
Naphthalene	ND		mg/kg	0.408	--	1
2-Methylnaphthalene	ND		mg/kg	0.408	--	1
Acenaphthylene	0.609		mg/kg	0.408	--	1
Acenaphthene	0.432		mg/kg	0.408	--	1
Fluorene	0.466		mg/kg	0.408	--	1
Phenanthrene	6.06		mg/kg	0.408	--	1
Anthracene	1.56		mg/kg	0.408	--	1
Fluoranthene	13.4		mg/kg	0.408	--	1
Pyrene	12.0		mg/kg	0.408	--	1
Benzo(a)anthracene	6.49		mg/kg	0.408	--	1
Chrysene	7.35		mg/kg	0.408	--	1
Benzo(b)fluoranthene	6.43		mg/kg	0.408	--	1
Benzo(k)fluoranthene	5.93		mg/kg	0.408	--	1
Benzo(a)pyrene	7.51		mg/kg	0.408	--	1
Indeno(1,2,3-cd)Pyrene	5.00		mg/kg	0.408	--	1
Dibenzo(a,h)anthracene	0.990		mg/kg	0.408	--	1
Benzo(ghi)perylene	4.72		mg/kg	0.408	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-07	Date Collected:	03/11/14 13:30
Client ID:	S-7	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	65		40-140
o-Terphenyl	82		40-140
2-Fluorobiphenyl	72		40-140
2-Bromonaphthalene	74		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-08	Date Collected:	03/11/14 14:30
Client ID:	S-8	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	98,EPH-04-1.1	Extraction Date:	03/12/14 01:54
Analytical Date:	03/18/14 09:27	Cleanup Method1:	EPH-04-1
Analyst:	SR	Cleanup Date1:	03/17/14
Percent Solids:	75%		

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	8.56	--	1
C19-C36 Aliphatics	56.7		mg/kg	8.56	--	1
C11-C22 Aromatics	84.3		mg/kg	8.56	--	1
C11-C22 Aromatics, Adjusted	82.6		mg/kg	8.56	--	1
Naphthalene	ND		mg/kg	0.428	--	1
2-Methylnaphthalene	ND		mg/kg	0.428	--	1
Acenaphthylene	ND		mg/kg	0.428	--	1
Acenaphthene	ND		mg/kg	0.428	--	1
Fluorene	ND		mg/kg	0.428	--	1
Phenanthrene	ND		mg/kg	0.428	--	1
Anthracene	0.475		mg/kg	0.428	--	1
Fluoranthene	0.858		mg/kg	0.428	--	1
Pyrene	0.440		mg/kg	0.428	--	1
Benzo(a)anthracene	ND		mg/kg	0.428	--	1
Chrysene	ND		mg/kg	0.428	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.428	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.428	--	1
Benzo(a)pyrene	ND		mg/kg	0.428	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.428	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.428	--	1
Benzo(ghi)perylene	ND		mg/kg	0.428	--	1

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-08	Date Collected:	03/11/14 14:30
Client ID:	S-8	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	57		40-140
o-Terphenyl	98		40-140
2-Fluorobiphenyl	84		40-140
2-Bromonaphthalene	82		40-140

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 03/17/14 07:26
Analyst: SR

Extraction Method: EPA 3546
Extraction Date: 03/12/14 01:02
Cleanup Method1: EPH-04-1
Cleanup Date1: 03/14/14

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-08 Batch: WG674912-1					
C9-C18 Aliphatics	ND		mg/kg	6.58	--
C19-C36 Aliphatics	ND		mg/kg	6.58	--
C11-C22 Aromatics	ND		mg/kg	6.58	--
C11-C22 Aromatics, Adjusted	ND		mg/kg	6.58	--
Naphthalene	ND		mg/kg	0.329	--
2-Methylnaphthalene	ND		mg/kg	0.329	--
Acenaphthylene	ND		mg/kg	0.329	--
Acenaphthene	ND		mg/kg	0.329	--
Fluorene	ND		mg/kg	0.329	--
Phenanthrene	ND		mg/kg	0.329	--
Anthracene	ND		mg/kg	0.329	--
Fluoranthene	ND		mg/kg	0.329	--
Pyrene	ND		mg/kg	0.329	--
Benzo(a)anthracene	ND		mg/kg	0.329	--
Chrysene	ND		mg/kg	0.329	--
Benzo(b)fluoranthene	ND		mg/kg	0.329	--
Benzo(k)fluoranthene	ND		mg/kg	0.329	--
Benzo(a)pyrene	ND		mg/kg	0.329	--
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.329	--
Dibenzo(a,h)anthracene	ND		mg/kg	0.329	--
Benzo(ghi)perylene	ND		mg/kg	0.329	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	61		40-140
o-Terphenyl	70		40-140
2-Fluorobiphenyl	74		40-140
2-Bromonaphthalene	71		40-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-08 Batch: WG674912-2 WG674912-3								
C9-C18 Aliphatics	58		56		40-140	4		25
C19-C36 Aliphatics	80		77		40-140	4		25
C11-C22 Aromatics	86		84		40-140	2		25
Naphthalene	81		77		40-140	5		25
2-Methylnaphthalene	86		82		40-140	5		25
Acenaphthylene	72		71		40-140	1		25
Acenaphthene	84		80		40-140	5		25
Fluorene	86		82		40-140	5		25
Phenanthrene	89		86		40-140	3		25
Anthracene	89		86		40-140	3		25
Fluoranthene	91		88		40-140	3		25
Pyrene	92		90		40-140	2		25
Benzo(a)anthracene	85		84		40-140	1		25
Chrysene	87		85		40-140	2		25
Benzo(b)fluoranthene	87		86		40-140	1		25
Benzo(k)fluoranthene	88		88		40-140	0		25
Benzo(a)pyrene	77		78		40-140	1		25
Indeno(1,2,3-cd)Pyrene	86		84		40-140	2		25
Dibenzo(a,h)anthracene	80		80		40-140	0		25
Benzo(ghi)perylene	84		81		40-140	4		25
Nonane (C9)	50		49		30-140	2		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-08 Batch: WG674912-2 WG674912-3								
Decane (C10)	56		54		40-140	4		25
Dodecane (C12)	59		57		40-140	3		25
Tetradecane (C14)	63		61		40-140	3		25
Hexadecane (C16)	70		68		40-140	3		25
Octadecane (C18)	77		75		40-140	3		25
Nonadecane (C19)	79		77		40-140	3		25
Eicosane (C20)	79		78		40-140	1		25
Docosane (C22)	81		79		40-140	3		25
Tetracosane (C24)	82		80		40-140	2		25
Hexacosane (C26)	82		80		40-140	2		25
Octacosane (C28)	80		78		40-140	3		25
Triacontane (C30)	80		80		40-140	0		25
Hexatriacontane (C36)	80		74		40-140	8		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	75		72		40-140
o-Terphenyl	90		83		40-140
2-Fluorobiphenyl	87		89		40-140
2-Bromonaphthalene	85		88		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

PCBS

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-01	Date Collected:	03/11/14 08:00
Client ID:	S-1	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	03/12/14 20:46
Analytical Date:	03/14/14 16:09	Cleanup Method1:	EPA 3665A
Analyst:	JW	Cleanup Date1:	03/14/14
Percent Solids:	77%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	03/14/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/kg	42.7	--	1	A
Aroclor 1221	ND		ug/kg	42.7	--	1	A
Aroclor 1232	ND		ug/kg	42.7	--	1	A
Aroclor 1242	ND		ug/kg	42.7	--	1	A
Aroclor 1248	64.2		ug/kg	42.7	--	1	B
Aroclor 1254	ND		ug/kg	42.7	--	1	A
Aroclor 1260	ND		ug/kg	42.7	--	1	B
Aroclor 1262	ND		ug/kg	42.7	--	1	A
Aroclor 1268	ND		ug/kg	42.7	--	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-02	Date Collected:	03/11/14 09:00
Client ID:	S-2	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	03/12/14 20:46
Analytical Date:	03/14/14 16:22	Cleanup Method1:	EPA 3665A
Analyst:	JW	Cleanup Date1:	03/14/14
Percent Solids:	84%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	03/14/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.7	--	1	A
Aroclor 1221	ND		ug/kg	37.7	--	1	A
Aroclor 1232	ND		ug/kg	37.7	--	1	A
Aroclor 1242	ND		ug/kg	37.7	--	1	A
Aroclor 1248	209		ug/kg	37.7	--	1	B
Aroclor 1254	72.1		ug/kg	37.7	--	1	A
Aroclor 1260	43.3	P	ug/kg	37.7	--	1	B
Aroclor 1262	ND		ug/kg	37.7	--	1	A
Aroclor 1268	ND		ug/kg	37.7	--	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	83		30-150	B

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-03	D	Date Collected:	03/11/14 09:30
Client ID:	S-3		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3540C
Analytical Method:	97,8082		Extraction Date:	03/12/14 20:46
Analytical Date:	03/17/14 12:32		Cleanup Method1:	EPA 3665A
Analyst:	JW		Cleanup Date1:	03/14/14
Percent Solids:	87%		Cleanup Method2:	EPA 3660B
			Cleanup Date2:	03/14/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/kg	3630	--	100	A
Aroclor 1221	ND		ug/kg	3630	--	100	A
Aroclor 1232	ND		ug/kg	3630	--	100	A
Aroclor 1242	ND		ug/kg	3630	--	100	A
Aroclor 1248	61200		ug/kg	3630	--	100	B
Aroclor 1254	ND		ug/kg	3630	--	100	A
Aroclor 1260	ND		ug/kg	3630	--	100	A
Aroclor 1262	ND		ug/kg	3630	--	100	A
Aroclor 1268	ND		ug/kg	3630	--	100	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	A
Decachlorobiphenyl	**0**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	B
Decachlorobiphenyl	**0**	Q	30-150	B

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-04	D	Date Collected:	03/11/14 10:00
Client ID:	S-4		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3540C
Analytical Method:	97,8082		Extraction Date:	03/12/14 20:46
Analytical Date:	03/17/14 12:44		Cleanup Method1:	EPA 3665A
Analyst:	JW		Cleanup Date1:	03/14/14
Percent Solids:	75%		Cleanup Method2:	EPA 3660B
			Cleanup Date2:	03/14/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/kg	428	--	10	A
Aroclor 1221	ND		ug/kg	428	--	10	A
Aroclor 1232	ND		ug/kg	428	--	10	A
Aroclor 1242	ND		ug/kg	428	--	10	A
Aroclor 1248	4750		ug/kg	428	--	10	A
Aroclor 1254	1260		ug/kg	428	--	10	A
Aroclor 1260	ND		ug/kg	428	--	10	A
Aroclor 1262	ND		ug/kg	428	--	10	A
Aroclor 1268	ND		ug/kg	428	--	10	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	A
Decachlorobiphenyl	**0**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	B
Decachlorobiphenyl	**0**	Q	30-150	B

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-05	Date Collected:	03/11/14 10:30
Client ID:	S-5	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	03/12/14 20:46
Analytical Date:	03/17/14 12:56	Cleanup Method1:	EPA 3665A
Analyst:	JW	Cleanup Date1:	03/14/14
Percent Solids:	85%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	03/14/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.5	--	1	A
Aroclor 1221	ND		ug/kg	37.5	--	1	A
Aroclor 1232	ND		ug/kg	37.5	--	1	A
Aroclor 1242	ND		ug/kg	37.5	--	1	A
Aroclor 1248	76.0		ug/kg	37.5	--	1	B
Aroclor 1254	ND		ug/kg	37.5	--	1	A
Aroclor 1260	ND		ug/kg	37.5	--	1	A
Aroclor 1262	ND		ug/kg	37.5	--	1	A
Aroclor 1268	ND		ug/kg	37.5	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	99		30-150	B

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-06	D	Date Collected:	03/11/14 12:30
Client ID:	S-6		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3540C
Analytical Method:	97,8082		Extraction Date:	03/12/14 20:46
Analytical Date:	03/17/14 13:09		Cleanup Method1:	EPA 3665A
Analyst:	JW		Cleanup Date1:	03/14/14
Percent Solids:	70%		Cleanup Method2:	EPA 3660B
			Cleanup Date2:	03/14/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/kg	462	--	10	A
Aroclor 1221	ND		ug/kg	462	--	10	A
Aroclor 1232	ND		ug/kg	462	--	10	A
Aroclor 1242	ND		ug/kg	462	--	10	A
Aroclor 1248	ND		ug/kg	462	--	10	A
Aroclor 1254	ND		ug/kg	462	--	10	A
Aroclor 1260	ND		ug/kg	462	--	10	A
Aroclor 1262	ND		ug/kg	462	--	10	A
Aroclor 1268	ND		ug/kg	462	--	10	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	A
Decachlorobiphenyl	**0**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	B
Decachlorobiphenyl	**0**	Q	30-150	B

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-07	Date Collected:	03/11/14 13:30
Client ID:	S-7	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	03/12/14 20:46
Analytical Date:	03/17/14 13:21	Cleanup Method1:	EPA 3665A
Analyst:	JW	Cleanup Date1:	03/14/14
Percent Solids:	81%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	03/14/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.5	--	1	A
Aroclor 1221	ND		ug/kg	38.5	--	1	A
Aroclor 1232	ND		ug/kg	38.5	--	1	A
Aroclor 1242	ND		ug/kg	38.5	--	1	A
Aroclor 1248	138		ug/kg	38.5	--	1	B
Aroclor 1254	140		ug/kg	38.5	--	1	A
Aroclor 1260	104		ug/kg	38.5	--	1	B
Aroclor 1262	ND		ug/kg	38.5	--	1	A
Aroclor 1268	ND		ug/kg	38.5	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	86		30-150	B

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-08	D	Date Collected:	03/11/14 14:30
Client ID:	S-8		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3540C
Analytical Method:	97,8082		Extraction Date:	03/12/14 20:46
Analytical Date:	03/17/14 13:33		Cleanup Method1:	EPA 3665A
Analyst:	JW		Cleanup Date1:	03/14/14
Percent Solids:	75%		Cleanup Method2:	EPA 3660B
			Cleanup Date2:	03/14/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/kg	2140	--	50	A
Aroclor 1221	ND		ug/kg	2140	--	50	A
Aroclor 1232	ND		ug/kg	2140	--	50	A
Aroclor 1242	ND		ug/kg	2140	--	50	A
Aroclor 1248	12300		ug/kg	2140	--	50	B
Aroclor 1254	ND		ug/kg	2140	--	50	A
Aroclor 1260	ND		ug/kg	2140	--	50	A
Aroclor 1262	ND		ug/kg	2140	--	50	A
Aroclor 1268	ND		ug/kg	2140	--	50	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	A
Decachlorobiphenyl	**0**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	B
Decachlorobiphenyl	**0**	Q	30-150	B

Project Name: NEEDHAM ST

Project Number: 11-0631

Lab Number: L1405044

Report Date: 03/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8082
Analytical Date: 03/14/14 16:34
Analyst: JW

Extraction Method: EPA 3540C
Extraction Date: 03/12/14 20:46
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/14/14
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/14/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01-08 Batch: WG675111-1						
Aroclor 1016	ND		ug/kg	32.5	--	A
Aroclor 1221	ND		ug/kg	32.5	--	A
Aroclor 1232	ND		ug/kg	32.5	--	A
Aroclor 1242	ND		ug/kg	32.5	--	A
Aroclor 1248	ND		ug/kg	32.5	--	A
Aroclor 1254	ND		ug/kg	32.5	--	A
Aroclor 1260	ND		ug/kg	32.5	--	A
Aroclor 1262	ND		ug/kg	32.5	--	A
Aroclor 1268	ND		ug/kg	32.5	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	81		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01-08 Batch: WG675111-2 WG675111-3									
Aroclor 1016	66		62		40-140	6		30	A
Aroclor 1260	52		49		40-140	6		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		67		30-150	A
Decachlorobiphenyl	57		53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		76		30-150	B
Decachlorobiphenyl	71		64		30-150	B

METALS

Project Name:	NEEDHAM ST	**Lab Number:**	L1405044
Project Number:	11-0631	**Report Date:**	03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-01	Date Collected:	03/11/14 08:00
Client ID:	S-1	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	77%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Arsenic, Total	160		mg/kg	0.51	--	1	03/14/14 11:16	03/14/14 17:26	EPA 3050B	97,6010C	TT
Barium, Total	180		mg/kg	0.51	--	1	03/14/14 11:16	03/14/14 17:26	EPA 3050B	97,6010C	TT
Cadmium, Total	2.5		mg/kg	0.51	--	1	03/14/14 11:16	03/14/14 17:26	EPA 3050B	97,6010C	TT
Chromium, Total	24		mg/kg	0.51	--	1	03/14/14 11:16	03/14/14 17:26	EPA 3050B	97,6010C	TT
Lead, Total	3000		mg/kg	2.5	--	1	03/14/14 11:16	03/14/14 17:26	EPA 3050B	97,6010C	TT
Mercury, Total	2.40		mg/kg	0.093	--	1	03/12/14 13:14	03/13/14 10:13	EPA 7471B	97,7471B	MC
Selenium, Total	62		mg/kg	2.5	--	1	03/14/14 11:16	03/14/14 17:26	EPA 3050B	97,6010C	TT
Silver, Total	17		mg/kg	0.51	--	1	03/14/14 11:16	03/14/14 17:26	EPA 3050B	97,6010C	TT

Project Name:	NEEDHAM ST	**Lab Number:**	L1405044
Project Number:	11-0631	**Report Date:**	03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-02	Date Collected:	03/11/14 09:00
Client ID:	S-2	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Arsenic, Total	25		mg/kg	0.46	--	1	03/14/14 11:16	03/14/14 17:29	EPA 3050B	97,6010C	TT
Barium, Total	95		mg/kg	0.46	--	1	03/14/14 11:16	03/14/14 17:29	EPA 3050B	97,6010C	TT
Cadmium, Total	0.63		mg/kg	0.46	--	1	03/14/14 11:16	03/14/14 17:29	EPA 3050B	97,6010C	TT
Chromium, Total	26		mg/kg	0.46	--	1	03/14/14 11:16	03/14/14 17:29	EPA 3050B	97,6010C	TT
Lead, Total	370		mg/kg	2.3	--	1	03/14/14 11:16	03/14/14 17:29	EPA 3050B	97,6010C	TT
Mercury, Total	1.87		mg/kg	0.076	--	1	03/12/14 13:14	03/13/14 10:15	EPA 7471B	97,7471B	MC
Selenium, Total	ND		mg/kg	2.3	--	1	03/14/14 11:16	03/14/14 17:29	EPA 3050B	97,6010C	TT
Silver, Total	1.4		mg/kg	0.46	--	1	03/14/14 11:16	03/14/14 17:29	EPA 3050B	97,6010C	TT

Project Name:	NEEDHAM ST	**Lab Number:**	L1405044
Project Number:	11-0631	**Report Date:**	03/18/14

SAMPLE RESULTS

Lab ID:	L1405044-03	Date Collected:	03/11/14 09:30
Client ID:	S-3	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Arsenic, Total	11		mg/kg	0.45	--	1	03/14/14 11:16	03/14/14 17:33	EPA 3050B	97,6010C	TT
Barium, Total	65		mg/kg	0.45	--	1	03/14/14 11:16	03/14/14 17:33	EPA 3050B	97,6010C	TT
Cadmium, Total	ND		mg/kg	0.45	--	1	03/14/14 11:16	03/14/14 17:33	EPA 3050B	97,6010C	TT
Chromium, Total	16		mg/kg	0.45	--	1	03/14/14 11:16	03/14/14 17:33	EPA 3050B	97,6010C	TT
Lead, Total	55		mg/kg	2.3	--	1	03/14/14 11:16	03/14/14 17:33	EPA 3050B	97,6010C	TT
Mercury, Total	ND		mg/kg	0.084	--	1	03/12/14 13:14	03/13/14 10:21	EPA 7471B	97,7471B	MC
Selenium, Total	ND		mg/kg	2.3	--	1	03/14/14 11:16	03/14/14 17:33	EPA 3050B	97,6010C	TT
Silver, Total	ND		mg/kg	0.45	--	1	03/14/14 11:16	03/14/14 17:33	EPA 3050B	97,6010C	TT

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-04
Client ID: S-4
Sample Location: NEWTON, MA
Matrix: Soil
Percent Solids: 75%

Date Collected: 03/11/14 10:00
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Arsenic, Total	14		mg/kg	0.52	--	1	03/14/14 11:16	03/14/14 17:37	EPA 3050B	97,6010C	TT
Barium, Total	150		mg/kg	0.52	--	1	03/14/14 11:16	03/14/14 17:37	EPA 3050B	97,6010C	TT
Cadmium, Total	1.2		mg/kg	0.52	--	1	03/14/14 11:16	03/14/14 17:37	EPA 3050B	97,6010C	TT
Chromium, Total	34		mg/kg	0.52	--	1	03/14/14 11:16	03/14/14 17:37	EPA 3050B	97,6010C	TT
Lead, Total	470		mg/kg	2.6	--	1	03/14/14 11:16	03/14/14 17:37	EPA 3050B	97,6010C	TT
Mercury, Total	0.814		mg/kg	0.109	--	1	03/12/14 13:14	03/13/14 10:23	EPA 7471B	97,7471B	MC
Selenium, Total	ND		mg/kg	2.6	--	1	03/14/14 11:16	03/14/14 17:37	EPA 3050B	97,6010C	TT
Silver, Total	ND		mg/kg	0.52	--	1	03/14/14 11:16	03/14/14 17:37	EPA 3050B	97,6010C	TT

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-05
Client ID: S-5
Sample Location: NEWTON, MA
Matrix: Soil
Percent Solids: 85%

Date Collected: 03/11/14 10:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Arsenic, Total	24		mg/kg	0.46	--	1	03/14/14 11:16	03/14/14 17:40	EPA 3050B	97,6010C	TT
Barium, Total	100		mg/kg	0.46	--	1	03/14/14 11:16	03/14/14 17:40	EPA 3050B	97,6010C	TT
Cadmium, Total	ND		mg/kg	0.46	--	1	03/14/14 11:16	03/14/14 17:40	EPA 3050B	97,6010C	TT
Chromium, Total	16		mg/kg	0.46	--	1	03/14/14 11:16	03/14/14 17:40	EPA 3050B	97,6010C	TT
Lead, Total	370		mg/kg	2.3	--	1	03/14/14 11:16	03/14/14 17:40	EPA 3050B	97,6010C	TT
Mercury, Total	0.186		mg/kg	0.089	--	1	03/12/14 13:14	03/13/14 10:24	EPA 7471B	97,7471B	MC
Selenium, Total	ND		mg/kg	2.3	--	1	03/14/14 11:16	03/14/14 17:40	EPA 3050B	97,6010C	TT
Silver, Total	ND		mg/kg	0.46	--	1	03/14/14 11:16	03/14/14 17:40	EPA 3050B	97,6010C	TT

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-06
Client ID: S-6
Sample Location: NEWTON, MA
Matrix: Soil
Percent Solids: 70%

Date Collected: 03/11/14 12:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Arsenic, Total	37		mg/kg	0.55	--	1	03/14/14 11:16	03/14/14 17:44	EPA 3050B	97,6010C	TT
Barium, Total	140		mg/kg	0.55	--	1	03/14/14 11:16	03/14/14 17:44	EPA 3050B	97,6010C	TT
Cadmium, Total	1.0		mg/kg	0.55	--	1	03/14/14 11:16	03/14/14 17:44	EPA 3050B	97,6010C	TT
Chromium, Total	36		mg/kg	0.55	--	1	03/14/14 11:16	03/14/14 17:44	EPA 3050B	97,6010C	TT
Lead, Total	530		mg/kg	2.8	--	1	03/14/14 11:16	03/14/14 17:44	EPA 3050B	97,6010C	TT
Mercury, Total	3.00		mg/kg	0.109	--	1	03/12/14 13:14	03/13/14 10:26	EPA 7471B	97,7471B	MC
Selenium, Total	ND		mg/kg	2.8	--	1	03/14/14 11:16	03/14/14 17:44	EPA 3050B	97,6010C	TT
Silver, Total	ND		mg/kg	0.55	--	1	03/14/14 11:16	03/14/14 17:44	EPA 3050B	97,6010C	TT

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-07
Client ID: S-7
Sample Location: NEWTON, MA
Matrix: Soil
Percent Solids: 81%

Date Collected: 03/11/14 13:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Arsenic, Total	21		mg/kg	0.48	--	1	03/14/14 11:16	03/14/14 17:48	EPA 3050B	97,6010C	TT
Barium, Total	74		mg/kg	0.48	--	1	03/14/14 11:16	03/14/14 17:48	EPA 3050B	97,6010C	TT
Cadmium, Total	0.86		mg/kg	0.48	--	1	03/14/14 11:16	03/14/14 17:48	EPA 3050B	97,6010C	TT
Chromium, Total	15		mg/kg	0.48	--	1	03/14/14 11:16	03/14/14 17:48	EPA 3050B	97,6010C	TT
Lead, Total	250		mg/kg	2.4	--	1	03/14/14 11:16	03/14/14 17:48	EPA 3050B	97,6010C	TT
Mercury, Total	0.293		mg/kg	0.094	--	1	03/12/14 13:14	03/13/14 10:28	EPA 7471B	97,7471B	MC
Selenium, Total	ND		mg/kg	2.4	--	1	03/14/14 11:16	03/14/14 17:48	EPA 3050B	97,6010C	TT
Silver, Total	ND		mg/kg	0.48	--	1	03/14/14 11:16	03/14/14 17:48	EPA 3050B	97,6010C	TT

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-08
Client ID: S-8
Sample Location: NEWTON, MA
Matrix: Soil
Percent Solids: 75%

Date Collected: 03/11/14 14:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Arsenic, Total	15		mg/kg	0.50	--	1	03/14/14 11:16	03/14/14 17:51	EPA 3050B	97,6010C	TT
Barium, Total	170		mg/kg	0.50	--	1	03/14/14 11:16	03/14/14 17:51	EPA 3050B	97,6010C	TT
Cadmium, Total	0.67		mg/kg	0.50	--	1	03/14/14 11:16	03/14/14 17:51	EPA 3050B	97,6010C	TT
Chromium, Total	120		mg/kg	0.50	--	1	03/14/14 11:16	03/14/14 17:51	EPA 3050B	97,6010C	TT
Lead, Total	610		mg/kg	2.5	--	1	03/14/14 11:16	03/14/14 17:51	EPA 3050B	97,6010C	TT
Mercury, Total	0.412		mg/kg	0.102	--	1	03/12/14 13:14	03/13/14 10:30	EPA 7471B	97,7471B	MC
Selenium, Total	ND		mg/kg	2.5	--	1	03/14/14 11:16	03/14/14 17:51	EPA 3050B	97,6010C	TT
Silver, Total	ND		mg/kg	0.50	--	1	03/14/14 11:16	03/14/14 17:51	EPA 3050B	97,6010C	TT

Project Name: NEEDHAM ST **Lab Number:** L1405044

Project Number: 11-0631 **Report Date:** 03/18/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 01-08 Batch: WG674998-1										
Mercury, Total	ND		mg/kg	0.083	--	1	03/12/14 13:14	03/13/14 09:58	97,7471B	MC

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 01-08 Batch: WG675556-1										
Arsenic, Total	ND		mg/kg	0.40	--	1	03/14/14 11:16	03/14/14 16:54	97,6010C	TT
Barium, Total	ND		mg/kg	0.40	--	1	03/14/14 11:16	03/14/14 16:54	97,6010C	TT
Cadmium, Total	ND		mg/kg	0.40	--	1	03/14/14 11:16	03/14/14 16:54	97,6010C	TT
Chromium, Total	ND		mg/kg	0.40	--	1	03/14/14 11:16	03/14/14 16:54	97,6010C	TT
Lead, Total	ND		mg/kg	2.0	--	1	03/14/14 11:16	03/14/14 16:54	97,6010C	TT
Selenium, Total	ND		mg/kg	2.0	--	1	03/14/14 11:16	03/14/14 16:54	97,6010C	TT
Silver, Total	ND		mg/kg	0.40	--	1	03/14/14 11:16	03/14/14 16:54	97,6010C	TT

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405044
Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Westborough Lab Associated sample(s): 01-08 Batch: WG674998-2 WG674998-3 SRM Lot Number: 0518-10-02								
Mercury, Total	91		99		67-133	8		30
MCP Total Metals - Westborough Lab Associated sample(s): 01-08 Batch: WG675556-2 WG675556-3 SRM Lot Number: 0518-10-02								
Arsenic, Total	94		90		81-119	4		30
Barium, Total	112		92		83-118	20		30
Cadmium, Total	89		85		82-117	5		30
Chromium, Total	92		88		80-119	4		30
Lead, Total	91		86		80-120	6		30
Selenium, Total	84		80		80-120	5		30
Silver, Total	93		91		66-134	2		30

INORGANICS
&
MISCELLANEOUS

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-01
Client ID: S-1
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 08:00
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Specific Conductance	88		umhos/cm	10	--	1	-	03/13/14 22:23	1,9050A	EL
Solids, Total	76.7		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
pH (H)	7.5		SU	-	NA	1	-	03/11/14 20:37	1,9045D	TL
Oxidation/Reduction Potential	230		mv	-	NA	1	-	03/11/14 22:30	68,1498	TL

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-02
Client ID: S-2
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 09:00
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Specific Conductance	78		umhos/cm	10	--	1	-	03/13/14 22:23	1,9050A	EL
Solids, Total	83.8		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
pH (H)	7.6		SU	-	NA	1	-	03/11/14 20:37	1,9045D	TL
Oxidation/Reduction Potential	240		mv	-	NA	1	-	03/11/14 22:30	68,1498	TL

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-03
Client ID: S-3
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 09:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Specific Conductance	78		umhos/cm	10	--	1	-	03/13/14 22:23	1,9050A	EL
Solids, Total	86.6		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
pH (H)	8.6		SU	-	NA	1	-	03/11/14 20:37	1,9045D	TL
Oxidation/Reduction Potential	200		mv	-	NA	1	-	03/11/14 22:30	68,1498	TL

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-04
Client ID: S-4
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 10:00
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Specific Conductance	76		umhos/cm	10	--	1	-	03/13/14 22:23	1,9050A	EL
Solids, Total	74.9		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
pH (H)	8.0		SU	-	NA	1	-	03/11/14 20:37	1,9045D	TL
Oxidation/Reduction Potential	210		mv	-	NA	1	-	03/11/14 22:30	68,1498	TL

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-05
Client ID: S-5
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 10:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Specific Conductance	150		umhos/cm	10	--	1	-	03/13/14 22:23	1,9050A	EL
Solids, Total	84.8		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
pH (H)	8.0		SU	-	NA	1	-	03/11/14 20:37	1,9045D	TL
Oxidation/Reduction Potential	210		mv	-	NA	1	-	03/11/14 22:30	68,1498	TL

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-06
Client ID: S-6
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 12:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Specific Conductance	91		umhos/cm	10	--	1	-	03/13/14 22:23	1,9050A	EL
Solids, Total	70.4		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
pH (H)	7.6		SU	-	NA	1	-	03/11/14 20:37	1,9045D	TL
Oxidation/Reduction Potential	220		mv	-	NA	1	-	03/11/14 22:30	68,1498	TL

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-07
Client ID: S-7
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 13:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Specific Conductance	51		umhos/cm	10	--	1	-	03/13/14 22:23	1,9050A	EL
Solids, Total	81.3		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
pH (H)	8.0		SU	-	NA	1	-	03/11/14 20:37	1,9045D	TL
Oxidation/Reduction Potential	200		mv	-	NA	1	-	03/11/14 22:30	68,1498	TL

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

SAMPLE RESULTS

Lab ID: L1405044-08
Client ID: S-8
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 14:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Specific Conductance	23		umhos/cm	10	--	1	-	03/13/14 22:23	1,9050A	EL
Solids, Total	75.3		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
pH (H)	7.9		SU	-	NA	1	-	03/11/14 20:37	1,9045D	TL
Oxidation/Reduction Potential	220		mv	-	NA	1	-	03/11/14 22:30	68,1498	TL

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 Batch: WG674902-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01-08 Batch: WG674903-1								
Oxidation/Reduction Potential	100		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-08 Batch: WG675431-1								
Specific Conductance	95		-		80-120	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG674882-1 QC Sample: L1405007-01 Client ID: DUP Sample						
Solids, Total	78.5	82.0	%	4		20
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG674902-2 QC Sample: L1405044-01 Client ID: S-1						
pH (H)	7.5	7.7	SU	3		5
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG674903-2 QC Sample: L1405044-01 Client ID: S-1						
Oxidation/Reduction Potential	230	250	mv	8		20
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG675431-2 QC Sample: L1405044-01 Client ID: S-1						
Specific Conductance	88	56	umhos/cm	**44**	Q	20

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 03/11/2014 17:25

Cooler Information	Custody Seal
Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405044-01A	Vial MeOH preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-01B	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-01C	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-01D	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-01E	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-01F	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-01X	Amber 120ml unpreserved	A	N/A	4.7	Y	Absent	HEXCR-RELOG()

*Values in parentheses indicate holding time in days

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405044-02A	Vial MeOH preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-02B	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-02C	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-02D	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-02E	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-02F	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-02X	Amber 120ml unpreserved	A	N/A	4.7	Y	Absent	HEXCR-RELOG()
L1405044-03A	Vial MeOH preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-03B	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-03C	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)

*Values in parentheses indicate holding time in days

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405044-03D	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-03E	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-03F	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-03X	Amber 120ml unpreserved	A	N/A	4.7	Y	Absent	HEXCR-RELOG()
L1405044-04A	Vial MeOH preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-04B	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-04C	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-04D	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)

*Values in parentheses indicate holding time in days

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405044-04E	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-04F	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-04X	Amber 120ml unpreserved	A	N/A	4.7	Y	Absent	HEXCR-RELOG()
L1405044-05A	Vial MeOH preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-05B	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-05C	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-05D	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-05E	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)

*Values in parentheses indicate holding time in days

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405044-05F	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-05X	Amber 120ml unpreserved	A	N/A	4.7	Y	Absent	HEXCR-RELOG()
L1405044-06A	Vial MeOH preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-06B	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-06C	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-06D	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-06E	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-06F	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-06X	Amber 120ml unpreserved	A	N/A	4.7	Y	Absent	HEXCR-RELOG()

*Values in parentheses indicate holding time in days

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405044-07A	Vial MeOH preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-07B	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-07C	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-07D	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-07E	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-07F	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-07X	Amber 120ml unpreserved	A	N/A	4.7	Y	Absent	HEXCR-RELOG()
L1405044-08A	Vial MeOH preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-08B	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-08C	Vial water preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)

*Values in parentheses indicate holding time in days

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405044
Report Date: 03/18/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405044-08D	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-08E	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-08F	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	MCP-CR-6010T-10(180),ORP-9045(1),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-8082-10-3540C(365),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),TPH-DRO-D(14),COND-9050(28),EPH-DELUX-10(14),MCP-PB-6010T-10(180)
L1405044-08G	Vial MeOH preserved	A	N/A	4.7	Y	Absent	MCP-8260HLW-10(14)
L1405044-08X	Amber 120ml unpreserved	A	N/A	4.7	Y	Absent	HEXCR-RELOG()

Container Comments

L1405044-08F

*Values in parentheses indicate holding time in days

Project Name:	NEEDHAM ST	**Lab Number:**	L1405044
Project Number:	11-0631	**Report Date:**	03/18/14

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The lower value for the two columns has been reported due to obvious interference.

Report Format: Data Usability Report

Project Name:	NEEDHAM ST	**Lab Number:**	L1405044
Project Number:	11-0631	**Report Date:**	03/18/14

Data Qualifiers

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: NEEDHAM ST **Lab Number:** L1405044
Project Number: 11-0631 **Report Date:** 03/18/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

68 Annual Book of ASTM (American Society for Testing and Materials) Standards following extraction by SW-846 EPA Method 9045C under the requirements of MADEP BWSC, WSC-CAM-VIB. August 2004.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised December 11, 2013

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 3/11/14

ALPHA Job #: L1405044

ALPHA ANALYTICAL World Class Chemistry
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Client Information

Client: Tighe + Bond
Address: 446 Main St, Worcester MA
Phone: 508-471-9602
Email:

Project Information

Project Name: Needham St
Project Location: Newton, MA
Project #: 11-0631
Project Manager: Matt Abraham
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 3/18/14

Report Information - Data Deliverables

☒ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☒ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☒ No NPDES RGP
☐ Other State/Fed Program MCP/comm 97 Criteria

Additional Project Information:

(X) NOTES - CALLED INTO NICOLE HUNT FOR AUTO-LOG
1) Auto log samples for HEX-CR if total CR exceeds 30 mg/kg
2) Run TCLP for individual metals if result exceeds 100 x Rule.

ANALYSIS: VOC: ☒ 8260 ☐ 624 ☐ 524.2; SVOC: ☐ ABN ☐ PAH; METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15; METALS: ☐ RCRA5 ☒ RCRA8 ☐ PP13; EPH: ☒ Ranges & Targets ☐ Ranges Only; VPH: ☐ Ranges & Targets ☐ Ranges Only; ☐ PCB ☐ PEST; TPH: ☐ Quant Only ☐ Fingerprint; Cond/ORP/pH; Hex-CR; PCBs (soxmat); TCLP metals

SAMPLE INFO: Filtration ☐ Field ☐ Lab to do; Preservation ☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC	SVOC	METALS	METALS	EPH	VPH	PCB	TPH	Cond/ORP/pH	Hex-CR	PCBs (soxmat)	TCLP metals		Sample Comments	TOTAL # BOTTLES
05044 01	S-1	3/11/14	0800	S	MAA	X	X	X	X	X			X	X	⊗	X	⊗		⊗ see	7
02	S-2	3/11/14	0900	S	↓	X	X	X	X	X			X	X	⊗	X	⊗		notes	7
03	S-3	3/11/14	0930	S	↓	X	X	X	X	X			X	X	⊗	X	⊗		section	7
04	S-4	3/11/14	1000	S	↓	X	X	X	X	X			X	X	⊗	X	⊗			7
05	S-5	3/11/14	1030	S	↓	X	X	X	X	X			X	X	⊗	X	⊗			7
06	S-6	3/11/14	1230	S	↓	X	X	X	X	X			X	X	⊗	X	⊗			7
07	S-7	3/11/14	1330	S	↓	X	X	X	X	X			X	X	⊗	X	⊗			7
08	S-8	3/11/14	1430	S	↓	X	X	X	X	X			X	X	⊗	X	⊗			7
	~ END																			

Container Type	
Preservative	

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	3/11/14 1600	[signature]	3/11/14 1600

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.
FORM NO: 01-01 (rev. 12-Mar-2012)

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1405044

Instrument ID: Voa100.i Calibration Date: 13-MAR-2014 Time: 12:49

Lab File ID: 0313A01 Init. Calib. Date(s): 06-MAR-2 07-MAR-2

Sample No: 8260 CCAL Init. Calib. Times : 13:13 13:22

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.22895	.17956	.1	-22	20	F
chloromethane	.26204	.22375	.1	-15	20	
vinyl chloride	.29128	.26234	.1	-10	20	
bromomethane	100	110	.1	10	20	
chloroethane	.21173	.19929	.1	-6	20	
trichlorofluoromethane	.4649	.41702	.1	-10	20	
ethyl ether	.14985	.13457	.05	-10	20	
1,1,-dichloroethene	.22427	.20945	.1	-7	20	
carbon disulfide	.71447	.69049	.1	-3	20	
methylene chloride	.28608	.26428	.1	-8	20	
acetone	.09257	.1027	.1	11	20	F
trans-1,2-dichloroethene	.25795	.24262	.1	-6	20	
methyl tert butyl ether	.66106	.56411	.1	-15	20	
Diisopropyl Ether	.73468	.6467	.05	-12	20	
1,1-dichloroethane	.4598	.42723	.2	-7	20	
Ethyl-Tert-Butyl-Ether	.7529	.65288	.05	-13	20	
cis-1,2-dichloroethene	.27992	.2553	.1	-9	20	
2,2-dichloropropane	.384	.36498	.05	-5	20	
bromochloromethane	.13934	.12845	.05	-8	20	
chloroform	.47709	.43302	.2	-9	20	
carbontetrachloride	.3406	.32465	.1	-5	20	
tetrahydrofuran	.0718	.06372	.05	-11	20	
1,1,1-trichloroethane	.39686	.37197	.1	-6	20	
2-butanone	.13011	.1129	.1	-13	20	
1,1-dichloropropene	.34473	.32149	.05	-7	20	
benzene	1.0443	.94214	.5	-10	20	
Tertiary-Amyl Methyl Ether	.66638	.57578	.05	-14	20	
1,2-dichloroethane	.35487	.30768	.1	-13	20	
trichloroethene	.25742	.24246	.2	-6	20	
dibromomethane	.16494	.14828	.05	-10	20	
1,2-dichloropropane	.25481	.23017	.1	-10	20	
bromodichloromethane	.36247	.33195	.2	-8	20	
1,4-dioxane	5000	3788	.05	-24	20	F
cis-1,3-dichloropropene	.4087	.37096	.2	-9	20	
toluene	.88122	.80844	.4	-8	20	
4-methyl-2-pentanone	.08535	.06882	.1	-19	20	F
tetrachloroethene	.35539	.34304	.2	-3	20	
trans-1,3-dichloropropene	.50903	.46338	.1	-9	20	

FORM VII MCP-8260HLW-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1405044

Instrument ID: Voa100.i Calibration Date: 13-MAR-2014 Time: 12:49

Lab File ID: 0313A01 Init. Calib. Date(s): 06-MAR-2 07-MAR-2

Sample No: 8260 CCAL Init. Calib. Times : 13:13 13:22

Compound	$\overline{RRF}$	RRF	MIN RRF	%D	MAX %D
1,1,2-trichloroethane	.25756	.22504	.1	-13	20
chlorodibromomethane	.37459	.3354	.1	-10	20
1,3-dichloropropane	.53017	.46686	.05	-12	20
1,2-dibromoethane	.31206	.2762	.1	-11	20
2-hexanone	.2228	.19023	.1	-15	20
chlorobenzene	1.0096	.94302	.5	-7	20
ethyl benzene	1.6782	1.5519	.1	-8	20
1,1,1,2-tetrachloroethane	.35386	.32888	.05	-7	20
p/m xylene	.66426	.62314	.1	-6	20
o xylene	.6303	.57996	.3	-8	20
styrene	1.0652	.96855	.3	-9	20
bromoform	.45407	.41029	.1	-10	20
isopropylbenzene	3.2083	3.0350	.1	-5	20
bromobenzene	.77416	.7155	.05	-8	20
n-propylbenzene	3.5838	3.4148	.05	-5	20
1,1,2,2,-tetrachloroethane	.8157	.70905	.3	-13	20
2-chlorotoluene	2.5001	2.3722	.05	-5	20
1,3,5-trimethybenzene	2.7549	2.6653	.05	-3	20
1,2,3-trichloropropane	.70444	.58033	.05	-18	20
4-chorotoluene	2.3103	2.2029	.05	-5	20
tert-butylbenzene	2.2622	2.2026	.05	-3	20
1,2,4-trimethylbenzene	2.6870	2.5832	.05	-4	20
sec-butylbenzene	3.5444	3.4356	.05	-3	20
p-isopropyltoluene	2.9318	2.8299	.05	-3	20
1,3-dichlorobenzene	1.5773	1.4867	.6	-6	20
1,4-dichlorobenzene	1.5890	1.4903	.5	-6	20
n-butylbenzene	2.7690	2.6864	.05	-3	20
1,2-dichlorobenzene	1.4569	1.3537	.4	-7	20
1,2-dibromo-3-chloropropane	.12177	.10348	.05	-15	20
hexachlorobutadiene	.44483	.43534	.05	-2	20
1,2,4-trichlorobenzene	.94015	.87798	.2	-7	20
naphthalene	2.3012	1.9206	.05	-17	20
1,2,3-trichlorobenzene	.86959	.78027	.05	-10	20
dibromofluoromethane	.26967	.2715	.05	1	30
1,2-dichloroethane-d4	.28067	.27213	.05	-3	30
toluene-d8	1.2584	1.2846	.05	2	30
4-bromofluorobenzene	.90583	.9061	.05	0	30

FORM VII MCP-8260HLW-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1405044

Instrument ID: Voa100.i Calibration Date: 12-MAR-2014 Time: 07:57

Lab File ID: 0312A01 Init. Calib. Date(s): 06-MAR-2 07-MAR-2

Sample No: 8260 CCAL Init. Calib. Times : 13:13 13:22

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.22895	.22049	.1	-4	20	
chloromethane	.26204	.22896	.1	-13	20	
vinyl chloride	.29128	.27795	.1	-5	20	
bromomethane	100	110	.1	10	20	
chloroethane	.21173	.19463	.1	-8	20	
trichlorofluoromethane	.4649	.44273	.1	-5	20	
ethyl ether	.14985	.12889	.05	-14	20	
1,1,-dichloroethene	.22427	.20772	.1	-7	20	
carbon disulfide	.71447	.68468	.1	-4	20	
methylene chloride	.28608	.24675	.1	-14	20	
acetone	.09257	.11575	.1	25	20	F
trans-1,2-dichloroethene	.25795	.23296	.1	-10	20	
methyl tert butyl ether	.66106	.56429	.1	-15	20	
Diisopropyl Ether	.73468	.6316	.05	-14	20	
1,1-dichloroethane	.4598	.41124	.2	-11	20	
Ethyl-Tert-Butyl-Ether	.7529	.63891	.05	-15	20	
cis-1,2-dichloroethene	.27992	.2439	.1	-13	20	
2,2-dichloropropane	.384	.35942	.05	-6	20	
bromochloromethane	.13934	.1249	.05	-10	20	
chloroform	.47709	.43161	.2	-10	20	
carbontetrachloride	.3406	.32183	.1	-6	20	
tetrahydrofuran	.0718	.06491	.05	-10	20	
1,1,1-trichloroethane	.39686	.3615	.1	-9	20	
2-butanone	.13011	.12723	.1	-2	20	
1,1-dichloropropene	.34473	.31742	.05	-8	20	
benzene	1.0443	.90068	.5	-14	20	
Tertiary-Amyl Methyl Ether	.66638	.56748	.05	-15	20	
1,2-dichloroethane	.35487	.29537	.1	-17	20	
trichloroethene	.25742	.23079	.2	-10	20	
dibromomethane	.16494	.14285	.05	-13	20	
1,2-dichloropropane	.25481	.22249	.1	-13	20	
bromodichloromethane	.36247	.31541	.2	-13	20	
1,4-dioxane	5000	4044	.05	-19	20	
cis-1,3-dichloropropene	.4087	.35493	.2	-13	20	
toluene	.88122	.78848	.4	-11	20	
4-methyl-2-pentanone	.08535	.0701	.1	-18	20	F
tetrachloroethene	.35539	.33188	.2	-7	20	
trans-1,3-dichloropropene	.50903	.4548	.1	-11	20	

FORM VII MCP-8260HLW-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1405044

Instrument ID: Voa100.i Calibration Date: 12-MAR-2014 Time: 07:57

Lab File ID: 0312A01 Init. Calib. Date(s): 06-MAR-2 07-MAR-2

Sample No: 8260 CCAL Init. Calib. Times : 13:13 13:22

Compound	$\overline{RRF}$	RRF	MIN RRF	%D	MAX %D
1,1,2-trichloroethane	.25756	.21914	.1	-15	20
chlorodibromomethane	.37459	.3308	.1	-12	20
1,3-dichloropropane	.53017	.4585	.05	-14	20
1,2-dibromoethane	.31206	.27277	.1	-13	20
2-hexanone	.2228	.21483	.1	-4	20
chlorobenzene	1.0096	.8947	.5	-11	20
ethyl benzene	1.6782	1.5075	.1	-10	20
1,1,1,2-tetrachloroethane	.35386	.31356	.05	-11	20
p/m xylene	.66426	.5969	.1	-10	20
o xylene	.6303	.55899	.3	-11	20
styrene	1.0652	.94068	.3	-12	20
bromoform	.45407	.40057	.1	-12	20
isopropylbenzene	3.2083	2.9005	.1	-10	20
bromobenzene	.77416	.68181	.05	-12	20
n-propylbenzene	3.5838	3.2556	.05	-9	20
1,1,2,2,-tetrachloroethane	.8157	.69166	.3	-15	20
2-chlorotoluene	2.5001	2.2308	.05	-11	20
1,3,5-trimethybenzene	2.7549	2.5276	.05	-8	20
1,2,3-trichloropropane	.70444	.60481	.05	-14	20
4-chorotoluene	2.3103	2.0959	.05	-9	20
tert-butylbenzene	2.2622	2.1016	.05	-7	20
1,2,4-trimethylbenzene	2.6870	2.4732	.05	-8	20
sec-butylbenzene	3.5444	3.2920	.05	-7	20
p-isopropyltoluene	2.9318	2.7144	.05	-7	20
1,3-dichlorobenzene	1.5773	1.4090	.6	-11	20
1,4-dichlorobenzene	1.5890	1.4184	.5	-11	20
n-butylbenzene	2.7690	2.5850	.05	-7	20
1,2-dichlorobenzene	1.4569	1.2881	.4	-12	20
1,2-dibromo-3-chloropropane	.12177	.10846	.05	-11	20
hexachlorobutadiene	.44483	.42914	.05	-4	20
1,2,4-trichlorobenzene	.94015	.84297	.2	-10	20
naphthalene	2.3012	1.9220	.05	-16	20
1,2,3-trichlorobenzene	.86959	.73865	.05	-15	20
dibromofluoromethane	.26967	.26701	.05	-1	30
1,2-dichloroethane-d4	.28067	.27147	.05	-3	30
toluene-d8	1.2584	1.2901	.05	3	30
4-bromofluorobenzene	.90583	.91328	.05	1	30

FORM VII MCP-8260HLW-10

ANALYTICAL REPORT

Lab Number:	L1405554
Client:	Tighe & Bond, Inc. 446 Main Street Worcester, MA 01608
ATTN:	Matt Abraham
Phone:	(508) 754-2201
Project Name:	NEEDHAM ST
Project Number:	11-0631
Report Date:	03/24/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405554
Report Date: 03/24/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405554-01	S-1	NEWTON, MA	03/11/14 08:00
L1405554-02	S-2	NEWTON, MA	03/11/14 09:00
L1405554-03	S-4	NEWTON, MA	03/11/14 10:00
L1405554-04	S-5	NEWTON, MA	03/11/14 10:30
L1405554-05	S-6	NEWTON, MA	03/11/14 12:30
L1405554-06	S-7	NEWTON, MA	03/11/14 13:30
L1405554-07	S-8	NEWTON, MA	03/11/14 14:30

Project Name: NEEDHAM ST **Lab Number:** L1405554

Project Number: 11-0631 **Report Date:** 03/24/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F 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
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
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
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
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).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I 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
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405554
Report Date: 03/24/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405554
Report Date: 03/24/14

Case Narrative (continued)

MCP Related Narratives

Sample Receipt

In reference to question H:

A Matrix Spike was not submitted for the analysis of Hexavalent Chromium.

Chromium, Hexavalent

SRM Lot#: ERA D080-921

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative

Date: 03/24/14

METALS

Project Name:	NEEDHAM ST	**Lab Number:**	L1405554
Project Number:	11-0631	**Report Date:**	03/24/14

SAMPLE RESULTS

Lab ID:	L1405554-01	Date Collected:	03/11/14 08:00
Client ID:	S-1	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	TCLP/SPLP Ext. Date:	03/22/14 12:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Westborough Lab											
Arsenic, TCLP	ND		mg/l	1.0	--	1	03/24/14 08:33	03/24/14 10:28	EPA 3015	1,6010C	TT
Lead, TCLP	2.8		mg/l	0.50	--	1	03/24/14 08:33	03/24/14 10:28	EPA 3015	1,6010C	TT
Selenium, TCLP	ND		mg/l	0.50	--	1	03/24/14 08:33	03/24/14 10:28	EPA 3015	1,6010C	TT

Project Name:	NEEDHAM ST	**Lab Number:**	L1405554
Project Number:	11-0631	**Report Date:**	03/24/14

SAMPLE RESULTS

Lab ID:	L1405554-02	Date Collected:	03/11/14 09:00
Client ID:	S-2	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	TCLP/SPLP Ext. Date:	03/22/14 12:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Westborough Lab											
Lead, TCLP	0.66		mg/l	0.50	--	1	03/24/14 08:33	03/24/14 10:32	EPA 3015	1,6010C	TT

Project Name:	NEEDHAM ST	**Lab Number:**	L1405554
Project Number:	11-0631	**Report Date:**	03/24/14

SAMPLE RESULTS

Lab ID:	L1405554-03	Date Collected:	03/11/14 10:00
Client ID:	S-4	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	TCLP/SPLP Ext. Date:	03/22/14 12:15
Percent Solids:	75%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Westborough Lab											
Lead, TCLP	0.82		mg/l	0.50	--	1	03/24/14 08:33	03/24/14 10:35	EPA 3015	1,6010C	TT

Project Name:	NEEDHAM ST	**Lab Number:**	L1405554
Project Number:	11-0631	**Report Date:**	03/24/14

SAMPLE RESULTS

Lab ID:	L1405554-04	Date Collected:	03/11/14 10:30
Client ID:	S-5	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	TCLP/SPLP Ext. Date:	03/22/14 12:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Westborough Lab											
Lead, TCLP	2.8		mg/l	0.50	--	1	03/24/14 08:33	03/24/14 10:39	EPA 3015	1,6010C	TT

Project Name:	NEEDHAM ST	**Lab Number:**	L1405554
Project Number:	11-0631	**Report Date:**	03/24/14

SAMPLE RESULTS

Lab ID:	L1405554-05	Date Collected:	03/11/14 12:30
Client ID:	S-6	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	TCLP/SPLP Ext. Date:	03/22/14 12:15
Percent Solids:	70%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Westborough Lab											
Lead, TCLP	1.6		mg/l	0.50	--	1	03/24/14 08:33	03/24/14 10:55	EPA 3015	1,6010C	TT

Project Name:	NEEDHAM ST	**Lab Number:**	L1405554
Project Number:	11-0631	**Report Date:**	03/24/14

SAMPLE RESULTS

Lab ID:	L1405554-06	Date Collected:	03/11/14 13:30
Client ID:	S-7	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	TCLP/SPLP Ext. Date:	03/22/14 12:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Westborough Lab											
Lead, TCLP	ND		mg/l	0.50	--	1	03/24/14 08:33	03/24/14 11:17	EPA 3015	1,6010C	TT

Project Name:	NEEDHAM ST	**Lab Number:**	L1405554
Project Number:	11-0631	**Report Date:**	03/24/14

SAMPLE RESULTS

Lab ID:	L1405554-07	Date Collected:	03/11/14 14:30
Client ID:	S-8	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	TCLP/SPLP Ext. Date:	03/22/14 12:15
Percent Solids:	75%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Westborough Lab											
Chromium, TCLP	0.21		mg/l	0.20	--	1	03/24/14 08:33	03/24/14 11:20	EPA 3015	1,6010C	TT
Lead, TCLP	ND		mg/l	0.50	--	1	03/24/14 08:33	03/24/14 11:20	EPA 3015	1,6010C	TT

Project Name: NEEDHAM ST **Lab Number:** L1405554

Project Number: 11-0631 **Report Date:** 03/24/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Westborough Lab for sample(s): 01-07 Batch: WG677378-1										
Arsenic, TCLP	ND		mg/l	1.0	--	1	03/24/14 08:33	03/24/14 09:57	1,6010C	TT
Chromium, TCLP	ND		mg/l	0.20	--	1	03/24/14 08:33	03/24/14 09:57	1,6010C	TT
Lead, TCLP	ND		mg/l	0.50	--	1	03/24/14 08:33	03/24/14 09:57	1,6010C	TT
Selenium, TCLP	ND		mg/l	0.50	--	1	03/24/14 08:33	03/24/14 09:57	1,6010C	TT

Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 03/22/14 12:15

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEEDHAM ST

Project Number: 11-0631

Lab Number: L1405554

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01-07 Batch: WG677378-2								
Arsenic, TCLP	100		-		75-125	-		20
Chromium, TCLP	105		-		75-125	-		20
Lead, TCLP	104		-		75-125	-		20
Selenium, TCLP	108		-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631
Lab Number: L1405554
Report Date: 03/24/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG677378-4 QC Sample: L1405993-01 Client ID: MS Sample												
Arsenic, TCLP	ND	1.2	1.3	108		-	-		75-125	-		20
Chromium, TCLP	ND	2	2.1	105		-	-		75-125	-		20
Lead, TCLP	12	5.1	18	118		-	-		75-125	-		20
Selenium, TCLP	ND	1.2	1.3	108		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405554
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG677378-3 QC Sample: L1405993-01 Client ID: DUP Sample						
Lead, TCLP	12	12	mg/l	0		20

INORGANICS
&
MISCELLANEOUS

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405554
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405554-03
Client ID: S-4
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 10:00
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Chromium, Hexavalent	ND		mg/kg	1.1	--	1	03/18/14 20:00	03/20/14 14:06	97,7196A	JT
General Chemistry - Westborough Lab										
Solids, Total	74.9		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
pH (H)	8.0		SU	-	NA	1	-	03/11/14 20:37	1,9045D	TL
Oxidation/Reduction Potential	210		mv	-	NA	1	-	03/11/14 22:30	68,1498	TL

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405554
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405554-05
Client ID: S-6
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 12:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Chromium, Hexavalent	ND		mg/kg	1.1	--	1	03/18/14 20:00	03/20/14 14:06	97,7196A	JT
General Chemistry - Westborough Lab										
Solids, Total	70.4		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
pH (H)	7.6		SU	-	NA	1	-	03/11/14 20:37	1,9045D	TL
Oxidation/Reduction Potential	220		mv	-	NA	1	-	03/11/14 22:30	68,1498	TL

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405554
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405554-07
Client ID: S-8
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 14:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Chromium, Hexavalent	23		mg/kg	1.1	--	1	03/18/14 20:00	03/20/14 14:07	97,7196A	JT
General Chemistry - Westborough Lab										
Solids, Total	75.3		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
pH (H)	7.9		SU	-	NA	1	-	03/11/14 20:37	1,9045D	TL
Oxidation/Reduction Potential	220		mv	-	NA	1	-	03/11/14 22:30	68,1498	TL

Project Name: NEEDHAM ST **Lab Number:** L1405554

Project Number: 11-0631 **Report Date:** 03/24/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab for sample(s): 03,05,07 Batch: WG676300-1										
Chromium, Hexavalent	ND		mg/kg	0.80	--	1	03/18/14 20:00	03/20/14 13:48	97,7196A	JT

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEEDHAM ST

Project Number: 11-0631

Lab Number: L1405554

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 03,05,07 Batch: WG674902-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 03,05,07 Batch: WG674903-1								
Oxidation/Reduction Potential	100		-		90-110	-		20
MCP General Chemistry - Westborough Lab Associated sample(s): 03,05,07 Batch: WG676300-2 WG676300-3								
Chromium, Hexavalent	96		96		70-129	0		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405554
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 03,05,07 QC Batch ID: WG674882-1 QC Sample: L1405007-01 Client ID: DUP Sample						
Solids, Total	78.5	82.0	%	4		20
General Chemistry - Westborough Lab Associated sample(s): 03,05,07 QC Batch ID: WG674902-2 QC Sample: L1405044-01 Client ID: DUP Sample						
pH	7.5	7.7	SU	3		5
General Chemistry - Westborough Lab Associated sample(s): 03,05,07 QC Batch ID: WG674903-2 QC Sample: L1405044-01 Client ID: DUP Sample						
Oxidation/Reduction Potential	230	250	mv	8		20

Project Name: NEEDHAM ST
Project Number: 11-0631

Lab Number: L1405554
Report Date: 03/24/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405554-01A	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	-
L1405554-01A9	Plastic 1000ml unpreserved split	A	N/A	4.7	Y	Absent	-
L1405554-01X	Plastic 250ml HNO3 preserved spl	A	<2	4.7	Y	Absent	AS-CI(180),PB-CI(180),SE-CI(180)
L1405554-02A	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	-
L1405554-02A9	Plastic 1000ml unpreserved split	A	N/A	4.7	Y	Absent	-
L1405554-02X	Plastic 250ml HNO3 preserved spl	A	<2	4.7	Y	Absent	PB-CI(180)
L1405554-03A	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	-
L1405554-03A9	Plastic 1000ml unpreserved split	A	N/A	4.7	Y	Absent	-
L1405554-03W	Amber 120ml unpreserved	A	N/A	4.7	Y	Absent	MCP-HEXCR7196-10(30)
L1405554-03X	Plastic 250ml HNO3 preserved spl	A	<2	4.7	Y	Absent	PB-CI(180)
L1405554-04A	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	-
L1405554-04A9	Plastic 1000ml unpreserved split	A	N/A	4.7	Y	Absent	-
L1405554-04X	Plastic 250ml HNO3 preserved spl	A	<2	4.7	Y	Absent	PB-CI(180)
L1405554-05A	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	-
L1405554-05A9	Plastic 1000ml unpreserved split	A	N/A	4.7	Y	Absent	-
L1405554-05W	Amber 120ml unpreserved	A	N/A	4.7	Y	Absent	MCP-HEXCR7196-10(30)
L1405554-05X	Plastic 250ml HNO3 preserved spl	A	<2	4.7	Y	Absent	PB-CI(180)
L1405554-06A	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	-
L1405554-06A9	Plastic 1000ml unpreserved split	A	N/A	4.7	Y	Absent	-
L1405554-06X	Plastic 250ml HNO3 preserved spl	A	<2	4.7	Y	Absent	PB-CI(180)
L1405554-07A	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	-
L1405554-07A9	Plastic 1000ml unpreserved split	A	N/A	4.7	Y	Absent	-
L1405554-07W	Amber 120ml unpreserved	A	N/A	4.7	Y	Absent	MCP-HEXCR7196-10(30)
L1405554-07X	Plastic 250ml HNO3 preserved spl	A	<2	4.7	Y	Absent	PB-CI(180),CR-CI(180)

*Values in parentheses indicate holding time in days

Project Name:	NEEDHAM ST	**Lab Number:**	L1405554
Project Number:	11-0631	**Report Date:**	03/24/14

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The lower value for the two columns has been reported due to obvious interference.

Report Format: Data Usability Report

Project Name:	NEEDHAM ST	**Lab Number:**	L1405554
Project Number:	11-0631	**Report Date:**	03/24/14

Data Qualifiers

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: NEEDHAM ST **Lab Number:** L1405554
Project Number: 11-0631 **Report Date:** 03/24/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

68 Annual Book of ASTM (American Society for Testing and Materials) Standards following extraction by SW-846 EPA Method 9045C under the requirements of MADEP BWSC, WSC-CAM-VIB. August 2004.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised December 11, 2013

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Serial No:08241422:01

L1405554

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 3/11/14

ALPHA Job #: L1405554 @ 3/14/14

ALPHA Analytical Laboratories
Water Data Chemistry
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Project Information

Project Name: Needham St

Project Location: Newton, MA

Project #: 11-0631

Project Manager: Matt Abrahams

ALPHA Quote #:

Report Information - Data Deliverables

☒ ADEx ☒ EMAIL

Billing Information

☒ Same as Client Info PO #:

Client Information

Client: Tighe + Bond

Address: 446 Main St, Worcester MA

Phone: 508-471-9602

Email:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: 3/18/14

Regulatory Requirements & Project Information Requirements

☒ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods

☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)

☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)

☐ Yes ☒ No NPDES RGP

☐ Other State/Fed Program MCP/comm 97 Criteria

Additional Project Information:

(X) NOTES - CALLED INTO MIDDLE MAN FOR AUTO-LOG
1) Auto log samples for HEX-CR if tot/cr exceeds 30 mg/kg
2) Run TCLP for individual metals if result exceeds 100x Rule.

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC: ☐ 624 ☐ 524.2	SVOC: ☐ ABN ☐ PAH	METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15	METALS: ☐ RCRA8 (X) ☐ RCRA8 ☐ PP13	EPH: (X) Ranges & Targets ☐ Ranges Only	VPH: ☐ Ranges & Targets ☐ Ranges Only	☐ PCB ☐ REST	(TPH) ☐ Extant Only ☐ Fingerprint	Cond	Total Cr	Hex Cr	PCBs (Aroclors)	TCLP Metals	TCLP As, Pb, Se	TCLP Pb	Sample Comments	TOTAL # BOTTLES
050414-01	S-1	3/11/14	0800	S	MAA	X	X	X	X	X			X	X	X	X	X	X			See notes section	7
02-02	S-2	3/11/14	0900	S		X	X	X	X	X			X	X	X	X	X		X			7
03	S-3	3/11/14	0930	S		X	X	X	X	X			X	X	X	X	X					7
03-04	S-4	3/11/14	1000	S		X	X	X	X	X		X	X	X	X	X	X		X			7
04-05	S-5	3/11/14	1030	S		X	X	X	X	X			X	X	X	X	X		X			7
05-06	S-6	3/11/14	1230	S		X	X	X	X	X		X	X	X	X	X	X		X			7
06-07	S-7	3/11/14	1330	S		X	X	X	X	X			X	X	X	X	X		X			7
07-08	S-8	3/11/14	1430	S		X	X	X	X	X	X	X	X	X	X	X	X		X			7
	END																					

SAMPLE INFO

Filtration
☐ Field
☐ Lab to do

Preservation
☐ Lab to do

Container Type	
Preservative	

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
Matt Abrahams	3/11/14 1600	Eyrnitt	3/11/14

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

ANALYTICAL REPORT

Lab Number:	L1406935
Client:	Tighe & Bond, Inc. 446 Main Street Worcester, MA 01608
ATTN:	Matt Abraham
Phone:	(508) 754-2201
Project Name:	NEEDHAM ST.
Project Number:	11-0631
Report Date:	04/08/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: NEEDHAM ST.
Project Number: 11-0631

Lab Number: L1406935
Report Date: 04/08/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1406935-01	S-1	NEWTON, MA	03/11/14 08:00
L1406935-02	S-2	NEWTON, MA	03/11/14 09:00
L1406935-03	S-5	NEWTON, MA	03/11/14 10:30
L1406935-04	S-6	NEWTON, MA	03/11/14 12:30
L1406935-05	S-7	NEWTON, MA	03/11/14 13:30

Project Name: NEEDHAM ST. **Lab Number:** L1406935

Project Number: 11-0631 **Report Date:** 04/08/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F 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?	NO
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
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
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
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).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I 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)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: NEEDHAM ST. **Lab Number:** L1406935
Project Number: 11-0631 **Report Date:** 04/08/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: NEEDHAM ST. **Lab Number:** L1406935
Project Number: 11-0631 **Report Date:** 04/08/14

Case Narrative (continued)

MCP Related Narratives

Report Submission

In reference to question A:

The samples were originally received in a cooler with ice and analyzed. At the client's request, the samples were retrieved at a later date from storage at room temperature and logged with the method required holding times exceeded for all requested analyses.

Pesticides

A copy of the Degradation Standards for 4,4'-DDT and Endrin breakdown products is included as an addendum.

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 04/08/14

ORGANICS

PESTICIDES

Project Name: NEEDHAM ST.
Project Number: 11-0631
Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-01	Date Collected:	03/11/14 08:00
Client ID:	S-1	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	97,8081B	Extraction Date:	04/03/14 16:44
Analytical Date:	04/04/14 22:42	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	04/04/14
Percent Solids:	77%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Organochlorine Pesticides - Westborough Lab							
Delta-BHC	ND		ug/kg	10.3	--	1	A
Lindane	ND		ug/kg	3.42	--	1	A
Alpha-BHC	ND		ug/kg	4.28	--	1	A
Beta-BHC	ND		ug/kg	10.3	--	1	A
Heptachlor	ND		ug/kg	5.13	--	1	A
Aldrin	42.6		ug/kg	10.3	--	1	B
Heptachlor epoxide	ND		ug/kg	19.2	--	1	A
Endrin	ND		ug/kg	4.28	--	1	A
Endrin ketone	ND		ug/kg	10.3	--	1	A
Dieldrin	ND		ug/kg	6.42	--	1	A
4,4'-DDE	ND		ug/kg	10.3	--	1	A
4,4'-DDD	ND		ug/kg	10.3	--	1	A
4,4'-DDT	ND		ug/kg	19.2	--	1	A
Endosulfan I	ND		ug/kg	10.3	--	1	A
Endosulfan II	ND		ug/kg	10.3	--	1	A
Endosulfan sulfate	ND		ug/kg	4.28	--	1	A
Methoxychlor	ND		ug/kg	19.2	--	1	A
Chlordane	ND		ug/kg	83.4	--	1	A
Hexachlorobenzene	ND		ug/kg	10.3	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	100		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	143		30-150	B

Project Name: NEEDHAM ST.
Project Number: 11-0631
Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-01	Date Collected:	03/11/14 08:00
Client ID:	S-1	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	97,8151A	Extraction Date:	04/04/14 02:44
Analytical Date:	04/07/14 15:01	Methylation Date:	04/04/14 19:54
Analyst:	SH		
Percent Solids:	77%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Chlorinated Herbicides - Westborough Lab							
MCPP	ND		ug/kg	4300	--	1	A
MCPA	ND		ug/kg	4300	--	1	A
Dalapon	ND		ug/kg	43	--	1	A
Dicamba	ND		ug/kg	43	--	1	A
Dichloroprop	ND		ug/kg	43	--	1	A
2,4-D	ND		ug/kg	43	--	1	A
2,4-DB	ND		ug/kg	43	--	1	A
2,4,5-T	ND		ug/kg	43	--	1	A
2,4,5-TP (Silvex)	ND		ug/kg	43	--	1	A
Dinoseb	ND		ug/kg	43	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	57		30-150	A
DCAA	66		30-150	B

Project Name: NEEDHAM ST.
Project Number: 11-0631
Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-02	Date Collected:	03/11/14 09:00
Client ID:	S-2	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	97,8081B	Extraction Date:	04/03/14 16:44
Analytical Date:	04/04/14 22:55	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	04/04/14
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Organochlorine Pesticides - Westborough Lab							
Delta-BHC	ND		ug/kg	8.95	--	1	A
Lindane	ND		ug/kg	2.98	--	1	A
Alpha-BHC	ND		ug/kg	3.73	--	1	A
Beta-BHC	ND		ug/kg	8.95	--	1	A
Heptachlor	ND		ug/kg	4.47	--	1	A
Aldrin	ND		ug/kg	8.95	--	1	A
Heptachlor epoxide	ND		ug/kg	16.8	--	1	A
Endrin	ND		ug/kg	3.73	--	1	A
Endrin ketone	ND		ug/kg	8.95	--	1	A
Dieldrin	50.4		ug/kg	5.59	--	1	B
4,4'-DDE	ND		ug/kg	8.95	--	1	A
4,4'-DDD	ND		ug/kg	8.95	--	1	A
4,4'-DDT	ND		ug/kg	16.8	--	1	A
Endosulfan I	ND		ug/kg	8.95	--	1	A
Endosulfan II	ND		ug/kg	8.95	--	1	A
Endosulfan sulfate	ND		ug/kg	3.73	--	1	A
Methoxychlor	ND		ug/kg	16.8	--	1	A
Chlordane	ND		ug/kg	72.7	--	1	A
Hexachlorobenzene	ND		ug/kg	8.95	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	145		30-150	B

Project Name: NEEDHAM ST.
Project Number: 11-0631
Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-02	Date Collected:	03/11/14 09:00
Client ID:	S-2	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	97,8151A	Extraction Date:	04/04/14 02:44
Analytical Date:	04/07/14 15:21	Methylation Date:	04/04/14 19:54
Analyst:	SH		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Chlorinated Herbicides - Westborough Lab							
MCPP	ND		ug/kg	4000	--	1	A
MCPA	ND		ug/kg	4000	--	1	A
Dalapon	ND		ug/kg	40	--	1	A
Dicamba	ND		ug/kg	40	--	1	A
Dichloroprop	ND		ug/kg	40	--	1	A
2,4-D	ND		ug/kg	40	--	1	A
2,4-DB	ND		ug/kg	40	--	1	A
2,4,5-T	ND		ug/kg	40	--	1	A
2,4,5-TP (Silvex)	ND		ug/kg	40	--	1	A
Dinoseb	ND		ug/kg	40	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	48		30-150	A
DCAA	58		30-150	B

Project Name: NEEDHAM ST.
Project Number: 11-0631
Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-03	Date Collected:	03/11/14 10:30
Client ID:	S-5	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	97,8081B	Extraction Date:	04/03/14 16:44
Analytical Date:	04/04/14 23:08	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	04/04/14
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Organochlorine Pesticides - Westborough Lab							
Delta-BHC	ND		ug/kg	9.43	--	1	A
Lindane	ND		ug/kg	3.14	--	1	A
Alpha-BHC	ND		ug/kg	3.93	--	1	A
Beta-BHC	ND		ug/kg	9.43	--	1	A
Heptachlor	ND		ug/kg	4.71	--	1	A
Aldrin	ND		ug/kg	9.43	--	1	A
Heptachlor epoxide	ND		ug/kg	17.7	--	1	A
Endrin	ND		ug/kg	3.93	--	1	A
Endrin ketone	ND		ug/kg	9.43	--	1	A
Dieldrin	ND		ug/kg	5.89	--	1	A
4,4'-DDE	ND		ug/kg	9.43	--	1	A
4,4'-DDD	ND		ug/kg	9.43	--	1	A
4,4'-DDT	ND		ug/kg	17.7	--	1	A
Endosulfan I	ND		ug/kg	9.43	--	1	A
Endosulfan II	ND		ug/kg	9.43	--	1	A
Endosulfan sulfate	ND		ug/kg	3.93	--	1	A
Methoxychlor	ND		ug/kg	17.7	--	1	A
Chlordane	ND		ug/kg	76.6	--	1	A
Hexachlorobenzene	ND		ug/kg	9.43	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	92		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: NEEDHAM ST.
Project Number: 11-0631
Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-03	Date Collected:	03/11/14 10:30
Client ID:	S-5	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	97,8151A	Extraction Date:	04/04/14 02:44
Analytical Date:	04/07/14 15:41	Methylation Date:	04/04/14 19:54
Analyst:	SH		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Chlorinated Herbicides - Westborough Lab							
MCPP	ND		ug/kg	3900	--	1	A
MCPA	ND		ug/kg	3900	--	1	A
Dalapon	ND		ug/kg	39	--	1	A
Dicamba	ND		ug/kg	39	--	1	A
Dichloroprop	ND		ug/kg	39	--	1	A
2,4-D	ND		ug/kg	39	--	1	A
2,4-DB	ND		ug/kg	39	--	1	A
2,4,5-T	ND		ug/kg	39	--	1	A
2,4,5-TP (Silvex)	ND		ug/kg	39	--	1	A
Dinoseb	ND		ug/kg	39	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	59		30-150	A
DCAA	77		30-150	B

Project Name: NEEDHAM ST.
Project Number: 11-0631
Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-04	Date Collected:	03/11/14 12:30
Client ID:	S-6	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	97,8151A	Extraction Date:	04/04/14 02:44
Analytical Date:	04/07/14 16:01	Methylation Date:	04/04/14 19:54
Analyst:	SH		
Percent Solids:	70%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Chlorinated Herbicides - Westborough Lab							
MCPP	ND		ug/kg	4700	--	1	A
MCPA	ND		ug/kg	4700	--	1	A
Dalapon	ND		ug/kg	47	--	1	A
Dicamba	ND		ug/kg	47	--	1	A
Dichloroprop	ND		ug/kg	47	--	1	A
2,4-D	ND		ug/kg	47	--	1	A
2,4-DB	ND		ug/kg	47	--	1	A
2,4,5-T	ND		ug/kg	47	--	1	A
2,4,5-TP (Silvex)	ND		ug/kg	47	--	1	A
Dinoseb	ND		ug/kg	47	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	58		30-150	A
DCAA	72		30-150	B

Project Name: NEEDHAM ST.
Project Number: 11-0631
Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-04	D2	Date Collected:	03/11/14 12:30
Client ID:	S-6		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	97,8081B		Extraction Date:	04/03/14 16:44
Analytical Date:	04/07/14 10:03		Cleanup Method1:	EPA 3620B
Analyst:	SH		Cleanup Date1:	04/04/14
Percent Solids:	70%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Organochlorine Pesticides - Westborough Lab							
Chlordane	160000		ug/kg	4570	--	50	B

Project Name: NEEDHAM ST.
Project Number: 11-0631
Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-04	D	Date Collected:	03/11/14 12:30
Client ID:	S-6		Date Received:	03/11/14
Sample Location:	NEWTON, MA		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	97,8081B		Extraction Date:	04/03/14 16:44
Analytical Date:	04/07/14 09:50		Cleanup Method1:	EPA 3620B
Analyst:	SH		Cleanup Date1:	04/04/14
Percent Solids:	70%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Organochlorine Pesticides - Westborough Lab							
Delta-BHC	ND		ug/kg	112	--	10	A
Lindane	ND		ug/kg	37.5	--	10	A
Alpha-BHC	ND		ug/kg	46.9	--	10	A
Beta-BHC	ND		ug/kg	112	--	10	A
Heptachlor	728		ug/kg	56.3	--	10	B
Aldrin	6660		ug/kg	112	--	10	A
Heptachlor epoxide	ND		ug/kg	211	--	10	A
Endrin	1420		ug/kg	46.9	--	10	A
Endrin ketone	ND		ug/kg	112	--	10	A
Dieldrin	4810	P	ug/kg	70.4	--	10	B
4,4'-DDE	5390		ug/kg	112	--	10	B
4,4'-DDD	ND		ug/kg	112	--	10	A
4,4'-DDT	4710		ug/kg	211	--	10	B
Endosulfan I	ND		ug/kg	112	--	10	A
Endosulfan II	ND		ug/kg	112	--	10	A
Endosulfan sulfate	ND		ug/kg	46.9	--	10	A
Methoxychlor	ND		ug/kg	211	--	10	A
Chlordane	109000	E	ug/kg	915	--	10	A
Hexachlorobenzene	ND		ug/kg	112	--	10	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	A
Decachlorobiphenyl	115		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	94		30-150	B

Project Name: NEEDHAM ST.
Project Number: 11-0631
Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-05	Date Collected:	03/11/14 13:30
Client ID:	S-7	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	97,8081B	Extraction Date:	04/03/14 16:44
Analytical Date:	04/04/14 23:34	Cleanup Method1:	EPA 3620B
Analyst:	SH	Cleanup Date1:	04/04/14
Percent Solids:	81%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Organochlorine Pesticides - Westborough Lab							
Delta-BHC	ND		ug/kg	9.35	--	1	A
Lindane	ND		ug/kg	3.12	--	1	A
Alpha-BHC	ND		ug/kg	3.89	--	1	A
Beta-BHC	ND		ug/kg	9.35	--	1	A
Heptachlor	ND		ug/kg	4.67	--	1	A
Aldrin	ND		ug/kg	9.35	--	1	A
Heptachlor epoxide	ND		ug/kg	17.5	--	1	A
Endrin	ND		ug/kg	3.89	--	1	A
Endrin ketone	ND		ug/kg	9.35	--	1	A
Dieldrin	ND		ug/kg	5.84	--	1	A
4,4'-DDE	ND		ug/kg	9.35	--	1	A
4,4'-DDD	ND		ug/kg	9.35	--	1	A
4,4'-DDT	80.5		ug/kg	17.5	--	1	A
Endosulfan I	ND		ug/kg	9.35	--	1	A
Endosulfan II	ND		ug/kg	9.35	--	1	A
Endosulfan sulfate	ND		ug/kg	3.89	--	1	A
Methoxychlor	ND		ug/kg	17.5	--	1	A
Chlordane	ND		ug/kg	76.0	--	1	A
Hexachlorobenzene	ND		ug/kg	9.35	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	93		30-150	B

Project Name: NEEDHAM ST.
Project Number: 11-0631
Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-05	Date Collected:	03/11/14 13:30
Client ID:	S-7	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	97,8151A	Extraction Date:	04/04/14 02:44
Analytical Date:	04/07/14 16:21	Methylation Date:	04/04/14 19:54
Analyst:	SH		
Percent Solids:	81%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Chlorinated Herbicides - Westborough Lab							
MCPP	ND		ug/kg	4000	--	1	A
MCPA	ND		ug/kg	4000	--	1	A
Dalapon	ND		ug/kg	40	--	1	A
Dicamba	ND		ug/kg	40	--	1	A
Dichloroprop	ND		ug/kg	40	--	1	A
2,4-D	ND		ug/kg	40	--	1	A
2,4-DB	ND		ug/kg	40	--	1	A
2,4,5-T	ND		ug/kg	40	--	1	A
2,4,5-TP (Silvex)	ND		ug/kg	40	--	1	A
Dinoseb	ND		ug/kg	40	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	59		30-150	A
DCAA	74		30-150	B

Project Name: NEEDHAM ST.
Project Number: 11-0631

Lab Number: L1406935
Report Date: 04/08/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8081B
Analytical Date: 04/04/14 23:47
Analyst: SH

Extraction Method: EPA 3546
Extraction Date: 04/03/14 16:44
Cleanup Method1: EPA 3620B
Cleanup Date1: 04/04/14

MCP Organochlorine Pesticides - Westborough Lab for sample(s): 01-05 Batch: WG680069-1

Parameter	Result	Qualifier	Units	RL	MDL	Column
Delta-BHC	ND		ug/kg	7.67	--	A
Lindane	ND		ug/kg	2.56	--	A
Alpha-BHC	ND		ug/kg	3.20	--	A
Beta-BHC	ND		ug/kg	7.67	--	A
Heptachlor	ND		ug/kg	3.84	--	A
Aldrin	ND		ug/kg	7.67	--	A
Heptachlor epoxide	ND		ug/kg	14.4	--	A
Endrin	ND		ug/kg	3.20	--	A
Endrin ketone	ND		ug/kg	7.67	--	A
Dieldrin	ND		ug/kg	4.80	--	A
4,4'-DDE	ND		ug/kg	7.67	--	A
4,4'-DDD	ND		ug/kg	7.67	--	A
4,4'-DDT	ND		ug/kg	14.4	--	A
Endosulfan I	ND		ug/kg	7.67	--	A
Endosulfan II	ND		ug/kg	7.67	--	A
Endosulfan sulfate	ND		ug/kg	3.20	--	A
Methoxychlor	ND		ug/kg	14.4	--	A
Chlordane	ND		ug/kg	62.3	--	A
Hexachlorobenzene	ND		ug/kg	7.67	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	106		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	99		30-150	B
Decachlorobiphenyl	107		30-150	A

Project Name: NEEDHAM ST.
Project Number: 11-0631

Lab Number: L1406935
Report Date: 04/08/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8151A
Analytical Date: 04/07/14 14:02
Analyst: SH

Extraction Method: EPA 8151A
Extraction Date: 04/04/14 02:44

Methylation Date: 04/04/14 19:54

Parameter	Result	Qualifier	Units	RL	MDL	Column
MCP Chlorinated Herbicides - Westborough Lab for sample(s): 01-05 Batch: WG680141-1						
MCPP	ND		ug/kg	3200	--	A
MCPA	ND		ug/kg	3200	--	A
Dalapon	ND		ug/kg	32	--	A
Dicamba	ND		ug/kg	32	--	A
Dichloroprop	ND		ug/kg	32	--	A
2,4-D	ND		ug/kg	32	--	A
2,4-DB	ND		ug/kg	32	--	A
2,4,5-T	ND		ug/kg	32	--	A
2,4,5-TP (Silvex)	ND		ug/kg	32	--	A
Dinoseb	ND		ug/kg	32	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	59		30-150	B
DCAA	60		30-150	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST.
Project Number: 11-0631

Lab Number: L1406935
Report Date: 04/08/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
MCP Organochlorine Pesticides - Westborough Lab Associated sample(s): 01-05 Batch: WG680069-2 WG680069-3									
Delta-BHC	81		95		40-140	16		30	A
Lindane	81		94		40-140	15		30	A
Alpha-BHC	84		98		40-140	15		30	A
Beta-BHC	78		87		40-140	11		30	A
Heptachlor	88		102		40-140	15		30	A
Aldrin	88		100		40-140	13		30	A
Heptachlor epoxide	83		96		40-140	15		30	A
Endrin	95		111		40-140	16		30	A
Endrin ketone	92		108		40-140	16		30	A
Dieldrin	91		104		40-140	13		30	A
4,4'-DDE	89		103		40-140	15		30	A
4,4'-DDD	89		104		40-140	16		30	A
4,4'-DDT	101		120		40-140	17		30	A
Endosulfan I	88		101		40-140	14		30	A
Endosulfan II	91		105		40-140	14		30	A
Endosulfan sulfate	96		113		40-140	16		30	A
Methoxychlor	95		106		40-140	11		30	A
Hexachlorobenzene	76		87		40-140	13		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEEDHAM ST.

Project Number: 11-0631

Lab Number: L1406935

Report Date: 04/08/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Organochlorine Pesticides - Westborough Lab Associated sample(s): 01-05 Batch: WG680069-2 WG680069-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		96		30-150	A
Decachlorobiphenyl	87		116		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		81		30-150	B
Decachlorobiphenyl	98		121		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEEDHAM ST.

Project Number: 11-0631

Lab Number: L1406935

Report Date: 04/08/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
MCP Chlorinated Herbicides - Westborough Lab Associated sample(s): 01-05 Batch: WG680141-2 WG680141-3									
MCPP	58		65		40-140	11		30	A
MCPA	53		62		40-140	16		30	A
Dalapon	45		49		40-140	9		30	A
Dicamba	48		52		40-140	8		30	A
Dichloroprop	56		63		40-140	12		30	A
2,4-D	62		65		40-140	5		30	A
2,4-DB	59		66		40-140	11		30	A
2,4,5-T	52		57		40-140	9		30	A
2,4,5-TP (Silvex)	52		57		40-140	9		30	A
Dinoseb	**10**	Q	**8**	Q	40-140	17		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	47		52		30-150	A
DCAA	53		57		30-150	B

INORGANICS
&
MISCELLANEOUS

Project Name:	NEEDHAM ST.	**Lab Number:**	L1406935
Project Number:	11-0631	**Report Date:**	04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-01	Date Collected:	03/11/14 08:00
Client ID:	S-1	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	04/04/14 15:30	1,1030	SB

Project Name:	NEEDHAM ST.	**Lab Number:**	L1406935
Project Number:	11-0631	**Report Date:**	04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-02	Date Collected:	03/11/14 09:00
Client ID:	S-2	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	04/04/14 15:30	1,1030	SB

Project Name:	NEEDHAM ST.	**Lab Number:**	L1406935
Project Number:	11-0631	**Report Date:**	04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-03	Date Collected:	03/11/14 10:30
Client ID:	S-5	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	04/04/14 15:30	1,1030	SB

Project Name:	NEEDHAM ST.	**Lab Number:**	L1406935
Project Number:	11-0631	**Report Date:**	04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-04	Date Collected:	03/11/14 12:30
Client ID:	S-6	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	04/04/14 15:30	1,1030	SB

Project Name:	NEEDHAM ST.	**Lab Number:**	L1406935
Project Number:	11-0631	**Report Date:**	04/08/14

SAMPLE RESULTS

Lab ID:	L1406935-05	Date Collected:	03/11/14 13:30
Client ID:	S-7	Date Received:	03/11/14
Sample Location:	NEWTON, MA	Field Prep:	Not Specified
Matrix:	Soil		

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	04/04/14 15:30	1,1030	SB

Project Name: NEEDHAM ST.
Project Number: 11-0631

Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID: L1406935-01
Client ID: S-1
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 08:00
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	76.7		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
Cyanide, Reactive	ND		mg/kg	10	--	1	04/04/14 16:00	04/04/14 17:29	1,7.3	TL
Sulfide, Reactive	ND		mg/kg	10	--	1	04/04/14 16:00	04/04/14 17:24	1,7.3	TL

Project Name: NEEDHAM ST.
Project Number: 11-0631

Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID: L1406935-02
Client ID: S-2
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 09:00
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.8		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
Cyanide, Reactive	ND		mg/kg	10	--	1	04/04/14 16:00	04/04/14 17:29	1,7.3	TL
Sulfide, Reactive	ND		mg/kg	10	--	1	04/04/14 16:00	04/04/14 17:24	1,7.3	TL

Project Name: NEEDHAM ST.
Project Number: 11-0631

Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID: L1406935-03
Client ID: S-5
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 10:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.8		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
Cyanide, Reactive	ND		mg/kg	10	--	1	04/04/14 16:00	04/04/14 17:29	1,7.3	TL
Sulfide, Reactive	ND		mg/kg	10	--	1	04/04/14 16:00	04/04/14 17:24	1,7.3	TL

Project Name: NEEDHAM ST.
Project Number: 11-0631

Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID: L1406935-04
Client ID: S-6
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 12:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	70.4		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
Cyanide, Reactive	ND		mg/kg	10	--	1	04/04/14 16:00	04/04/14 17:29	1,7.3	TL
Sulfide, Reactive	ND		mg/kg	10	--	1	04/04/14 16:00	04/04/14 17:24	1,7.3	TL

Project Name: NEEDHAM ST.
Project Number: 11-0631

Lab Number: L1406935
Report Date: 04/08/14

SAMPLE RESULTS

Lab ID: L1406935-05
Client ID: S-7
Sample Location: NEWTON, MA
Matrix: Soil

Date Collected: 03/11/14 13:30
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.3		%	0.100	NA	1	-	03/11/14 19:15	30,2540G	RT
Cyanide, Reactive	ND		mg/kg	10	--	1	04/04/14 16:00	04/04/14 17:29	1,7.3	TL
Sulfide, Reactive	ND		mg/kg	10	--	1	04/04/14 16:00	04/04/14 17:24	1,7.3	TL

Project Name: NEEDHAM ST.
Project Number: 11-0631
Lab Number: L1406935
Report Date: 04/08/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG680297-1										
Cyanide, Reactive	ND		mg/kg	10	--	1	04/04/14 16:00	04/04/14 17:27	1,7.3	TL
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG680298-1										
Sulfide, Reactive	ND		mg/kg	10	--	1	04/04/14 16:00	04/04/14 17:21	1,7.3	TL

Lab Control Sample Analysis
Batch Quality Control

Project Name: NEEDHAM ST.
Project Number: 11-0631
Lab Number: L1406935
Report Date: 04/08/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG680297-2								
Cyanide, Reactive	86		-		30-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG680298-2								
Sulfide, Reactive	110		-		60-125	-		40

Lab Duplicate Analysis
Batch Quality Control

Project Name: NEEDHAM ST.
Project Number: 11-0631

Lab Number: L1406935
Report Date: 04/08/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG674882-1 QC Sample: L1405007-01 Client ID: DUP Sample						
Solids, Total	78.5	82.0	%	4		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG680297-3 QC Sample: L1406867-01 Client ID: DUP Sample						
Cyanide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG680298-3 QC Sample: L1406867-01 Client ID: DUP Sample						
Sulfide, Reactive	ND	ND	mg/kg	NC		40

Project Name: NEEDHAM ST.
Project Number: 11-0631

Lab Number: L1406935
Report Date: 04/08/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1406935-01A	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	IGNIT-1030(14),REACTS(14),MCP-8081-10(14),MCP-8151-10(14),REACTCN(14)
L1406935-02A	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	IGNIT-1030(14),REACTS(14),MCP-8081-10(14),MCP-8151-10(14),REACTCN(14)
L1406935-03A	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	IGNIT-1030(14),REACTS(14),MCP-8081-10(14),MCP-8151-10(14),REACTCN(14)
L1406935-04A	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	IGNIT-1030(14),REACTS(14),MCP-8081-10(14),MCP-8151-10(14),REACTCN(14)
L1406935-05A	Amber 250ml unpreserved	A	N/A	4.7	Y	Absent	IGNIT-1030(14),REACTS(14),MCP-8081-10(14),MCP-8151-10(14),REACTCN(14)

*Values in parentheses indicate holding time in days

Project Name:	NEEDHAM ST.	**Lab Number:**	L1406935
Project Number:	11-0631	**Report Date:**	04/08/14

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The lower value for the two columns has been reported due to obvious interference.

Report Format: Data Usability Report

Project Name:	NEEDHAM ST.	**Lab Number:**	L1406935
Project Number:	11-0631	**Report Date:**	04/08/14

Data Qualifiers

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	NEEDHAM ST.	**Lab Number:**	L1406935
Project Number:	11-0631	**Report Date:**	04/08/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised December 11, 2013

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 3/11/14

ALPHA Job #: L1405044

ALPHA ANALYTICAL
Pioneers in Data Chemistry
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Project Information

Project Name: Needham St
Project Location: Newton, MA
Project #: 11-0631
Project Manager: Matt Abraham
ALPHA Quote #:

Report Information - Data Deliverables

☒ ADEx ☒ EMAIL

Billing Information

☒ Same as Client Info PO #:

Client Information

Client: Tighe + Bond
Address: 446 Main St, Worcester MA
Phone: 508-471-9602
Email:

Regulatory Requirements & Project Information Requirements

☒ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☒ No NPDES RGP
☐ Other State/Fed Program MCP/CT RCP Criteria

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 3/18/14

Additional Project Information:

(*) NOTES - CALLED INTO NICOLE ~~[illegible]~~ FOR AUTO-LOG
1) Auto log samples for HEX-CR if Cr/CR exceeds 30 mg/kg
2) Run TCLP for individual metals if result exceeds 100x rule.

06935

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC	SVOC	METALS	METALS	EPH	VPH	PCB	TPH	Cl Naphth	Cl Naphth	Hex Cr	TCLP Metals (SOLID ONLY)	Pest Herb	Ignit, react	Sample Comments	Total # Bottles
.01 05044-01	S-1	3/11/14	0900	S	MAA	X	X	X	X	X			X	X	(*)	(*)	(*)	X	X	(*) see	7
.02 02	S-2	3/11/14	0900	S		X	X	X	X	X			X	X	(*)	(*)	(*)	X	X	notes	7
03	S-3	3/11/14	0930	S		X	X	X	X	X			X	X	(*)	(*)	(*)			section	7
04	S-4	3/11/14	1000	S		X	X	X	X	X			X	X	(*)	(*)	(*)				7
.03 05	S-5	3/11/14	1030	S		X	X	X	X	X			X	X	(*)	(*)	(*)	X	X		7
.04 06	S-6	3/11/14	1230	S		X	X	X	X	X			X	X	(*)	(*)	(*)	X	X		7
.05 07	S-7	3/11/14	1330	S		X	X	X	X	X			X	X	(*)	(*)	(*)	X	X		7
08	S-8	3/11/14	1430	S	✓	X	X	X	X	X			X	X	(*)	(*)	(*)				7
	~ END ~																				

SAMPLE INFO
Filtration: ☐ Field ☐ Lab to do
Preservation: ☐ Lab to do

Container Type															
Preservative															

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H= $Na_2S_2O_3$
I= Ascorbic Acid
J= NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	3/11/14 1600	[signature]	3/11/14 1600

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

I:\Pest11\140404n\11140404n-01.d

Data File Name	**11140404n-01.d**
Data File Path	**I:\Pest11\140404n**
Operator	**pest11:ss**
Date Acquired	**4/4/2014 18:39**
Acq. Method File	**PEST_P11.M**
Sample Name	**deg std pp4584**
Instrument Name	**PEST 11**

Name	Ret Time	Response	
4,4'-DDT	4.67	3425606426	% Breakdown
4,4'-DDE	4.00	61512279.71	
4,4'-DDD	4.46	79554070.63	3.96%
Endrin	4.40	3599789923	% Breakdown
Endrin Aldehyde	4.87	52891343.55	
Endrin Ketone	5.36	88456269.45	3.78%
Signal #2			
4,4'-DDT #2	5.28	3985253124	% Breakdown
4,4'-DDE #2	4.63	95176629.34	
4,4'-DDD #2	5.06	113863478.2	4.98%
Endrin #2	4.98	4626175660	% Breakdown
Endrin Aldehyde #2	5.37	60212775.7	
Endrin Ketone #2	5.92	107730080.6	3.50%

WG680069-1,2,3,
L1406935-01,02,03,05

I:\Pest11\140407\11140407-01.d

Data File Name	**11140407-01.d**
Data File Path	**I:\Pest11\140407**
Operator	**pest11:shLOADED**
Date Acquired	**4/7/2014 5:44**
Acq. Method File	**PEST_P11.M**
Sample Name	**deg std pp4584**
Instrument Name	**PEST 11**

Name	Ret Time	Response	
4,4'-DDT	4.65	3015015273	% Breakdown
4,4'-DDE	3.98	198858959.1	
4,4'-DDD	4.44	56176950.09	7.80%
Endrin	4.38	3261917365	% Breakdown
Endrin Aldehyde	4.85	65339672.48	
Endrin Ketone	5.35	82035325.82	4.32%
Signal #2			
4,4'-DDT #2	5.27	4634110578	% Breakdown
4,4'-DDE #2	4.62	514678476.3	
4,4'-DDD #2	5.05	115467373.7	11.97%
Endrin #2	4.97	5850441954	% Breakdown
Endrin Aldehyde #2	5.36	132575253.3	
Endrin Ketone #2	5.91	139204049.8	4.44%

L1406935-04d

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

March 26, 2014

Matt Abraham
Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303

Project Location: 71 Needham St. Newton MA
Client Job Number:
Project Number: B-0631
Laboratory Work Order Number: 14C0663

Enclosed are results of analyses for samples received by the laboratory on March 21, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa A. Worthington
Project Manager

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

Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303
ATTN: Matt Abraham

REPORT DATE: 3/26/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: B-0631

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14C0663

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

PROJECT LOCATION: 71 Needham St. Newton MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
TB-1 (1-3)	14C0663-01	Soil		SM 2540G	
				SW-846 8082A	
TB-1 (4-6)	14C0663-02	Soil		SM 2540G	
				SW-846 8082A	
TB-2 (1-3)	14C0663-03	Soil		SM 2540G	
				SW-846 8082A	
TB-2 (4-6)	14C0663-04	Soil		SM 2540G	
				SW-846 8082A	
TB-3 (1-3)	14C0663-05	Soil		SM 2540G	
				SW-846 8082A	
TB-3 (4-6)	14C0663-06	Soil		SM 2540G	
				SW-846 8082A	
TB-4 (1-3)	14C0663-07	Soil		SM 2540G	
				SW-846 8082A	
TB-4 (4-6)	14C0663-08	Soil		SM 2540G	
				SW-846 8082A	
TB-5 (1-3)	14C0663-09	Soil		SM 2540G	
				SW-846 8082A	
TB-5 (4-6)	14C0663-10	Soil		SM 2540G	
				SW-846 8082A	
TB-6 (1-3)	14C0663-11	Soil		SM 2540G	
				SW-846 8082A	
TB-6 (4-6)	14C0663-12	Soil		SM 2540G	
				SW-846 8082A	
TB-7 (1-3)	14C0663-13	Soil		SM 2540G	
				SW-846 8082A	
TB-7 (4-6)	14C0663-14	Soil		SM 2540G	
				SW-846 8082A	
TB-8 (1-3)	14C0663-15	Soil		SM 2540G	
				SW-846 8082A	
TB-8 (4-6)	14C0663-16	Soil		SM 2540G	
				SW-846 8082A	
TB-9 (1-3)	14C0663-17	Soil		SM 2540G	
				SW-846 8082A	
TB-9 (4-6)	14C0663-18	Soil		SM 2540G	
				SW-846 8082A	
TB-10 (1-3)	14C0663-19	Soil		SM 2540G	
				SW-846 8082A	
TB-10 (4-6)	14C0663-20	Soil		SM 2540G	
				SW-846 8082A	
TB-11 (1-3)	14C0663-21	Soil		SM 2540G	

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

Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303
ATTN: Matt Abraham

REPORT DATE: 3/26/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: B-0631

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14C0663

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

PROJECT LOCATION: 71 Needham St. Newton MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
TB-11 (4-6)	14C0663-22	Soil		SM 2540G	
TB-12 (1-3)	14C0663-23	Soil		SM 2540G	
				SW-846 8082A	
TB-12 (4-6)	14C0663-24	Soil		SM 2540G	
				SW-846 8082A	
TB-13 (1-3)	14C0663-25	Soil		SM 2540G	
TB-13 (4-6)	14C0663-26	Soil		SM 2540G	
TB-14 (1-3)	14C0663-27	Soil		SM 2540G	
				SW-846 8082A	
TB-14 (4-6)	14C0663-28	Soil		SM 2540G	
				SW-846 8082A	
TP-6A (0-1)	14C0663-29	Soil		SM 2540G	
				SW-846 8082A	
TP-6A (1-2)	14C0663-30	Soil		SM 2540G	
				SW-846 8082A	
TP-6A (2-3)	14C0663-31	Soil		SM 2540G	
				SW-846 8082A	
TP-6A (3-4)	14C0663-32	Soil		SM 2540G	
				SW-846 8082A	
TP-6A (4-5)	14C0663-33	Soil		SM 2540G	
				SW-846 8082A	
TP-6A (5-6)	14C0663-34	Soil		SM 2540G	
				SW-846 8082A	
TP-11A (0-1)	14C0663-35	Soil		SM 2540G	
				SW-846 8082A	
TP-11A (1-2)	14C0663-36	Soil		SM 2540G	
				SW-846 8082A	
TP-11A (2-3)	14C0663-37	Soil		SM 2540G	
				SW-846 8082A	
TP-11A (3-4)	14C0663-38	Soil		SM 2540G	
				SW-846 8082A	
TP-11A (4-5)	14C0663-39	Soil		SM 2540G	
				SW-846 8082A	
TP-11A (5-6)	14C0663-40	Soil		SM 2540G	
				SW-846 8082A	
TP-5A (0-1)	14C0663-41	Soil		SM 2540G	
				SW-846 8082A	
TP-5A (1-2)	14C0663-42	Soil		SM 2540G	
				SW-846 8082A	
TP-5A (2-3)	14C0663-43	Soil		SM 2540G	
				SW-846 8082A	

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

Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303
ATTN: Matt Abraham

REPORT DATE: 3/26/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: B-0631

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14C0663

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

PROJECT LOCATION: 71 Needham St. Newton MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
TP-5A (3-4)	14C0663-44	Soil		SM 2540G	
				SW-846 8082A	
TP-5A (4-5)	14C0663-45	Soil		SM 2540G	
				SW-846 8082A	
TP-5A (5-6)	14C0663-46	Soil		SM 2540G	
				SW-846 8082A	

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 8082A

Qualifications:

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, Aroclor-1016 [2C]

B092357-MS1, B092357-MSD1, B092358-MS1, B092358-MSD1, B092360-MS1, B092360-MSD1

Sample fingerprint does not match standard exactly. Sample was quantitated against the closest matching standard.

Analyte & Samples(s) Qualified:

Aroclor-1248, Aroclor-1248 [2C]

14C0663-23[TB-12 (1-3)], 14C0663-24[TB-12 (4-6)], 14C0663-27[TB-14 (1-3)], 14C0663-28[TB-14 (4-6)], 14C0663-29[TP-6A (0-1)], 14C0663-30[TP-6A (1-2)], 14C0663-31[TP-6A (2-3)], 14C0663-32[TP-6A (3-4)], 14C0663-33[TP-6A (4-5)], 14C0663-34[TP-6A (5-6)], 14C0663-35[TP-11A (0-1)], 14C0663-36[TP-11A (1-2)], 14C0663-37[TP-11A (2-3)], 14C0663-38[TP-11A (3-4)], 14C0663-39[TP-11A (4-5)], 14C0663-40[TP-11A (5-6)], 14C0663-01[TB-1 (1-3)], 14C0663-02[TB-1 (4-6)], 14C0663-03[TB-2 (1-3)], 14C0663-04[TB-2 (4-6)], 14C0663-05[TB-3 (1-3)], 14C0663-06[TB-3 (4-6)], 14C0663-09[TB-5 (1-3)], 14C0663-10[TB-5 (4-6)], 14C0663-11[TB-6 (1-3)], 14C0663-12[TB-6 (4-6)], 14C0663-13[TB-7 (1-3)], 14C0663-14[TB-7 (4-6)], 14C0663-15[TB-8 (1-3)], 14C0663-16[TB-8 (4-6)], 14C0663-18[TB-9 (4-6)], 14C0663-19[TB-10 (1-3)], 14C0663-20[TB-10 (4-6)], 14C0663-41[TP-5A (0-1)], 14C0663-42[TP-5A (1-2)], 14C0663-43[TP-5A (2-3)], 14C0663-44[TP-5A (3-4)], 14C0663-45[TP-5A (4-5)], 14C0663-46[TP-5A (5-6)]

A five times dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

14C0663-07[TB-4 (1-3)], 14C0663-08[TB-4 (4-6)], 14C0663-17[TB-9 (1-3)]

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, Decachlorobiphenyl [2C], Tetrachloro-m-xylene, Tetrachloro-m-xylene [2C]

14C0663-03[TB-2 (1-3)], 14C0663-04[TB-2 (4-6)], 14C0663-05[TB-3 (1-3)], 14C0663-06[TB-3 (4-6)], 14C0663-11[TB-6 (1-3)], 14C0663-12[TB-6 (4-6)], 14C0663-13[TB-7 (1-3)], 14C0663-14[TB-7 (4-6)], 14C0663-15[TB-8 (1-3)], 14C0663-16[TB-8 (4-6)], 14C0663-29[TP-6A (0-1)], 14C0663-30[TP-6A (1-2)], 14C0663-31[TP-6A (2-3)], 14C0663-32[TP-6A (3-4)]

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: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-1 (1-3) | Sampled: 3/21/2014 07:00

Sample ID: 14C0663-01

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	3/21/14	3/24/14 21:20	KAL
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:20	KAL
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:20	KAL
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:20	KAL
Aroclor-1248 [2]	0.31	0.11	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/24/14 21:20	KAL
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:20	KAL
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:20	KAL
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:20	KAL
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:20	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	86.4	30-150		3/24/14 21:20
Decachlorobiphenyl [2]	89.6	30-150		3/24/14 21:20
Tetrachloro-m-xylene [1]	94.3	30-150		3/24/14 21:20
Tetrachloro-m-xylene [2]	88.7	30-150		3/24/14 21:20

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-1 (1-3)
Sampled: 3/21/2014 07:00

Sample ID: 14C0663-01

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	86.3		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-1 (4-6)
Sampled: 3/21/2014 07:05

Sample ID: 14C0663-02

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	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:38	KAL
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:38	KAL
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:38	KAL
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:38	KAL
Aroclor-1248 [2]	0.14	0.12	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/24/14 21:38	KAL
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:38	KAL
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:38	KAL
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:38	KAL
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:38	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	91.0	30-150		3/24/14 21:38
Decachlorobiphenyl [2]	94.6	30-150		3/24/14 21:38
Tetrachloro-m-xylene [1]	99.8	30-150		3/24/14 21:38
Tetrachloro-m-xylene [2]	92.6	30-150		3/24/14 21:38

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-1 (4-6)
Sampled: 3/21/2014 07:05

Sample ID: 14C0663-02

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	82.8		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-2 (1-3) | Sampled: 3/21/2014 07:10

Sample ID: 14C0663-03

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	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 13:48	KAL
Aroclor-1221 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 13:48	KAL
Aroclor-1232 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 13:48	KAL
Aroclor-1242 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 13:48	KAL
Aroclor-1248 [2]	16	5.4	mg/Kg dry	250	O-04	SW-846 8082A	3/21/14	3/25/14 13:48	KAL
Aroclor-1254 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 13:48	KAL
Aroclor-1260 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 13:48	KAL
Aroclor-1262 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 13:48	KAL
Aroclor-1268 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 13:48	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 13:48
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 13:48
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 13:48
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 13:48

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-2 (1-3)
Sampled: 3/21/2014 07:10

Sample ID: 14C0663-03

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	90.0		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-2 (4-6) | Sampled: 3/21/2014 07:15

Sample ID: 14C0663-04

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	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 9:04	KAL
Aroclor-1221 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 9:04	KAL
Aroclor-1232 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 9:04	KAL
Aroclor-1242 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 9:04	KAL
Aroclor-1248 [2]	6.1	1.1	mg/Kg dry	50	O-04	SW-846 8082A	3/21/14	3/25/14 9:04	KAL
Aroclor-1254 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 9:04	KAL
Aroclor-1260 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 9:04	KAL
Aroclor-1262 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 9:04	KAL
Aroclor-1268 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 9:04	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 9:04
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 9:04
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 9:04
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 9:04

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-2 (4-6)
Sampled: 3/21/2014 07:15

Sample ID: 14C0663-04

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	90.5		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-3 (1-3) | Sampled: 3/21/2014 07:20

Sample ID: 14C0663-05

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	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:17	KAL
Aroclor-1221 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:17	KAL
Aroclor-1232 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:17	KAL
Aroclor-1242 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:17	KAL
Aroclor-1248 [2]	56	5.5	mg/Kg dry	250	O-04	SW-846 8082A	3/21/14	3/25/14 9:17	KAL
Aroclor-1254 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:17	KAL
Aroclor-1260 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:17	KAL
Aroclor-1262 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:17	KAL
Aroclor-1268 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:17	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 9:17
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 9:17
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 9:17
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 9:17

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-3 (1-3)
Sampled: 3/21/2014 07:20

Sample ID: 14C0663-05

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	89.6		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-3 (4-6)
Sampled: 3/21/2014 07:25

Sample ID: 14C0663-06

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	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:30	KAL
Aroclor-1221 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:30	KAL
Aroclor-1232 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:30	KAL
Aroclor-1242 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:30	KAL
Aroclor-1248 [2]	67	5.5	mg/Kg dry	250	O-04	SW-846 8082A	3/21/14	3/25/14 9:30	KAL
Aroclor-1254 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:30	KAL
Aroclor-1260 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:30	KAL
Aroclor-1262 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:30	KAL
Aroclor-1268 [1]	ND	5.5	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:30	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 9:30
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 9:30
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 9:30
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 9:30

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-3 (4-6)
Sampled: 3/21/2014 07:25

Sample ID: 14C0663-06

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	88.5		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-4 (1-3) | Sampled: 3/21/2014 07:30

Sample ID: 14C0663-07

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	3/21/14	3/25/14 14:01	KAL
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:01	KAL
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:01	KAL
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:01	KAL
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:01	KAL
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:01	KAL
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:01	KAL
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:01	KAL
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:01	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	91.4	30-150		3/25/14 14:01
Decachlorobiphenyl [2]	90.9	30-150		3/25/14 14:01
Tetrachloro-m-xylene [1]	94.8	30-150		3/25/14 14:01
Tetrachloro-m-xylene [2]	91.7	30-150		3/25/14 14:01

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-4 (1-3)
Sampled: 3/21/2014 07:30

Sample ID: 14C0663-07

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	88.5		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-4 (4-6)
Sampled: 3/21/2014 07:35

Sample ID: 14C0663-08

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	3/21/14	3/24/14 23:27	KAL
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:27	KAL
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:27	KAL
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:27	KAL
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:27	KAL
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:27	KAL
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:27	KAL
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:27	KAL
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:27	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	84.6	30-150		3/24/14 23:27
Decachlorobiphenyl [2]	87.1	30-150		3/24/14 23:27
Tetrachloro-m-xylene [1]	85.8	30-150		3/24/14 23:27
Tetrachloro-m-xylene [2]	84.3	30-150		3/24/14 23:27

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-4 (4-6)
Sampled: 3/21/2014 07:35

Sample ID: 14C0663-08

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	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-5 (1-3) | Sampled: 3/21/2014 07:40

Sample ID: 14C0663-09

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	0.10	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:45	KAL
Aroclor-1221 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:45	KAL
Aroclor-1232 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:45	KAL
Aroclor-1242 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:45	KAL
Aroclor-1248 [2]	0.47	0.10	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/24/14 23:45	KAL
Aroclor-1254 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:45	KAL
Aroclor-1260 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:45	KAL
Aroclor-1262 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:45	KAL
Aroclor-1268 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 23:45	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	77.0	30-150		3/24/14 23:45
Decachlorobiphenyl [2]	82.3	30-150		3/24/14 23:45
Tetrachloro-m-xylene [1]	89.4	30-150		3/24/14 23:45
Tetrachloro-m-xylene [2]	82.1	30-150		3/24/14 23:45

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-5 (1-3)
Sampled: 3/21/2014 07:40

Sample ID: 14C0663-09

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	91.1		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-5 (4-6) | Sampled: 3/21/2014 07:45

Sample ID: 14C0663-10

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	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:14	KAL
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:14	KAL
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:14	KAL
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:14	KAL
Aroclor-1248 [2]	0.84	0.11	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/25/14 14:14	KAL
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:14	KAL
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:14	KAL
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:14	KAL
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 14:14	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	96.3	30-150		3/25/14 14:14
Decachlorobiphenyl [2]	99.3	30-150		3/25/14 14:14
Tetrachloro-m-xylene [1]	100	30-150		3/25/14 14:14
Tetrachloro-m-xylene [2]	95.5	30-150		3/25/14 14:14

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-5 (4-6)
Sampled: 3/21/2014 07:45

Sample ID: 14C0663-10

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	87.2		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-6 (1-3) | Sampled: 3/21/2014 07:50

Sample ID: 14C0663-11

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	58	mg/Kg dry	2500		SW-846 8082A	3/21/14	3/25/14 9:43	KAL
Aroclor-1221 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	3/21/14	3/25/14 9:43	KAL
Aroclor-1232 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	3/21/14	3/25/14 9:43	KAL
Aroclor-1242 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	3/21/14	3/25/14 9:43	KAL
Aroclor-1248 [2]	340	58	mg/Kg dry	2500	O-04	SW-846 8082A	3/21/14	3/25/14 9:43	KAL
Aroclor-1254 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	3/21/14	3/25/14 9:43	KAL
Aroclor-1260 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	3/21/14	3/25/14 9:43	KAL
Aroclor-1262 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	3/21/14	3/25/14 9:43	KAL
Aroclor-1268 [1]	ND	58	mg/Kg dry	2500		SW-846 8082A	3/21/14	3/25/14 9:43	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 9:43
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 9:43
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 9:43
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 9:43

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-6 (1-3)
Sampled: 3/21/2014 07:50

Sample ID: 14C0663-11

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	84.2		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-6 (4-6)
Sampled: 3/21/2014 07:55

Sample ID: 14C0663-12

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	2.5	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 9:56	KAL
Aroclor-1221 [1]	ND	2.5	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 9:56	KAL
Aroclor-1232 [1]	ND	2.5	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 9:56	KAL
Aroclor-1242 [1]	ND	2.5	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 9:56	KAL
Aroclor-1248 [2]	21	2.5	mg/Kg dry	100	O-04	SW-846 8082A	3/21/14	3/25/14 9:56	KAL
Aroclor-1254 [1]	ND	2.5	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 9:56	KAL
Aroclor-1260 [1]	ND	2.5	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 9:56	KAL
Aroclor-1262 [1]	ND	2.5	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 9:56	KAL
Aroclor-1268 [1]	ND	2.5	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 9:56	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 9:56
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 9:56
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 9:56
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 9:56

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-6 (4-6)
Sampled: 3/21/2014 07:55

Sample ID: 14C0663-12

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	75.5		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-7 (1-3) | Sampled: 3/21/2014 08:00

Sample ID: 14C0663-13

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	3/21/14	3/25/14 10:09	KAL
Aroclor-1221 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:09	KAL
Aroclor-1232 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:09	KAL
Aroclor-1242 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:09	KAL
Aroclor-1248 [2]	8.2	1.1	mg/Kg dry	50	O-04	SW-846 8082A	3/21/14	3/25/14 10:09	KAL
Aroclor-1254 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:09	KAL
Aroclor-1260 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:09	KAL
Aroclor-1262 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:09	KAL
Aroclor-1268 [1]	ND	1.1	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:09	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 10:09
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 10:09
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 10:09
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 10:09

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-7 (1-3)
Sampled: 3/21/2014 08:00

Sample ID: 14C0663-13

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	85.9		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-7 (4-6) | Sampled: 3/21/2014 08:05

Sample ID: 14C0663-14

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	13	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 10:22	KAL
Aroclor-1221 [1]	ND	13	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 10:22	KAL
Aroclor-1232 [1]	ND	13	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 10:22	KAL
Aroclor-1242 [1]	ND	13	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 10:22	KAL
Aroclor-1248 [2]	92	13	mg/Kg dry	500	O-04	SW-846 8082A	3/21/14	3/25/14 10:22	KAL
Aroclor-1254 [1]	ND	13	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 10:22	KAL
Aroclor-1260 [1]	ND	13	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 10:22	KAL
Aroclor-1262 [1]	ND	13	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 10:22	KAL
Aroclor-1268 [1]	ND	13	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 10:22	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 10:22
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 10:22
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 10:22
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 10:22

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-7 (4-6)
Sampled: 3/21/2014 08:05

Sample ID: 14C0663-14

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	74.2		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-8 (1-3) | Sampled: 3/21/2014 08:10

Sample ID: 14C0663-15

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	1.3	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:35	KAL
Aroclor-1221 [1]	ND	1.3	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:35	KAL
Aroclor-1232 [1]	ND	1.3	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:35	KAL
Aroclor-1242 [1]	ND	1.3	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:35	KAL
Aroclor-1248 [2]	11	1.3	mg/Kg dry	50	O-04	SW-846 8082A	3/21/14	3/25/14 10:35	KAL
Aroclor-1254 [1]	ND	1.3	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:35	KAL
Aroclor-1260 [1]	ND	1.3	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:35	KAL
Aroclor-1262 [1]	ND	1.3	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:35	KAL
Aroclor-1268 [1]	ND	1.3	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:35	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 10:35
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 10:35
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 10:35
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 10:35

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-8 (1-3)
Sampled: 3/21/2014 08:10

Sample ID: 14C0663-15

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	77.5		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-8 (4-6) | Sampled: 3/21/2014 08:15

Sample ID: 14C0663-16

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	1.4	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:48	KAL
Aroclor-1221 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:48	KAL
Aroclor-1232 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:48	KAL
Aroclor-1242 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:48	KAL
Aroclor-1248 [2]	10	1.4	mg/Kg dry	50	O-04	SW-846 8082A	3/21/14	3/25/14 10:48	KAL
Aroclor-1254 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:48	KAL
Aroclor-1260 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:48	KAL
Aroclor-1262 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:48	KAL
Aroclor-1268 [1]	ND	1.4	mg/Kg dry	50		SW-846 8082A	3/21/14	3/25/14 10:48	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 10:48
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 10:48
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 10:48
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 10:48

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-8 (4-6)
Sampled: 3/21/2014 08:15

Sample ID: 14C0663-16

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	72.1		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-9 (1-3)
Sampled: 3/21/2014 08:20

Sample ID: 14C0663-17

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	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:41	KAL
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:41	KAL
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:41	KAL
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:41	KAL
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:41	KAL
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:41	KAL
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:41	KAL
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:41	KAL
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:41	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	82.9	30-150		3/25/14 2:41
Decachlorobiphenyl [2]	86.3	30-150		3/25/14 2:41
Tetrachloro-m-xylene [1]	96.5	30-150		3/25/14 2:41
Tetrachloro-m-xylene [2]	91.7	30-150		3/25/14 2:41

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-9 (1-3)
Sampled: 3/21/2014 08:20

Sample ID: 14C0663-17

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	82.5		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-9 (4-6)
Sampled: 3/21/2014 08:25

Sample ID: 14C0663-18

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	3/21/14	3/25/14 2:59	KAL
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:59	KAL
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:59	KAL
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:59	KAL
Aroclor-1248 [2]	0.17	0.11	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/25/14 2:59	KAL
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:59	KAL
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:59	KAL
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:59	KAL
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 2:59	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	88.6	30-150		3/25/14 2:59
Decachlorobiphenyl [2]	88.1	30-150		3/25/14 2:59
Tetrachloro-m-xylene [1]	100	30-150		3/25/14 2:59
Tetrachloro-m-xylene [2]	93.5	30-150		3/25/14 2:59

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-9 (4-6)
Sampled: 3/21/2014 08:25

Sample ID: 14C0663-18

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	87.3		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-10 (1-3) | Sampled: 3/21/2014 08:30

Sample ID: 14C0663-19

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	3/21/14	3/25/14 3:17	KAL
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 3:17	KAL
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 3:17	KAL
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 3:17	KAL
Aroclor-1248 [2]	0.14	0.12	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/25/14 3:17	KAL
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 3:17	KAL
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 3:17	KAL
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 3:17	KAL
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 3:17	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	94.0	30-150		3/25/14 3:17
Decachlorobiphenyl [2]	93.3	30-150		3/25/14 3:17
Tetrachloro-m-xylene [1]	104	30-150		3/25/14 3:17
Tetrachloro-m-xylene [2]	99.4	30-150		3/25/14 3:17

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-10 (1-3)
Sampled: 3/21/2014 08:30

Sample ID: 14C0663-19

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	79.0		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-10 (4-6)
Sampled: 3/21/2014 08:35

Sample ID: 14C0663-20

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	0.57	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:00	KAL
Aroclor-1221 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:00	KAL
Aroclor-1232 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:00	KAL
Aroclor-1242 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:00	KAL
Aroclor-1248 [2]	2.6	0.57	mg/Kg dry	20	O-04	SW-846 8082A	3/21/14	3/25/14 11:00	KAL
Aroclor-1254 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:00	KAL
Aroclor-1260 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:00	KAL
Aroclor-1262 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:00	KAL
Aroclor-1268 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:00	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	102	30-150		3/25/14 11:00
Decachlorobiphenyl [2]	102	30-150		3/25/14 11:00
Tetrachloro-m-xylene [1]	109	30-150		3/25/14 11:00
Tetrachloro-m-xylene [2]	102	30-150		3/25/14 11:00

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-10 (4-6)
Sampled: 3/21/2014 08:35

Sample ID: 14C0663-20

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	68.8		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-11 (1-3)
Sampled: 3/21/2014 08:40

Sample ID: 14C0663-21

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	85.6		% Wt	1		SM 2540G	3/25/14	3/25/14 10:39	MXG

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-11 (4-6)
Sampled: 3/21/2014 08:45

Sample ID: 14C0663-22

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	87.7		% Wt	1		SM 2540G	3/25/14	3/25/14 10:39	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-12 (1-3) | Sampled: 3/21/2014 08:50

Sample ID: 14C0663-23

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	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 8:34	PJG
Aroclor-1221 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 8:34	PJG
Aroclor-1232 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 8:34	PJG
Aroclor-1242 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 8:34	PJG
Aroclor-1248 [1]	3.4	0.59	mg/Kg dry	25	O-04	SW-846 8082A	3/21/14	3/25/14 8:34	PJG
Aroclor-1254 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 8:34	PJG
Aroclor-1260 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 8:34	PJG
Aroclor-1262 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 8:34	PJG
Aroclor-1268 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 8:34	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	92.7	30-150		3/25/14 8:34
Decachlorobiphenyl [2]	118	30-150		3/25/14 8:34
Tetrachloro-m-xylene [1]	95.2	30-150		3/25/14 8:34
Tetrachloro-m-xylene [2]	99.0	30-150		3/25/14 8:34

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-12 (1-3)
Sampled: 3/21/2014 08:50

Sample ID: 14C0663-23

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	82.0		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-12 (4-6) | Sampled: 3/21/2014 08:55

Sample ID: 14C0663-24

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	0.15	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 17:56	PJG
Aroclor-1221 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 17:56	PJG
Aroclor-1232 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 17:56	PJG
Aroclor-1242 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 17:56	PJG
Aroclor-1248 [1]	0.43	0.15	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/24/14 17:56	PJG
Aroclor-1254 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 17:56	PJG
Aroclor-1260 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 17:56	PJG
Aroclor-1262 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 17:56	PJG
Aroclor-1268 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 17:56	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	86.1	30-150		3/24/14 17:56
Decachlorobiphenyl [2]	107	30-150		3/24/14 17:56
Tetrachloro-m-xylene [1]	90.1	30-150		3/24/14 17:56
Tetrachloro-m-xylene [2]	88.4	30-150		3/24/14 17:56

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-12 (4-6)
Sampled: 3/21/2014 08:55

Sample ID: 14C0663-24

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	61.9		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-13 (1-3)
Sampled: 3/21/2014 09:00

Sample ID: 14C0663-25

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	92.8		% Wt	1		SM 2540G	3/25/14	3/25/14 10:39	MXG

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-13 (4-6)
Sampled: 3/21/2014 09:10

Sample ID: 14C0663-26

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	71.6		% Wt	1		SM 2540G	3/25/14	3/25/14 10:39	MXG

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-14 (1-3) | Sampled: 3/21/2014 09:15

Sample ID: 14C0663-27

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	3/21/14	3/24/14 18:14	PJG
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:14	PJG
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:14	PJG
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:14	PJG
Aroclor-1248 [1]	0.90	0.12	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/24/14 18:14	PJG
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:14	PJG
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:14	PJG
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:14	PJG
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:14	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	88.0	30-150		3/24/14 18:14
Decachlorobiphenyl [2]	97.5	30-150		3/24/14 18:14
Tetrachloro-m-xylene [1]	91.5	30-150		3/24/14 18:14
Tetrachloro-m-xylene [2]	93.9	30-150		3/24/14 18:14

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-14 (1-3)
Sampled: 3/21/2014 09:15

Sample ID: 14C0663-27

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	80.2		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-14 (4-6) | Sampled: 3/21/2014 09:20

Sample ID: 14C0663-28

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	0.14	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 11:03	PJG
Aroclor-1221 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 11:03	PJG
Aroclor-1232 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 11:03	PJG
Aroclor-1242 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 11:03	PJG
Aroclor-1248 [1]	1.0	0.14	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/25/14 11:03	PJG
Aroclor-1254 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 11:03	PJG
Aroclor-1260 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 11:03	PJG
Aroclor-1262 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 11:03	PJG
Aroclor-1268 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 11:03	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	88.0	30-150		3/25/14 11:03
Decachlorobiphenyl [2]	96.2	30-150		3/25/14 11:03
Tetrachloro-m-xylene [1]	90.3	30-150		3/25/14 11:03
Tetrachloro-m-xylene [2]	91.0	30-150		3/25/14 11:03

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TB-14 (4-6)
Sampled: 3/21/2014 09:20

Sample ID: 14C0663-28

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	70.2		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-6A (0-1) | Sampled: 3/21/2014 11:31

Sample ID: 14C0663-29

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	11	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 8:46	PJG
Aroclor-1221 [1]	ND	11	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 8:46	PJG
Aroclor-1232 [1]	ND	11	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 8:46	PJG
Aroclor-1242 [1]	ND	11	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 8:46	PJG
Aroclor-1248 [1]	64	11	mg/Kg dry	500	O-04	SW-846 8082A	3/21/14	3/25/14 8:46	PJG
Aroclor-1254 [1]	ND	11	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 8:46	PJG
Aroclor-1260 [1]	ND	11	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 8:46	PJG
Aroclor-1262 [1]	ND	11	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 8:46	PJG
Aroclor-1268 [1]	ND	11	mg/Kg dry	500		SW-846 8082A	3/21/14	3/25/14 8:46	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 8:46
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 8:46
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 8:46
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 8:46

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-6A (0-1)
Sampled: 3/21/2014 11:31

Sample ID: 14C0663-29

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	88.8		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-6A (1-2) | Sampled: 3/21/2014 11:33

Sample ID: 14C0663-30

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	3/21/14	3/25/14 8:59	PJG
Aroclor-1221 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 8:59	PJG
Aroclor-1232 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 8:59	PJG
Aroclor-1242 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 8:59	PJG
Aroclor-1248 [1]	8.0	2.1	mg/Kg dry	100	O-04	SW-846 8082A	3/21/14	3/25/14 8:59	PJG
Aroclor-1254 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 8:59	PJG
Aroclor-1260 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 8:59	PJG
Aroclor-1262 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 8:59	PJG
Aroclor-1268 [1]	ND	2.1	mg/Kg dry	100		SW-846 8082A	3/21/14	3/25/14 8:59	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 8:59
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 8:59
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 8:59
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 8:59

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-6A (1-2)
Sampled: 3/21/2014 11:33

Sample ID: 14C0663-30

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	90.9		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-6A (2-3) | Sampled: 3/21/2014 11:35

Sample ID: 14C0663-31

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	3/21/14	3/25/14 9:11	PJG
Aroclor-1221 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:11	PJG
Aroclor-1232 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:11	PJG
Aroclor-1242 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:11	PJG
Aroclor-1248 [1]	26	5.4	mg/Kg dry	250	O-04	SW-846 8082A	3/21/14	3/25/14 9:11	PJG
Aroclor-1254 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:11	PJG
Aroclor-1260 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:11	PJG
Aroclor-1262 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:11	PJG
Aroclor-1268 [1]	ND	5.4	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:11	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 9:11
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 9:11
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 9:11
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 9:11

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-6A (2-3)
Sampled: 3/21/2014 11:35

Sample ID: 14C0663-31

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	90.7		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-6A (3-4) | Sampled: 3/21/2014 11:37

Sample ID: 14C0663-32

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	6.1	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:24	PJG
Aroclor-1221 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:24	PJG
Aroclor-1232 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:24	PJG
Aroclor-1242 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:24	PJG
Aroclor-1248 [1]	32	6.1	mg/Kg dry	250	O-04	SW-846 8082A	3/21/14	3/25/14 9:24	PJG
Aroclor-1254 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:24	PJG
Aroclor-1260 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:24	PJG
Aroclor-1262 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:24	PJG
Aroclor-1268 [1]	ND	6.1	mg/Kg dry	250		SW-846 8082A	3/21/14	3/25/14 9:24	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/25/14 9:24
Decachlorobiphenyl [2]	*	30-150	S-01	3/25/14 9:24
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/25/14 9:24
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/25/14 9:24

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-6A (3-4)
Sampled: 3/21/2014 11:37

Sample ID: 14C0663-32

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	80.1		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-6A (4-5) | Sampled: 3/21/2014 11:39

Sample ID: 14C0663-33

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	0.49	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:16	PJG
Aroclor-1221 [1]	ND	0.49	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:16	PJG
Aroclor-1232 [1]	ND	0.49	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:16	PJG
Aroclor-1242 [1]	ND	0.49	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:16	PJG
Aroclor-1248 [1]	1.8	0.49	mg/Kg dry	20	O-04	SW-846 8082A	3/21/14	3/25/14 11:16	PJG
Aroclor-1254 [1]	ND	0.49	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:16	PJG
Aroclor-1260 [1]	ND	0.49	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:16	PJG
Aroclor-1262 [1]	ND	0.49	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:16	PJG
Aroclor-1268 [1]	ND	0.49	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:16	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	85.7	30-150		3/25/14 11:16
Decachlorobiphenyl [2]	129	30-150		3/25/14 11:16
Tetrachloro-m-xylene [1]	88.9	30-150		3/25/14 11:16
Tetrachloro-m-xylene [2]	90.2	30-150		3/25/14 11:16

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-6A (4-5)
Sampled: 3/21/2014 11:39

Sample ID: 14C0663-33

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	80.3		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-6A (5-6) | Sampled: 3/21/2014 11:41

Sample ID: 14C0663-34

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	0.59	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:28	PJG
Aroclor-1221 [1]	ND	0.59	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:28	PJG
Aroclor-1232 [1]	ND	0.59	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:28	PJG
Aroclor-1242 [1]	ND	0.59	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:28	PJG
Aroclor-1248 [1]	4.2	0.59	mg/Kg dry	20	O-04	SW-846 8082A	3/21/14	3/25/14 11:28	PJG
Aroclor-1254 [1]	ND	0.59	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:28	PJG
Aroclor-1260 [1]	ND	0.59	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:28	PJG
Aroclor-1262 [1]	ND	0.59	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:28	PJG
Aroclor-1268 [1]	ND	0.59	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:28	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	88.7	30-150		3/25/14 11:28
Decachlorobiphenyl [2]	97.6	30-150		3/25/14 11:28
Tetrachloro-m-xylene [1]	83.6	30-150		3/25/14 11:28
Tetrachloro-m-xylene [2]	85.6	30-150		3/25/14 11:28

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-6A (5-6)
Sampled: 3/21/2014 11:41

Sample ID: 14C0663-34

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	62.9		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-11A (0-1) | Sampled: 3/21/2014 12:01

Sample ID: 14C0663-35

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	0.48	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 9:36	PJG
Aroclor-1221 [1]	ND	0.48	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 9:36	PJG
Aroclor-1232 [1]	ND	0.48	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 9:36	PJG
Aroclor-1242 [1]	ND	0.48	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 9:36	PJG
Aroclor-1248 [1]	2.9	0.48	mg/Kg dry	20	O-04	SW-846 8082A	3/21/14	3/25/14 9:36	PJG
Aroclor-1254 [1]	ND	0.48	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 9:36	PJG
Aroclor-1260 [1]	ND	0.48	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 9:36	PJG
Aroclor-1262 [1]	ND	0.48	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 9:36	PJG
Aroclor-1268 [1]	ND	0.48	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 9:36	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	90.5	30-150		3/25/14 9:36
Decachlorobiphenyl [2]	112	30-150		3/25/14 9:36
Tetrachloro-m-xylene [1]	90.7	30-150		3/25/14 9:36
Tetrachloro-m-xylene [2]	93.4	30-150		3/25/14 9:36

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-11A (0-1)
Sampled: 3/21/2014 12:01

Sample ID: 14C0663-35

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	81.1		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-11A (1-2)
Sampled: 3/21/2014 12:03

Sample ID: 14C0663-36

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	0.13	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:21	PJG
Aroclor-1221 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:21	PJG
Aroclor-1232 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:21	PJG
Aroclor-1242 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:21	PJG
Aroclor-1248 [1]	1.0	0.13	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/24/14 21:21	PJG
Aroclor-1254 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:21	PJG
Aroclor-1260 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:21	PJG
Aroclor-1262 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:21	PJG
Aroclor-1268 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 21:21	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	96.0	30-150		3/24/14 21:21
Decachlorobiphenyl [2]	101	30-150		3/24/14 21:21
Tetrachloro-m-xylene [1]	90.2	30-150		3/24/14 21:21
Tetrachloro-m-xylene [2]	90.3	30-150		3/24/14 21:21

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-11A (1-2)
Sampled: 3/21/2014 12:03

Sample ID: 14C0663-36

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	76.6		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-11A (2-3) | Sampled: 3/21/2014 12:05

Sample ID: 14C0663-37

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	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 9:49	PJG
Aroclor-1221 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 9:49	PJG
Aroclor-1232 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 9:49	PJG
Aroclor-1242 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 9:49	PJG
Aroclor-1248 [1]	3.5	0.59	mg/Kg dry	25	O-04	SW-846 8082A	3/21/14	3/25/14 9:49	PJG
Aroclor-1254 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 9:49	PJG
Aroclor-1260 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 9:49	PJG
Aroclor-1262 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 9:49	PJG
Aroclor-1268 [1]	ND	0.59	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 9:49	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	100	30-150		3/25/14 9:49
Decachlorobiphenyl [2]	122	30-150		3/25/14 9:49
Tetrachloro-m-xylene [1]	97.3	30-150		3/25/14 9:49
Tetrachloro-m-xylene [2]	102	30-150		3/25/14 9:49

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-11A (2-3)
Sampled: 3/21/2014 12:05

Sample ID: 14C0663-37

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	79.7		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-11A (3-4)
Sampled: 3/21/2014 12:07

Sample ID: 14C0663-38

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	3/21/14	3/25/14 11:40	PJG
Aroclor-1221 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:40	PJG
Aroclor-1232 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:40	PJG
Aroclor-1242 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:40	PJG
Aroclor-1248 [1]	2.6	0.52	mg/Kg dry	20	O-04	SW-846 8082A	3/21/14	3/25/14 11:40	PJG
Aroclor-1254 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:40	PJG
Aroclor-1260 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:40	PJG
Aroclor-1262 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:40	PJG
Aroclor-1268 [1]	ND	0.52	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:40	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	106	30-150		3/25/14 11:40
Decachlorobiphenyl [2]	114	30-150		3/25/14 11:40
Tetrachloro-m-xylene [1]	96.7	30-150		3/25/14 11:40
Tetrachloro-m-xylene [2]	101	30-150		3/25/14 11:40

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-11A (3-4)
Sampled: 3/21/2014 12:07

Sample ID: 14C0663-38

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	74.8		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-11A (4-5)
Sampled: 3/21/2014 12:09

Sample ID: 14C0663-39

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	20		SW-846 8082A	3/21/14	3/25/14 11:53	PJG
Aroclor-1221 [1]	ND	0.55	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:53	PJG
Aroclor-1232 [1]	ND	0.55	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:53	PJG
Aroclor-1242 [1]	ND	0.55	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:53	PJG
Aroclor-1248 [1]	2.2	0.55	mg/Kg dry	20	O-04	SW-846 8082A	3/21/14	3/25/14 11:53	PJG
Aroclor-1254 [1]	ND	0.55	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:53	PJG
Aroclor-1260 [1]	ND	0.55	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:53	PJG
Aroclor-1262 [1]	ND	0.55	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:53	PJG
Aroclor-1268 [1]	ND	0.55	mg/Kg dry	20		SW-846 8082A	3/21/14	3/25/14 11:53	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	101	30-150		3/25/14 11:53
Decachlorobiphenyl [2]	109	30-150		3/25/14 11:53
Tetrachloro-m-xylene [1]	87.8	30-150		3/25/14 11:53
Tetrachloro-m-xylene [2]	93.8	30-150		3/25/14 11:53

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-11A (4-5)
Sampled: 3/21/2014 12:09

Sample ID: 14C0663-39

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	71.4		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-11A (5-6) | Sampled: 3/21/2014 12:11

Sample ID: 14C0663-40

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	0.19	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:05	PJG
Aroclor-1221 [1]	ND	0.19	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:05	PJG
Aroclor-1232 [1]	ND	0.19	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:05	PJG
Aroclor-1242 [1]	ND	0.19	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:05	PJG
Aroclor-1248 [1]	0.22	0.19	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/25/14 12:05	PJG
Aroclor-1254 [1]	ND	0.19	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:05	PJG
Aroclor-1260 [1]	ND	0.19	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:05	PJG
Aroclor-1262 [1]	ND	0.19	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:05	PJG
Aroclor-1268 [1]	ND	0.19	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:05	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	87.7	30-150		3/25/14 12:05
Decachlorobiphenyl [2]	89.9	30-150		3/25/14 12:05
Tetrachloro-m-xylene [1]	74.0	30-150		3/25/14 12:05
Tetrachloro-m-xylene [2]	75.1	30-150		3/25/14 12:05

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-11A (5-6)
Sampled: 3/21/2014 12:11

Sample ID: 14C0663-40

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	53.5		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-5A (0-1)
Sampled: 3/21/2014 11:01

Sample ID: 14C0663-41

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	3/21/14	3/25/14 12:44	KAL
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:44	KAL
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:44	KAL
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:44	KAL
Aroclor-1248 [2]	0.51	0.11	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/25/14 12:44	KAL
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:44	KAL
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:44	KAL
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:44	KAL
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/25/14 12:44	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	72.2	30-150		3/25/14 12:44
Decachlorobiphenyl [2]	73.5	30-150		3/25/14 12:44
Tetrachloro-m-xylene [1]	77.1	30-150		3/25/14 12:44
Tetrachloro-m-xylene [2]	71.5	30-150		3/25/14 12:44

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-5A (0-1)
Sampled: 3/21/2014 11:01

Sample ID: 14C0663-41

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	89.2		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-5A (1-2) | Sampled: 3/21/2014 11:03

Sample ID: 14C0663-42

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	0.56	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:13	KAL
Aroclor-1221 [1]	ND	0.56	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:13	KAL
Aroclor-1232 [1]	ND	0.56	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:13	KAL
Aroclor-1242 [1]	ND	0.56	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:13	KAL
Aroclor-1248 [2]	3.8	0.56	mg/Kg dry	25	O-04	SW-846 8082A	3/21/14	3/25/14 11:13	KAL
Aroclor-1254 [1]	ND	0.56	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:13	KAL
Aroclor-1260 [1]	ND	0.56	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:13	KAL
Aroclor-1262 [1]	ND	0.56	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:13	KAL
Aroclor-1268 [1]	ND	0.56	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:13	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	90.6	30-150		3/25/14 11:13
Decachlorobiphenyl [2]	90.5	30-150		3/25/14 11:13
Tetrachloro-m-xylene [1]	91.3	30-150		3/25/14 11:13
Tetrachloro-m-xylene [2]	84.8	30-150		3/25/14 11:13

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-5A (1-2)
Sampled: 3/21/2014 11:03

Sample ID: 14C0663-42

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	87.0		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-5A (2-3) | Sampled: 3/21/2014 11:05

Sample ID: 14C0663-43

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	3/21/14	3/25/14 11:26	KAL
Aroclor-1221 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:26	KAL
Aroclor-1232 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:26	KAL
Aroclor-1242 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:26	KAL
Aroclor-1248 [2]	4.4	0.55	mg/Kg dry	25	O-04	SW-846 8082A	3/21/14	3/25/14 11:26	KAL
Aroclor-1254 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:26	KAL
Aroclor-1260 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:26	KAL
Aroclor-1262 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:26	KAL
Aroclor-1268 [1]	ND	0.55	mg/Kg dry	25		SW-846 8082A	3/21/14	3/25/14 11:26	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	99.4	30-150		3/25/14 11:26
Decachlorobiphenyl [2]	99.8	30-150		3/25/14 11:26
Tetrachloro-m-xylene [1]	101	30-150		3/25/14 11:26
Tetrachloro-m-xylene [2]	95.5	30-150		3/25/14 11:26

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-5A (2-3)
Sampled: 3/21/2014 11:05

Sample ID: 14C0663-43

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	89.5		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-5A (3-4) | Sampled: 3/21/2014 11:07

Sample ID: 14C0663-44

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	3/21/14	3/24/14 18:49	KAL
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:49	KAL
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:49	KAL
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:49	KAL
Aroclor-1248 [2]	0.49	0.11	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/24/14 18:49	KAL
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:49	KAL
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:49	KAL
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:49	KAL
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 18:49	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	77.5	30-150		3/24/14 18:49
Decachlorobiphenyl [2]	78.7	30-150		3/24/14 18:49
Tetrachloro-m-xylene [1]	78.2	30-150		3/24/14 18:49
Tetrachloro-m-xylene [2]	73.9	30-150		3/24/14 18:49

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-5A (3-4)
Sampled: 3/21/2014 11:07

Sample ID: 14C0663-44

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	93.5		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-5A (4-5)
Sampled: 3/21/2014 11:09

Sample ID: 14C0663-45

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	3/21/14	3/24/14 19:07	KAL
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:07	KAL
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:07	KAL
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:07	KAL
Aroclor-1248 [2]	0.38	0.11	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/24/14 19:07	KAL
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:07	KAL
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:07	KAL
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:07	KAL
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:07	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	81.8	30-150		3/24/14 19:07
Decachlorobiphenyl [2]	84.1	30-150		3/24/14 19:07
Tetrachloro-m-xylene [1]	89.5	30-150		3/24/14 19:07
Tetrachloro-m-xylene [2]	83.1	30-150		3/24/14 19:07

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-5A (4-5)
Sampled: 3/21/2014 11:09

Sample ID: 14C0663-45

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	87.4		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St. Newton MA | Sample Description: | Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-5A (5-6) | Sampled: 3/21/2014 11:11

Sample ID: 14C0663-46

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	3/21/14	3/24/14 19:26	KAL
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:26	KAL
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:26	KAL
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:26	KAL
Aroclor-1248 [2]	0.69	0.11	mg/Kg dry	5	O-04	SW-846 8082A	3/21/14	3/24/14 19:26	KAL
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:26	KAL
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:26	KAL
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:26	KAL
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	3/21/14	3/24/14 19:26	KAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	84.4	30-150		3/24/14 19:26
Decachlorobiphenyl [2]	87.5	30-150		3/24/14 19:26
Tetrachloro-m-xylene [1]	91.8	30-150		3/24/14 19:26
Tetrachloro-m-xylene [2]	85.8	30-150		3/24/14 19:26

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

Project Location: 71 Needham St. Newton MA
Sample Description:
Work Order: 14C0663

Date Received: 3/21/2014

Field Sample #: TP-5A (5-6)
Sampled: 3/21/2014 11:11

Sample ID: 14C0663-46

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	87.1		% Wt	1		SM 2540G	3/24/14	3/25/14 8:13	WAL

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
14C0663-01 [TB-1 (1-3)]	B092459	03/24/14
14C0663-02 [TB-1 (4-6)]	B092459	03/24/14
14C0663-03 [TB-2 (1-3)]	B092459	03/24/14
14C0663-04 [TB-2 (4-6)]	B092459	03/24/14
14C0663-05 [TB-3 (1-3)]	B092459	03/24/14
14C0663-06 [TB-3 (4-6)]	B092459	03/24/14
14C0663-07 [TB-4 (1-3)]	B092459	03/24/14
14C0663-08 [TB-4 (4-6)]	B092459	03/24/14
14C0663-09 [TB-5 (1-3)]	B092459	03/24/14
14C0663-10 [TB-5 (4-6)]	B092459	03/24/14
14C0663-11 [TB-6 (1-3)]	B092459	03/24/14
14C0663-12 [TB-6 (4-6)]	B092459	03/24/14
14C0663-13 [TB-7 (1-3)]	B092459	03/24/14
14C0663-14 [TB-7 (4-6)]	B092459	03/24/14
14C0663-15 [TB-8 (1-3)]	B092459	03/24/14
14C0663-16 [TB-8 (4-6)]	B092459	03/24/14
14C0663-17 [TB-9 (1-3)]	B092459	03/24/14
14C0663-18 [TB-9 (4-6)]	B092459	03/24/14
14C0663-19 [TB-10 (1-3)]	B092459	03/24/14
14C0663-20 [TB-10 (4-6)]	B092459	03/24/14
14C0663-23 [TB-12 (1-3)]	B092459	03/24/14
14C0663-24 [TB-12 (4-6)]	B092459	03/24/14
14C0663-27 [TB-14 (1-3)]	B092459	03/24/14
14C0663-28 [TB-14 (4-6)]	B092459	03/24/14
14C0663-29 [TP-6A (0-1)]	B092459	03/24/14
14C0663-30 [TP-6A (1-2)]	B092459	03/24/14
14C0663-31 [TP-6A (2-3)]	B092459	03/24/14
14C0663-32 [TP-6A (3-4)]	B092459	03/24/14
14C0663-33 [TP-6A (4-5)]	B092459	03/24/14
14C0663-34 [TP-6A (5-6)]	B092459	03/24/14
14C0663-35 [TP-11A (0-1)]	B092459	03/24/14
14C0663-36 [TP-11A (1-2)]	B092459	03/24/14
14C0663-37 [TP-11A (2-3)]	B092459	03/24/14
14C0663-38 [TP-11A (3-4)]	B092459	03/24/14
14C0663-39 [TP-11A (4-5)]	B092459	03/24/14
14C0663-40 [TP-11A (5-6)]	B092459	03/24/14
14C0663-41 [TP-5A (0-1)]	B092459	03/24/14
14C0663-42 [TP-5A (1-2)]	B092459	03/24/14
14C0663-43 [TP-5A (2-3)]	B092459	03/24/14
14C0663-44 [TP-5A (3-4)]	B092459	03/24/14
14C0663-45 [TP-5A (4-5)]	B092459	03/24/14
14C0663-46 [TP-5A (5-6)]	B092459	03/24/14

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14C0663-21 [TB-11 (1-3)]	B092497	03/25/14
14C0663-22 [TB-11 (4-6)]	B092497	03/25/14
14C0663-25 [TB-13 (1-3)]	B092497	03/25/14
14C0663-26 [TB-13 (4-6)]	B092497	03/25/14

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 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14C0663-01 [TB-1 (1-3)]	B092357	10.8	10.0	03/21/14
14C0663-02 [TB-1 (4-6)]	B092357	10.1	10.0	03/21/14
14C0663-03 [TB-2 (1-3)]	B092357	10.3	10.0	03/21/14
14C0663-04 [TB-2 (4-6)]	B092357	10.1	10.0	03/21/14
14C0663-05 [TB-3 (1-3)]	B092357	10.2	10.0	03/21/14
14C0663-06 [TB-3 (4-6)]	B092357	10.2	10.0	03/21/14
14C0663-07 [TB-4 (1-3)]	B092357	10.3	10.0	03/21/14
14C0663-08 [TB-4 (4-6)]	B092357	10.2	10.0	03/21/14
14C0663-09 [TB-5 (1-3)]	B092357	10.5	10.0	03/21/14
14C0663-10 [TB-5 (4-6)]	B092357	10.4	10.0	03/21/14
14C0663-11 [TB-6 (1-3)]	B092357	10.3	10.0	03/21/14
14C0663-12 [TB-6 (4-6)]	B092357	10.5	10.0	03/21/14
14C0663-13 [TB-7 (1-3)]	B092357	10.3	10.0	03/21/14
14C0663-14 [TB-7 (4-6)]	B092357	10.4	10.0	03/21/14
14C0663-15 [TB-8 (1-3)]	B092357	10.1	10.0	03/21/14
14C0663-16 [TB-8 (4-6)]	B092357	10.2	10.0	03/21/14
14C0663-17 [TB-9 (1-3)]	B092357	10.2	10.0	03/21/14
14C0663-18 [TB-9 (4-6)]	B092357	10.4	10.0	03/21/14
14C0663-19 [TB-10 (1-3)]	B092357	10.2	10.0	03/21/14
14C0663-20 [TB-10 (4-6)]	B092357	10.2	10.0	03/21/14

Prep Method: SW-846 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14C0663-23 [TB-12 (1-3)]	B092358	10.4	10.0	03/21/14
14C0663-24 [TB-12 (4-6)]	B092358	10.7	10.0	03/21/14
14C0663-27 [TB-14 (1-3)]	B092358	10.4	10.0	03/21/14
14C0663-28 [TB-14 (4-6)]	B092358	10.1	10.0	03/21/14
14C0663-29 [TP-6A (0-1)]	B092358	10.2	10.0	03/21/14
14C0663-30 [TP-6A (1-2)]	B092358	10.5	10.0	03/21/14
14C0663-31 [TP-6A (2-3)]	B092358	10.3	10.0	03/21/14
14C0663-32 [TP-6A (3-4)]	B092358	10.3	10.0	03/21/14
14C0663-33 [TP-6A (4-5)]	B092358	10.2	10.0	03/21/14
14C0663-34 [TP-6A (5-6)]	B092358	10.7	10.0	03/21/14
14C0663-35 [TP-11A (0-1)]	B092358	10.3	10.0	03/21/14
14C0663-36 [TP-11A (1-2)]	B092358	10.2	10.0	03/21/14
14C0663-37 [TP-11A (2-3)]	B092358	10.7	10.0	03/21/14
14C0663-38 [TP-11A (3-4)]	B092358	10.3	10.0	03/21/14
14C0663-39 [TP-11A (4-5)]	B092358	10.1	10.0	03/21/14
14C0663-40 [TP-11A (5-6)]	B092358	10.1	10.0	03/21/14

Prep Method: SW-846 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14C0663-41 [TP-5A (0-1)]	B092360	10.1	10.0	03/21/14
14C0663-42 [TP-5A (1-2)]	B092360	10.3	10.0	03/21/14
14C0663-43 [TP-5A (2-3)]	B092360	10.1	10.0	03/21/14
14C0663-44 [TP-5A (3-4)]	B092360	10.1	10.0	03/21/14
14C0663-45 [TP-5A (4-5)]	B092360	10.3	10.0	03/21/14
14C0663-46 [TP-5A (5-6)]	B092360	10.1	10.0	03/21/14

con-test® ANALYTICAL LABORATORY

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

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 B092357 - SW-846 3540C										
Blank (B092357-BLK1)				Prepared: 03/21/14 Analyzed: 03/24/14						
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	*0.177*		mg/Kg wet	0.200		88.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.189*		mg/Kg wet	0.200		94.4	30-150			
Surrogate: Tetrachloro-m-xylene	*0.171*		mg/Kg wet	0.200		85.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.172*		mg/Kg wet	0.200		86.0	30-150			
LCS (B092357-BS1)				Prepared: 03/21/14 Analyzed: 03/24/14						
Aroclor-1016	0.20	0.10	mg/Kg wet	0.200		101	40-140			
Aroclor-1016 [2C]	0.21	0.10	mg/Kg wet	0.200		103	40-140			
Aroclor-1260	0.20	0.10	mg/Kg wet	0.200		99.6	40-140			
Aroclor-1260 [2C]	0.21	0.10	mg/Kg wet	0.200		106	40-140			
Surrogate: Decachlorobiphenyl	*0.181*		mg/Kg wet	0.200		90.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.184*		mg/Kg wet	0.200		92.2	30-150			
Surrogate: Tetrachloro-m-xylene	*0.185*		mg/Kg wet	0.200		92.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.176*		mg/Kg wet	0.200		87.8	30-150			
LCS Dup (B092357-BSD1)				Prepared: 03/21/14 Analyzed: 03/24/14						
Aroclor-1016	0.22	0.10	mg/Kg wet	0.200		112	40-140	10.6	30	
Aroclor-1016 [2C]	0.23	0.10	mg/Kg wet	0.200		115	40-140	10.9	30	
Aroclor-1260	0.22	0.10	mg/Kg wet	0.200		110	40-140	9.53	30	
Aroclor-1260 [2C]	0.23	0.10	mg/Kg wet	0.200		115	40-140	8.56	30	
Surrogate: Decachlorobiphenyl	*0.196*		mg/Kg wet	0.200		97.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.199*		mg/Kg wet	0.200		99.6	30-150			
Surrogate: Tetrachloro-m-xylene	*0.207*		mg/Kg wet	0.200		103	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.197*		mg/Kg wet	0.200		98.6	30-150			

con-test® ANALYTICAL LABORATORY

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

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 B092357 - SW-846 3540C											
Matrix Spike (B092357-MS1)		**Source: 14C0663-20**		Prepared: 03/21/14 Analyzed: 03/25/14							
Aroclor-1016	2.2	0.14	mg/Kg dry	0.288	0.0	**777**	*	40-140			MS-21
Aroclor-1016 [2C]	2.2	0.14	mg/Kg dry	0.288	0.0	**752**	*	40-140			MS-21
Aroclor-1260	0.34	0.14	mg/Kg dry	0.288	0.0	117		40-140			
Aroclor-1260 [2C]	0.37	0.14	mg/Kg dry	0.288	0.0	127		40-140			
Surrogate: Decachlorobiphenyl	*0.260*		mg/Kg dry	0.288		90.3		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.257*		mg/Kg dry	0.288		89.2		30-150			
Surrogate: Tetrachloro-m-xylene	*0.300*		mg/Kg dry	0.288		104		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.283*		mg/Kg dry	0.288		98.3		30-150			
Matrix Spike Dup (B092357-MSD1)		**Source: 14C0663-20**		Prepared: 03/21/14 Analyzed: 03/25/14							
Aroclor-1016	1.9	0.14	mg/Kg dry	0.288	0.0	**673**	*	40-140	14.3	50	MS-21
Aroclor-1016 [2C]	1.8	0.14	mg/Kg dry	0.288	0.0	**635**	*	40-140	16.8	50	MS-21
Aroclor-1260	0.35	0.14	mg/Kg dry	0.288	0.0	123		40-140	4.66	50	
Aroclor-1260 [2C]	0.38	0.14	mg/Kg dry	0.288	0.0	132		40-140	3.21	50	
Surrogate: Decachlorobiphenyl	*0.266*		mg/Kg dry	0.288		92.3		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.268*		mg/Kg dry	0.288		93.0		30-150			
Surrogate: Tetrachloro-m-xylene	*0.309*		mg/Kg dry	0.288		107		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.284*		mg/Kg dry	0.288		98.7		30-150			
Batch B092358 - SW-846 3540C											
Blank (B092358-BLK1)				Prepared: 03/21/14 Analyzed: 03/24/14							
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	*0.206*		mg/Kg wet	0.200		103		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.219*		mg/Kg wet	0.200		110		30-150			
Surrogate: Tetrachloro-m-xylene	*0.170*		mg/Kg wet	0.200		84.8		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.163*		mg/Kg wet	0.200		81.7		30-150			

con-test® ANALYTICAL LABORATORY

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

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 B092358 - SW-846 3540C											
LCS (B092358-BS1)				Prepared: 03/21/14 Analyzed: 03/24/14							
Aroclor-1016	0.17	0.10	mg/Kg wet	0.200		87.3		40-140			
Aroclor-1016 [2C]	0.18	0.10	mg/Kg wet	0.200		89.6		40-140			
Aroclor-1260	0.18	0.10	mg/Kg wet	0.200		91.8		40-140			
Aroclor-1260 [2C]	0.21	0.10	mg/Kg wet	0.200		104		40-140			
Surrogate: Decachlorobiphenyl	*0.194*		mg/Kg wet	0.200		97.0		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.218*		mg/Kg wet	0.200		109		30-150			
Surrogate: Tetrachloro-m-xylene	*0.151*		mg/Kg wet	0.200		75.6		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.153*		mg/Kg wet	0.200		76.6		30-150			
LCS Dup (B092358-BSD1)				Prepared: 03/21/14 Analyzed: 03/24/14							
Aroclor-1016	0.18	0.10	mg/Kg wet	0.200		88.4		40-140	1.20	30	
Aroclor-1016 [2C]	0.18	0.10	mg/Kg wet	0.200		90.6		40-140	1.12	30	
Aroclor-1260	0.18	0.10	mg/Kg wet	0.200		88.1		40-140	4.07	30	
Aroclor-1260 [2C]	0.20	0.10	mg/Kg wet	0.200		102		40-140	2.41	30	
Surrogate: Decachlorobiphenyl	*0.184*		mg/Kg wet	0.200		92.0		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.212*		mg/Kg wet	0.200		106		30-150			
Surrogate: Tetrachloro-m-xylene	*0.161*		mg/Kg wet	0.200		80.4		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.163*		mg/Kg wet	0.200		81.3		30-150			
Matrix Spike (B092358-MS1)		**Source: 14C0663-23**		Prepared: 03/21/14 Analyzed: 03/24/14							
Aroclor-1016	1.9	0.12	mg/Kg dry	0.237	0.0	**784**	*	40-140			MS-21
Aroclor-1016 [2C]	2.1	0.12	mg/Kg dry	0.237	0.0	**892**	*	40-140			MS-21
Aroclor-1260	0.26	0.12	mg/Kg dry	0.237	0.0	112		40-140			
Aroclor-1260 [2C]	0.29	0.12	mg/Kg dry	0.237	0.0	124		40-140			
Surrogate: Decachlorobiphenyl	*0.203*		mg/Kg dry	0.237		85.9		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.241*		mg/Kg dry	0.237		102		30-150			
Surrogate: Tetrachloro-m-xylene	*0.220*		mg/Kg dry	0.237		92.7		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.213*		mg/Kg dry	0.237		90.1		30-150			
Matrix Spike Dup (B092358-MSD1)		**Source: 14C0663-23**		Prepared: 03/21/14 Analyzed: 03/24/14							
Aroclor-1016	2.4	0.12	mg/Kg dry	0.235	0.0	**1010**	*	40-140	24.7	50	MS-21
Aroclor-1016 [2C]	2.6	0.12	mg/Kg dry	0.235	0.0	**1110**	*	40-140	21.3	50	MS-21
Aroclor-1260	0.26	0.12	mg/Kg dry	0.235	0.0	111		40-140	1.84	50	
Aroclor-1260 [2C]	0.28	0.12	mg/Kg dry	0.235	0.0	119		40-140	4.88	50	
Surrogate: Decachlorobiphenyl	*0.207*		mg/Kg dry	0.235		88.4		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.254*		mg/Kg dry	0.235		108		30-150			
Surrogate: Tetrachloro-m-xylene	*0.224*		mg/Kg dry	0.235		95.7		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.217*		mg/Kg dry	0.235		92.6		30-150			
Batch B092360 - SW-846 3540C											
Blank (B092360-BLK1)				Prepared: 03/21/14 Analyzed: 03/24/14							
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								

con-test® ANALYTICAL LABORATORY

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

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 B092360 - SW-846 3540C											
Blank (B092360-BLK1)				Prepared: 03/21/14 Analyzed: 03/24/14							
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	*0.163*		mg/Kg wet	0.200		81.7		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.172*		mg/Kg wet	0.200		86.2		30-150			
Surrogate: Tetrachloro-m-xylene	*0.163*		mg/Kg wet	0.200		81.4		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.169*		mg/Kg wet	0.200		84.3		30-150			
LCS (B092360-BS1)				Prepared: 03/21/14 Analyzed: 03/24/14							
Aroclor-1016	0.19	0.10	mg/Kg wet	0.200		93.5		40-140			
Aroclor-1016 [2C]	0.19	0.10	mg/Kg wet	0.200		96.2		40-140			
Aroclor-1260	0.19	0.10	mg/Kg wet	0.200		94.7		40-140			
Aroclor-1260 [2C]	0.19	0.10	mg/Kg wet	0.200		97.4		40-140			
Surrogate: Decachlorobiphenyl	*0.169*		mg/Kg wet	0.200		84.5		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.169*		mg/Kg wet	0.200		84.7		30-150			
Surrogate: Tetrachloro-m-xylene	*0.176*		mg/Kg wet	0.200		87.9		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.171*		mg/Kg wet	0.200		85.4		30-150			
LCS Dup (B092360-BSD1)				Prepared: 03/21/14 Analyzed: 03/24/14							
Aroclor-1016	0.18	0.10	mg/Kg wet	0.200		87.6		40-140	6.50	30	
Aroclor-1016 [2C]	0.18	0.10	mg/Kg wet	0.200		89.3		40-140	7.37	30	
Aroclor-1260	0.19	0.10	mg/Kg wet	0.200		93.2		40-140	1.57	30	
Aroclor-1260 [2C]	0.19	0.10	mg/Kg wet	0.200		95.6		40-140	1.80	30	
Surrogate: Decachlorobiphenyl	*0.164*		mg/Kg wet	0.200		82.1		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.163*		mg/Kg wet	0.200		81.5		30-150			
Surrogate: Tetrachloro-m-xylene	*0.151*		mg/Kg wet	0.200		75.5		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.144*		mg/Kg wet	0.200		71.9		30-150			
Matrix Spike (B092360-MS1)		**Source: 14C0663-41**		Prepared: 03/21/14 Analyzed: 03/24/14							
Aroclor-1016	0.61	0.11	mg/Kg dry	0.224	0.0	**270**	*	40-140			MS-21
Aroclor-1016 [2C]	0.65	0.11	mg/Kg dry	0.224	0.0	**290**	*	40-140			MS-21
Aroclor-1260	0.20	0.11	mg/Kg dry	0.224	0.0	90.5		40-140			
Aroclor-1260 [2C]	0.26	0.11	mg/Kg dry	0.224	0.0	114		40-140			
Surrogate: Decachlorobiphenyl	*0.185*		mg/Kg dry	0.224		82.4		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.197*		mg/Kg dry	0.224		87.8		30-150			
Surrogate: Tetrachloro-m-xylene	*0.203*		mg/Kg dry	0.224		90.3		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.206*		mg/Kg dry	0.224		92.0		30-150			
Matrix Spike Dup (B092360-MSD1)		**Source: 14C0663-41**		Prepared: 03/21/14 Analyzed: 03/24/14							
Aroclor-1016	0.64	0.11	mg/Kg dry	0.224	0.0	**286**	*	40-140	5.69	50	MS-21
Aroclor-1016 [2C]	0.67	0.11	mg/Kg dry	0.224	0.0	**297**	*	40-140	2.48	50	MS-21
Aroclor-1260	0.19	0.11	mg/Kg dry	0.224	0.0	82.6		40-140	9.12	50	
Aroclor-1260 [2C]	0.23	0.11	mg/Kg dry	0.224	0.0	103		40-140	9.92	50	
Surrogate: Decachlorobiphenyl	*0.168*		mg/Kg dry	0.224		75.1		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.177*		mg/Kg dry	0.224		78.9		30-150			
Surrogate: Tetrachloro-m-xylene	*0.192*		mg/Kg dry	0.224		85.6		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.167*		mg/Kg dry	0.224		74.5		30-150			

con-test® ANALYTICAL LABORATORY

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

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 B092459 - % Solids										
Duplicate (B092459-DUP1)		**Source: 14C0663-43**		Prepared: 03/24/14	Analyzed: 03/25/14					
% Solids	87.8		% Wt		89.5			1.92	20	
Duplicate (B092459-DUP2)		**Source: 14C0663-44**		Prepared: 03/24/14	Analyzed: 03/25/14					
% Solids	93.0		% Wt		93.5			0.536	20	
Duplicate (B092459-DUP3)		**Source: 14C0663-45**		Prepared: 03/24/14	Analyzed: 03/25/14					
% Solids	88.1		% Wt		87.4			0.798	20	
Duplicate (B092459-DUP4)		**Source: 14C0663-46**		Prepared: 03/24/14	Analyzed: 03/25/14					
% Solids	88.5		% Wt		87.1			1.59	20	

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

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-04	Sample fingerprint does not match standard exactly. Sample was quantitated against the closest matching standard.
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.

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	06/30/2014
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2014
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

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

#14C0663

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Company Name: Tighe + Bond
Address: 446 Main St
Worcester MA
Attention: Matt Abraham
Project Location: 71 Needham St, Newton, MA
Sampled By: MAA

Telephone: 617 686 2310
Project # B-0631
Client PO# B-0631

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

Project Proposal Provided? (for billing purposes)
☒ yes 71 Newton St 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)
	TB-1 (1-3)	3/21/14	0700	X		S	U	X
	TB-1 (4-6)		0705					X
	TB-2 (1-3)		0710					X
	TB-2 (4-6)		0715					X
	TB-3 (1-3)		0720					X
	TB-3 (4-6)		0725					X
	TB-4 (1-3)		0730					X
	TB-4 (4-6)		0735					X
	TB-5 (1-3)		0740					X

# of Containers
** Preservation
***Container Co

Dissolved Met
○ 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:
[signature]	3/21/14 1305
Received by: (signature) [signature]	Date/Time: 3/21/14 1305
Relinquished by: (signature) [signature]	Date/Time: 3/21/14 320
Received by: (signature) [signature] 4.6°C	Date/Time: 3.21.14 15:20

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 3 DAY
RUSH† DAY
☐ †24-Hr ☐ †48-Hr
☒ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: Below 1 ppm
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

Page 104 of 111 14C0663_1 Contest_Final 03 26 14 1356

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

#14C0663

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Company Name: Tighe + Bond
Address:
Attention:
Project Location: 71 Needham St, Newton
Sampled By:

Telephone:
Project # B-0631
Client PO# B-0631

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	BCB (SOX HLET)										
	TB-5 (4-6)	3/21/14	0745	X		S	U	X										
	TB-6 (1-3)	↓	0750	↓		↓	↓	X										
	TB-6 (4-6)		0755					X										
	TB-7 (1-3)		0800					X										
	TB-7 (4-6)		0805					X										
	TB-8 (1-3)		0810					X										
	TB-8 (4-6)		0815					X										
	TB-9 (1-3)		0820					X										
	TB-9 (4-6)		0825					X										
	TB-10 (1-3)	↓	0830	↓		↓	↓	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:

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]	3/21/14 1305
Received by: (signature) [signature]	Date/Time: 3/21/14 1305
Relinquished by: (signature) [signature]	Date/Time: 3/21/14 520
Received by: (signature) [signature] 4.6°C	Date/Time: 3.21.14 15:20

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 3 DAY
RUSH †
☐ †24-Hr ☐ †48-Hr
☒ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: Below 1ppm
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

con-test ANALYTICAL LABORATORY

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

#14C0663

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Page 3 of 5

Company Name: Tighe + Bond
Address:
Attention:
Project Location: 71 Needham St, Newton MA
Sampled By:

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

Telephone:
Project # B-0631
Client PO# B-0631

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

ANALYSIS REQUESTED: PCB (SOXHLET)

# of Containers: 1
** Preservation: I
*** Container Code: A

Dissolved Metals: ○ Field Filtered ○ Lab to Filter

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	PCB (SOXHLET)
	TB-10 (4-6)	3/21/14	0835	X		S	U	X
	TB-11 (1-3)	↓	0840	↓		↓	↓	X
	TB-11 (4-6)	↓	0845	↓		↓	↓	X
	TB-12 (1-3)	↓	0850	↓		↓	↓	X
	TB-12 (4-6)	↓	0855	↓		↓	↓	X
	TB-13 (1-3)	↓	0900	↓		↓	↓	X
	TB-13 (4-6)	↓	0910	↓		↓	↓	X
	TB-14 (1-3)	↓	0915	↓		↓	↓	X
	TB-14 (4-6)	↓	0920	↓		↓	↓	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/Received	Signature	Date/Time
Relinquished by: (signature)	[signature]	3/21/14 1305
Received by: (signature)	[signature]	3/21/14 1205
Relinquished by: (signature)	[signature]	3/21/14 3:30
Received by: (signature)	[signature] 4.6°C	3.21.14 15:20

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 3 DAY
RUSH†
☐ †24-Hr ☐ †48-Hr
☒ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: Below 1 ppm
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

***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

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

CHAIN OF CUSTODY RECORD

14C0663

Rev 04.05.12

Page 4 of 5

Company Name: TIGHE + BOND
Address:
Attention:
Project Location: 11 Needham St, Newton
Sampled By:
Project Proposal Provided? (for billing purposes) X yes ______ proposal date

Telephone:
Project # B-0631
Client PO# B-0631
DATA DELIVERY (check all that apply) ○ FAX ✓ EMAIL ○ WEBSITE
Fax #
Email:
Format: ✓ PDF ✓ EXCEL ○ GIS ○ OTHER ○ "Enhanced Data Package"

# of Containers: 1
** Preservation
***Container Code: A

ANALYSIS REQUESTED: PCB (SOXHLET)

Dissolved Metals: ○ Field Filtered ○ Lab to Filter

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	PCB (SOXHLET)
	TP-6A (0-1)	3/21/14	1131	X		S	U	X
	TP-6A (1-2)	↓	1133	↓		↓	↓	X
	TP-6A (2-3)	↓	1135	↓		↓	↓	X
	TP-6A (3-4)	↓	1137	↓		↓	↓	X
	TP-6A (4-5)	↓	1139	↓		↓	↓	X
	TP-6A (5-6)	↓	1141	↓		↓	↓	X
	TP-11A (0-1)	↓	1201	↓		↓	↓	X
	TP-11A (1-2)	↓	1203	↓		↓	↓	X
	TP-11A (2-3)	↓	1205	↓		↓	↓	X
	TP-11A (3-4)	↓	1207	↓		↓	↓	X

***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) [signature]	3/21/14 1305
Received by: (signature) [signature]	3/21/14 1305
Relinquished by: (signature) [signature]	3/21/14 [illegible]
Received by: (signature) [signature] 4.6°C	3.21.14 15:20

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 3 DAY
RUSH †
☐ †24-Hr ☐ †48-Hr
☒ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: Below 1ppm
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

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

14C0663

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Company Name: TIGHE + BOND
Address:
Attention:
Project Location: 71 Needham St, Newton MA
Sampled By:

Telephone:
Project # B-0631
Client PO# B-0631

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	PCBs (SOX HLFT)
	TP11A (4-5)	3/21/14	1209	X		S	U	X
	TP11A (5-6)	3/21/14	1211	X		S	U	X
	TP-5A (0-1)	↓	1101	↓		↓	↓	X
	TP-5A (1-2)	↓	1103	↓		↓	↓	X
	TP-5A (2-3)	↓	1105	↓		↓	↓	X
	TP-5A (3-4)	↓	1107	↓		↓	↓	X
	TP-5A (4-5)	↓	1109	↓		↓	↓	X
	TP-5A (5-6)	↓	1111	↓		↓	↓	X
				MAA				

# of Containers
** Preservation
***Container Co

Dissolved Meta
○ 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:
[signature]	3/21/14 1305
Received by: (signature) [signature]	3/21/14 1305
Relinquished by: (signature) [signature]	3/21/14 350
Received by: (signature) Cassebatt 4.6°C 3.21.14	15:20

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 3 DAY
RUSH†
☐ †24-Hr ☐ †48-Hr
☒ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts: Below 1ppm
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

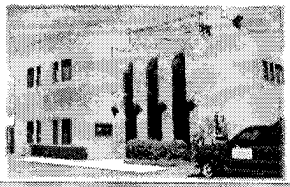
†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

Page 108 of 111 14C0663_1 Contest_Final 03 26 14 1356

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: Tighe & Bond **RECEIVED BY:** CC **DATE:** 3-21-14

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 4.6°
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	46
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.	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:**

Log-In Technician Initials: CC **Date/Time:** 3.21.14 15:20

Doc #277 Rev. 4 August 2013

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory	Project #: 14C0663
Project Location: 71 Needham St. Newton MA	RTN:

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

14C0663-01 thru 14C0663-46

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: _____ Position: Laboratory Manager

Printed Name: Daren J. Damboragian Date: 03/26/14

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

April 4, 2014

Matt Abraham
Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303

Project Location: Needham St., Newton
Client Job Number:
Project Number: B-0631
Laboratory Work Order Number: 14D0037

Enclosed are results of analyses for samples received by the laboratory on April 1, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa A. Worthington
Project Manager

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

Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303
ATTN: Matt Abraham

REPORT DATE: 4/4/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: B-0631

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14D0037

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

PROJECT LOCATION: Needham St., Newton

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
B-1 (1-3)	14D0037-01	Soil		SM 2540G	
				SW-846 8082A	
B-1 (4-6)	14D0037-02	Soil		SM 2540G	
				SW-846 8082A	
B-2 (1-3)	14D0037-04	Soil		SM 2540G	
				SW-846 8082A	
B-2 (4-6)	14D0037-05	Soil		SM 2540G	
				SW-846 8082A	
B-3 (1-3)	14D0037-06	Soil		SM 2540G	
				SW-846 8082A	
B-3 (4-6)	14D0037-07	Soil		SM 2540G	
				SW-846 8082A	
B-4 (1-3)	14D0037-08	Soil		SM 2540G	
				SW-846 8082A	
B-4 (4-6)	14D0037-09	Soil		SM 2540G	
				SW-846 8082A	
B-12 (1-3)	14D0037-25	Soil		SM 2540G	
				SW-846 8082A	
B-12 (4-6)	14D0037-26	Soil		SM 2540G	
				SW-846 8082A	
B-13 (1-3)	14D0037-27	Soil		SM 2540G	
				SW-846 8082A	
B-13 (4-6)	14D0037-28	Soil		SM 2540G	
				SW-846 8082A	
B-14 (1-3)	14D0037-29	Soil		SM 2540G	
				SW-846 8082A	
B-14 (4-6)	14D0037-30	Soil		SM 2540G	
				SW-846 8082A	
B-17 (7-9)	14D0037-35	Soil		SM 2540G	
				SW-846 8082A	
B-18 (7-9)	14D0037-37	Soil		SM 2540G	
				SW-846 8082A	
B-19 (1-3)	14D0037-39	Soil		SM 2540G	
				SW-846 8082A	
B-19 (4-6)	14D0037-40	Soil		SM 2540G	
				SW-846 8082A	

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 8082A

Qualifications:

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, Aroclor-1016 [2C]

B092999-MS1, B092999-MSD1

A five times dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

14D0037-04[B-2 (1-3)], 14D0037-05[B-2 (4-6)], 14D0037-07[B-3 (4-6)], 14D0037-08[B-4 (1-3)], 14D0037-09[B-4 (4-6)], 14D0037-27[B-13 (1-3)], 14D0037-28[B-13 (4-6)], 14D0037-30[B-14 (4-6)], 14D0037-35[B-17 (7-9)], 14D0037-37[B-18 (7-9)], 14D0037-40[B-19 (4-6)]

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, Decachlorobiphenyl [2C], Tetrachloro-m-xylene, Tetrachloro-m-xylene [2C]

14D0037-25[B-12 (1-3)]

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: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-1 (1-3) | Sampled: 4/1/2014 07:30

Sample ID: 14D0037-01

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	0.68	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 9:48	JMB
Aroclor-1221 [1]	ND	0.68	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 9:48	JMB
Aroclor-1232 [1]	ND	0.68	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 9:48	JMB
Aroclor-1242 [1]	ND	0.68	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 9:48	JMB
Aroclor-1248 [2]	4.7	0.68	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 9:48	JMB
Aroclor-1254 [1]	ND	0.68	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 9:48	JMB
Aroclor-1260 [1]	ND	0.68	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 9:48	JMB
Aroclor-1262 [1]	ND	0.68	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 9:48	JMB
Aroclor-1268 [1]	ND	0.68	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 9:48	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	104	30-150		4/3/14 9:48
Decachlorobiphenyl [2]	102	30-150		4/3/14 9:48
Tetrachloro-m-xylene [1]	102	30-150		4/3/14 9:48
Tetrachloro-m-xylene [2]	97.6	30-150		4/3/14 9:48

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-1 (1-3)
Sampled: 4/1/2014 07:30

Sample ID: 14D0037-01

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	71.9		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-1 (4-6) | Sampled: 4/1/2014 07:35

Sample ID: 14D0037-02

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	0.89	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 10:01	JMB
Aroclor-1221 [1]	ND	0.89	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 10:01	JMB
Aroclor-1232 [1]	ND	0.89	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 10:01	JMB
Aroclor-1242 [1]	ND	0.89	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 10:01	JMB
Aroclor-1248 [2]	6.2	0.89	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 10:01	JMB
Aroclor-1254 [1]	ND	0.89	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 10:01	JMB
Aroclor-1260 [1]	ND	0.89	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 10:01	JMB
Aroclor-1262 [1]	ND	0.89	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 10:01	JMB
Aroclor-1268 [1]	ND	0.89	mg/Kg dry	25		SW-846 8082A	4/1/14	4/3/14 10:01	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	98.5	30-150		4/3/14 10:01
Decachlorobiphenyl [2]	91.1	30-150		4/3/14 10:01
Tetrachloro-m-xylene [1]	99.8	30-150		4/3/14 10:01
Tetrachloro-m-xylene [2]	97.2	30-150		4/3/14 10:01

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-1 (4-6)
Sampled: 4/1/2014 07:35

Sample ID: 14D0037-02

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	55.8		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-2 (1-3) | Sampled: 4/1/2014 07:45

Sample ID: 14D0037-04

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	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/2/14 23:51	JMB
Aroclor-1221 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/2/14 23:51	JMB
Aroclor-1232 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/2/14 23:51	JMB
Aroclor-1242 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/2/14 23:51	JMB
Aroclor-1248 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/2/14 23:51	JMB
Aroclor-1254 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/2/14 23:51	JMB
Aroclor-1260 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/2/14 23:51	JMB
Aroclor-1262 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/2/14 23:51	JMB
Aroclor-1268 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/2/14 23:51	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	94.8	30-150		4/2/14 23:51
Decachlorobiphenyl [2]	87.0	30-150		4/2/14 23:51
Tetrachloro-m-xylene [1]	92.6	30-150		4/2/14 23:51
Tetrachloro-m-xylene [2]	89.8	30-150		4/2/14 23:51

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-2 (1-3)
Sampled: 4/1/2014 07:45

Sample ID: 14D0037-04

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	70.9		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-2 (4-6) | Sampled: 4/1/2014 07:50

Sample ID: 14D0037-05

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	0.20	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:14	JMB
Aroclor-1221 [1]	ND	0.20	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:14	JMB
Aroclor-1232 [1]	ND	0.20	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:14	JMB
Aroclor-1242 [1]	ND	0.20	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:14	JMB
Aroclor-1248 [1]	ND	0.20	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:14	JMB
Aroclor-1254 [1]	ND	0.20	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:14	JMB
Aroclor-1260 [1]	ND	0.20	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:14	JMB
Aroclor-1262 [1]	ND	0.20	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:14	JMB
Aroclor-1268 [1]	ND	0.20	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:14	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	84.2	30-150		4/3/14 10:14
Decachlorobiphenyl [2]	81.9	30-150		4/3/14 10:14
Tetrachloro-m-xylene [1]	93.8	30-150		4/3/14 10:14
Tetrachloro-m-xylene [2]	93.8	30-150		4/3/14 10:14

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-2 (4-6)
Sampled: 4/1/2014 07:50

Sample ID: 14D0037-05

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	49.0		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-3 (1-3)
Sampled: 4/1/2014 07:55

Sample ID: 14D0037-06

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	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:27	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:27	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:27	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:27	JMB
Aroclor-1248 [2]	0.69	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:27	JMB
Aroclor-1254 [2]	0.15	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:27	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:27	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:27	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:27	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	88.5	30-150		4/3/14 10:27
Decachlorobiphenyl [2]	91.8	30-150		4/3/14 10:27
Tetrachloro-m-xylene [1]	95.7	30-150		4/3/14 10:27
Tetrachloro-m-xylene [2]	95.9	30-150		4/3/14 10:27

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-3 (1-3)
Sampled: 4/1/2014 07:55

Sample ID: 14D0037-06

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	88.7		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-3 (4-6) | Sampled: 4/1/2014 08:00

Sample ID: 14D0037-07

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	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:30	JMB
Aroclor-1221 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:30	JMB
Aroclor-1232 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:30	JMB
Aroclor-1242 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:30	JMB
Aroclor-1248 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:30	JMB
Aroclor-1254 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:30	JMB
Aroclor-1260 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:30	JMB
Aroclor-1262 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:30	JMB
Aroclor-1268 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:30	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	90.9	30-150		4/3/14 0:30
Decachlorobiphenyl [2]	88.6	30-150		4/3/14 0:30
Tetrachloro-m-xylene [1]	91.6	30-150		4/3/14 0:30
Tetrachloro-m-xylene [2]	88.6	30-150		4/3/14 0:30

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-3 (4-6)
Sampled: 4/1/2014 08:00

Sample ID: 14D0037-07

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	70.1		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-4 (1-3) | Sampled: 4/1/2014 08:05

Sample ID: 14D0037-08

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	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:40	JMB
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:40	JMB
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:40	JMB
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:40	JMB
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:40	JMB
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:40	JMB
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:40	JMB
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:40	JMB
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 10:40	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	89.9	30-150		4/3/14 10:40
Decachlorobiphenyl [2]	91.3	30-150		4/3/14 10:40
Tetrachloro-m-xylene [1]	98.6	30-150		4/3/14 10:40
Tetrachloro-m-xylene [2]	94.9	30-150		4/3/14 10:40

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-4 (1-3)
Sampled: 4/1/2014 08:05

Sample ID: 14D0037-08

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	82.1		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-4 (4-6) | Sampled: 4/1/2014 08:10

Sample ID: 14D0037-09

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	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:56	JMB
Aroclor-1221 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:56	JMB
Aroclor-1232 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:56	JMB
Aroclor-1242 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:56	JMB
Aroclor-1248 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:56	JMB
Aroclor-1254 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:56	JMB
Aroclor-1260 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:56	JMB
Aroclor-1262 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:56	JMB
Aroclor-1268 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 0:56	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	91.4	30-150		4/3/14 0:56
Decachlorobiphenyl [2]	90.2	30-150		4/3/14 0:56
Tetrachloro-m-xylene [1]	96.7	30-150		4/3/14 0:56
Tetrachloro-m-xylene [2]	96.5	30-150		4/3/14 0:56

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-4 (4-6)
Sampled: 4/1/2014 08:10

Sample ID: 14D0037-09

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	68.2		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-12 (1-3) | Sampled: 4/1/2014 09:35

Sample ID: 14D0037-25

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	22	mg/Kg dry	1000		SW-846 8082A	4/1/14	4/3/14 10:52	JMB
Aroclor-1221 [1]	ND	22	mg/Kg dry	1000		SW-846 8082A	4/1/14	4/3/14 10:52	JMB
Aroclor-1232 [1]	ND	22	mg/Kg dry	1000		SW-846 8082A	4/1/14	4/3/14 10:52	JMB
Aroclor-1242 [1]	ND	22	mg/Kg dry	1000		SW-846 8082A	4/1/14	4/3/14 10:52	JMB
Aroclor-1248 [2]	210	22	mg/Kg dry	1000		SW-846 8082A	4/1/14	4/3/14 10:52	JMB
Aroclor-1254 [1]	ND	22	mg/Kg dry	1000		SW-846 8082A	4/1/14	4/3/14 10:52	JMB
Aroclor-1260 [1]	ND	22	mg/Kg dry	1000		SW-846 8082A	4/1/14	4/3/14 10:52	JMB
Aroclor-1262 [1]	ND	22	mg/Kg dry	1000		SW-846 8082A	4/1/14	4/3/14 10:52	JMB
Aroclor-1268 [1]	ND	22	mg/Kg dry	1000		SW-846 8082A	4/1/14	4/3/14 10:52	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	4/3/14 10:52
Decachlorobiphenyl [2]	*	30-150	S-01	4/3/14 10:52
Tetrachloro-m-xylene [1]	*	30-150	S-01	4/3/14 10:52
Tetrachloro-m-xylene [2]	*	30-150	S-01	4/3/14 10:52

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-12 (1-3)
Sampled: 4/1/2014 09:35

Sample ID: 14D0037-25

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	87.9		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-12 (4-6) | Sampled: 4/1/2014 09:40

Sample ID: 14D0037-26

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	0.57	mg/Kg dry	20		SW-846 8082A	4/1/14	4/3/14 11:05	JMB
Aroclor-1221 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	4/1/14	4/3/14 11:05	JMB
Aroclor-1232 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	4/1/14	4/3/14 11:05	JMB
Aroclor-1242 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	4/1/14	4/3/14 11:05	JMB
Aroclor-1248 [2]	1.0	0.57	mg/Kg dry	20		SW-846 8082A	4/1/14	4/3/14 11:05	JMB
Aroclor-1254 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	4/1/14	4/3/14 11:05	JMB
Aroclor-1260 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	4/1/14	4/3/14 11:05	JMB
Aroclor-1262 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	4/1/14	4/3/14 11:05	JMB
Aroclor-1268 [1]	ND	0.57	mg/Kg dry	20		SW-846 8082A	4/1/14	4/3/14 11:05	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	93.9	30-150		4/3/14 11:05
Decachlorobiphenyl [2]	92.2	30-150		4/3/14 11:05
Tetrachloro-m-xylene [1]	103	30-150		4/3/14 11:05
Tetrachloro-m-xylene [2]	99.5	30-150		4/3/14 11:05

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-12 (4-6)
Sampled: 4/1/2014 09:40

Sample ID: 14D0037-26

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	69.0		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-13 (1-3) | Sampled: 4/1/2014 09:45

Sample ID: 14D0037-27

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	4/1/14	4/3/14 2:01	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:01	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:01	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:01	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:01	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:01	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:01	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:01	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:01	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	88.8	30-150		4/3/14 2:01
Decachlorobiphenyl [2]	89.5	30-150		4/3/14 2:01
Tetrachloro-m-xylene [1]	94.3	30-150		4/3/14 2:01
Tetrachloro-m-xylene [2]	93.6	30-150		4/3/14 2:01

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-13 (1-3)
Sampled: 4/1/2014 09:45

Sample ID: 14D0037-27

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	4/2/14	4/3/14 8:26	MXG

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-13 (4-6)
Sampled: 4/1/2014 09:50

Sample ID: 14D0037-28

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	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:14	JMB
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:14	JMB
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:14	JMB
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:14	JMB
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:14	JMB
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:14	JMB
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:14	JMB
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:14	JMB
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 2:14	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	89.4	30-150		4/3/14 2:14
Decachlorobiphenyl [2]	86.2	30-150		4/3/14 2:14
Tetrachloro-m-xylene [1]	94.1	30-150		4/3/14 2:14
Tetrachloro-m-xylene [2]	93.7	30-150		4/3/14 2:14

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-13 (4-6)
Sampled: 4/1/2014 09:50

Sample ID: 14D0037-28

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	83.1		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-14 (1-3)
Sampled: 4/1/2014 09:55

Sample ID: 14D0037-29

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	0.13	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:18	JMB
Aroclor-1221 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:18	JMB
Aroclor-1232 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:18	JMB
Aroclor-1242 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:18	JMB
Aroclor-1248 [2]	0.26	0.13	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:18	JMB
Aroclor-1254 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:18	JMB
Aroclor-1260 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:18	JMB
Aroclor-1262 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:18	JMB
Aroclor-1268 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:18	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	96.0	30-150		4/3/14 11:18
Decachlorobiphenyl [2]	91.6	30-150		4/3/14 11:18
Tetrachloro-m-xylene [1]	103	30-150		4/3/14 11:18
Tetrachloro-m-xylene [2]	104	30-150		4/3/14 11:18

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-14 (1-3)
Sampled: 4/1/2014 09:55

Sample ID: 14D0037-29

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	4/2/14	4/3/14 8:21	MXG

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-14 (4-6)
Sampled: 4/1/2014 10:00

Sample ID: 14D0037-30

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	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:31	JMB
Aroclor-1221 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:31	JMB
Aroclor-1232 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:31	JMB
Aroclor-1242 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:31	JMB
Aroclor-1248 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:31	JMB
Aroclor-1254 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:31	JMB
Aroclor-1260 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:31	JMB
Aroclor-1262 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:31	JMB
Aroclor-1268 [1]	ND	0.15	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:31	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	94.1	30-150		4/3/14 11:31
Decachlorobiphenyl [2]	91.4	30-150		4/3/14 11:31
Tetrachloro-m-xylene [1]	94.1	30-150		4/3/14 11:31
Tetrachloro-m-xylene [2]	94.5	30-150		4/3/14 11:31

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-14 (4-6)
Sampled: 4/1/2014 10:00

Sample ID: 14D0037-30

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	64.5		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-17 (7-9) | Sampled: 4/1/2014 10:25

Sample ID: 14D0037-35

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	4/1/14	4/3/14 11:44	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:44	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:44	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:44	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:44	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:44	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:44	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:44	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:44	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	86.7	30-150		4/3/14 11:44
Decachlorobiphenyl [2]	82.2	30-150		4/3/14 11:44
Tetrachloro-m-xylene [1]	76.3	30-150		4/3/14 11:44
Tetrachloro-m-xylene [2]	76.8	30-150		4/3/14 11:44

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-17 (7-9)
Sampled: 4/1/2014 10:25

Sample ID: 14D0037-35

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	86.7		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-18 (7-9) | Sampled: 4/1/2014 10:35

Sample ID: 14D0037-37

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	4/1/14	4/3/14 11:57	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:57	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:57	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:57	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:57	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:57	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:57	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:57	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 11:57	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	97.4	30-150		4/3/14 11:57
Decachlorobiphenyl [2]	89.5	30-150		4/3/14 11:57
Tetrachloro-m-xylene [1]	86.8	30-150		4/3/14 11:57
Tetrachloro-m-xylene [2]	87.7	30-150		4/3/14 11:57

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-18 (7-9)
Sampled: 4/1/2014 10:35

Sample ID: 14D0037-37

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	87.0		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-19 (1-3) | Sampled: 4/1/2014 12:00

Sample ID: 14D0037-39

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	4/1/14	4/3/14 3:18	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:18	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:18	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:18	JMB
Aroclor-1248 [1]	0.76	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:18	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:18	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:18	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:18	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:18	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	101	30-150		4/3/14 3:18
Decachlorobiphenyl [2]	96.6	30-150		4/3/14 3:18
Tetrachloro-m-xylene [1]	98.0	30-150		4/3/14 3:18
Tetrachloro-m-xylene [2]	97.6	30-150		4/3/14 3:18

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-19 (1-3)
Sampled: 4/1/2014 12:00

Sample ID: 14D0037-39

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	84.6		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-19 (4-6) | Sampled: 4/1/2014 12:05

Sample ID: 14D0037-40

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	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:31	JMB
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:31	JMB
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:31	JMB
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:31	JMB
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:31	JMB
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:31	JMB
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:31	JMB
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:31	JMB
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	4/1/14	4/3/14 3:31	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	102	30-150		4/3/14 3:31
Decachlorobiphenyl [2]	101	30-150		4/3/14 3:31
Tetrachloro-m-xylene [1]	98.0	30-150		4/3/14 3:31
Tetrachloro-m-xylene [2]	101	30-150		4/3/14 3:31

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0037

Date Received: 4/1/2014

Field Sample #: B-19 (4-6)
Sampled: 4/1/2014 12:05

Sample ID: 14D0037-40

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	80.7		% Wt	1		SM 2540G	4/2/14	4/3/14 8:21	MXG

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
14D0037-01 [B-1 (1-3)]	B093066	04/02/14
14D0037-02 [B-1 (4-6)]	B093066	04/02/14
14D0037-04 [B-2 (1-3)]	B093066	04/02/14
14D0037-05 [B-2 (4-6)]	B093066	04/02/14
14D0037-06 [B-3 (1-3)]	B093066	04/02/14
14D0037-07 [B-3 (4-6)]	B093066	04/02/14
14D0037-08 [B-4 (1-3)]	B093066	04/02/14
14D0037-09 [B-4 (4-6)]	B093066	04/02/14
14D0037-25 [B-12 (1-3)]	B093066	04/02/14
14D0037-26 [B-12 (4-6)]	B093066	04/02/14
14D0037-27 [B-13 (1-3)]	B093066	04/02/14
14D0037-28 [B-13 (4-6)]	B093066	04/02/14
14D0037-29 [B-14 (1-3)]	B093066	04/02/14
14D0037-30 [B-14 (4-6)]	B093066	04/02/14
14D0037-35 [B-17 (7-9)]	B093066	04/02/14
14D0037-37 [B-18 (7-9)]	B093066	04/02/14
14D0037-39 [B-19 (1-3)]	B093066	04/02/14
14D0037-40 [B-19 (4-6)]	B093066	04/02/14

Prep Method: SW-846 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14D0037-01 [B-1 (1-3)]	B092999	10.3	10.0	04/01/14
14D0037-02 [B-1 (4-6)]	B092999	10.1	10.0	04/01/14
14D0037-04 [B-2 (1-3)]	B092999	10.0	10.0	04/01/14
14D0037-05 [B-2 (4-6)]	B092999	10.2	10.0	04/01/14
14D0037-06 [B-3 (1-3)]	B092999	10.2	10.0	04/01/14
14D0037-07 [B-3 (4-6)]	B092999	10.0	10.0	04/01/14
14D0037-08 [B-4 (1-3)]	B092999	10.0	10.0	04/01/14
14D0037-09 [B-4 (4-6)]	B092999	10.1	10.0	04/01/14
14D0037-25 [B-12 (1-3)]	B092999	10.2	10.0	04/01/14
14D0037-26 [B-12 (4-6)]	B092999	10.2	10.0	04/01/14
14D0037-27 [B-13 (1-3)]	B092999	10.2	10.0	04/01/14
14D0037-28 [B-13 (4-6)]	B092999	10.3	10.0	04/01/14
14D0037-29 [B-14 (1-3)]	B092999	10.1	10.0	04/01/14
14D0037-30 [B-14 (4-6)]	B092999	10.3	10.0	04/01/14
14D0037-35 [B-17 (7-9)]	B092999	10.1	10.0	04/01/14
14D0037-37 [B-18 (7-9)]	B092999	10.0	10.0	04/01/14
14D0037-39 [B-19 (1-3)]	B092999	10.3	10.0	04/01/14
14D0037-40 [B-19 (4-6)]	B092999	10.1	10.0	04/01/14

con-test® ANALYTICAL LABORATORY

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

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 B092999 - SW-846 3540C										
Blank (B092999-BLK1)				Prepared: 04/01/14 Analyzed: 04/02/14						
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	*0.174*		mg/Kg wet	0.200		87.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.167*		mg/Kg wet	0.200		83.5	30-150			
Surrogate: Tetrachloro-m-xylene	*0.140*		mg/Kg wet	0.200		69.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.144*		mg/Kg wet	0.200		71.9	30-150			
LCS (B092999-BS1)				Prepared: 04/01/14 Analyzed: 04/02/14						
Aroclor-1016	0.18	0.10	mg/Kg wet	0.200		91.1	40-140			
Aroclor-1016 [2C]	0.18	0.10	mg/Kg wet	0.200		91.9	40-140			
Aroclor-1260	0.20	0.10	mg/Kg wet	0.200		99.5	40-140			
Aroclor-1260 [2C]	0.20	0.10	mg/Kg wet	0.200		102	40-140			
Surrogate: Decachlorobiphenyl	*0.186*		mg/Kg wet	0.200		93.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.167*		mg/Kg wet	0.200		83.7	30-150			
Surrogate: Tetrachloro-m-xylene	*0.168*		mg/Kg wet	0.200		83.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.165*		mg/Kg wet	0.200		82.3	30-150			
LCS Dup (B092999-BSD1)				Prepared: 04/01/14 Analyzed: 04/02/14						
Aroclor-1016	0.19	0.10	mg/Kg wet	0.200		96.2	40-140	5.37	30	
Aroclor-1016 [2C]	0.19	0.10	mg/Kg wet	0.200		96.6	40-140	4.97	30	
Aroclor-1260	0.20	0.10	mg/Kg wet	0.200		101	40-140	1.71	30	
Aroclor-1260 [2C]	0.21	0.10	mg/Kg wet	0.200		103	40-140	1.11	30	
Surrogate: Decachlorobiphenyl	*0.190*		mg/Kg wet	0.200		95.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.171*		mg/Kg wet	0.200		85.5	30-150			
Surrogate: Tetrachloro-m-xylene	*0.176*		mg/Kg wet	0.200		88.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.173*		mg/Kg wet	0.200		86.5	30-150			

con-test® ANALYTICAL LABORATORY

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

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 B092999 - SW-846 3540C											
Matrix Spike (B092999-MS1)		**Source: 14D0037-26**		Prepared: 04/01/14 Analyzed: 04/03/14							
Aroclor-1016	2.3	0.14	mg/Kg dry	0.290	0.0	**781**	*	40-140			MS-21
Aroclor-1016 [2C]	2.1	0.14	mg/Kg dry	0.290	0.0	**741**	*	40-140			MS-21
Aroclor-1260	0.28	0.14	mg/Kg dry	0.290	0.0	97.4		40-140			
Aroclor-1260 [2C]	0.31	0.14	mg/Kg dry	0.290	0.0	106		40-140			
Surrogate: Decachlorobiphenyl	*0.283*		mg/Kg dry	0.290		97.5		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.281*		mg/Kg dry	0.290		96.9		30-150			
Surrogate: Tetrachloro-m-xylene	*0.283*		mg/Kg dry	0.290		97.6		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.284*		mg/Kg dry	0.290		98.2		30-150			
Matrix Spike Dup (B092999-MSD1)		**Source: 14D0037-26**		Prepared: 04/01/14 Analyzed: 04/03/14							
Aroclor-1016	1.5	0.14	mg/Kg dry	0.290	0.0	**507**	*	40-140	42.5	50	MS-21
Aroclor-1016 [2C]	1.5	0.14	mg/Kg dry	0.290	0.0	**525**	*	40-140	34.1	50	MS-21
Aroclor-1260	0.27	0.14	mg/Kg dry	0.290	0.0	93.5		40-140	4.05	50	
Aroclor-1260 [2C]	0.32	0.14	mg/Kg dry	0.290	0.0	111		40-140	4.72	50	
Surrogate: Decachlorobiphenyl	*0.268*		mg/Kg dry	0.290		92.6		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.283*		mg/Kg dry	0.290		97.7		30-150			
Surrogate: Tetrachloro-m-xylene	*0.303*		mg/Kg dry	0.290		104		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.293*		mg/Kg dry	0.290		101		30-150			

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

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 B093066 - % Solids										
Duplicate (B093066-DUP2)		**Source: 14D0037-40**		Prepared: 04/02/14 Analyzed: 04/03/14						
% Solids	78.2		% Wt		80.7			3.15	20	

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

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-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.

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	06/30/2014
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2014
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

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

CHAIN OF CUSTODY RECORD

14D0037

Rev 04.05.12

Company Name: Tighe + Bond
Address: 446 Main St
Worcester, MA
Attention: Matt Abraham
Project Location: Needham St, Newton
Sampled By: MAA

Telephone: 508 471 9602
Project #: B-0631
Client PO#: B-063 (Needham St)

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

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

ANALYSIS REQUESTED: PCB (SOXHLET)

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	PCB (SOXHLET)	# of Containers	** Preservation	***Container Code
01	B-1 (1-3)	4/1/14	730	X		S	U	X			
02	B-1 (4-6)	↓	735	↓		↓	↓	X			
03	B-1 (7-9) Hold		740					X			
04	B-2 (1-3)		745					X			
05	B-2 (4-6)		750					X			
06	B-3 (1-3)		755					X			
07	B-3 (4-6)		800					X			
08	B-4 (1-3)		805					X			
09	B-4 (4-6)	↓	810	↓		↓	↓	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:
Please provide results by Friday, 4/4/14 on samples to be run

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:
Matt Abraham	4/1/14 1550
Received by: (signature)	Date/Time:
[illegible] 4-1-14	1550
Relinquished by: (signature)	Date/Time:
[illegible] 4-1-14	
Received by: (signature)	Date/Time:
Rebecca Daust 4/1/14	1705

Turnaround ††
☐ 7-Day
☐ 10-Day
☐ Other ____
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

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

14D0037

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Company Name: Tighe + Bond
Address:
Attention:
Project Location:
Sampled By:

Telephone:
Project # B-0631
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	PCB (SOX HILTET)
10	B-5 (1-3) HOLD	4/1/14	815	X		S	U	X
11	B-5 (4-6) HOLD	↓	820	↓		↓	↓	X
12	B-6 (1-3) HOLD	↓	825	↓		↓	↓	X
13	B-6 (4-6) HOLD	↓	830	↓		↓	↓	X
14	B-6 (7-9) HOLD	↓	835	↓		↓	↓	X
15	B-7 (1-3) HOLD	↓	840	↓		↓	↓	X
16	B-7 (4-6) HOLD	↓	845	↓		↓	↓	X
17	B-8 (1-3) HOLD	↓	850	↓		↓	↓	X
18	B-8 (4-6) HOLD	↓	855	↓		↓	↓	X

# of Containers
** Preservation
***Container Co

Dissolved Met
○ 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:
[signature]	4/1/14 1550
Received by: (signature) [signature] 4-1-14	Date/Time: 1550
Relinquished by: (signature) [signature] 4-1-14	Date/Time: 1705
Received by: (signature) [signature] 4/1/14	Date/Time: 1705

Turnaround ††
☐ 7-Day
☐ 10-Day
☐ Other ____
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

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

CHAIN OF CUSTODY RECORD

14D0037

Rev 04.05.12

Page 3 of

Company Name: Tighe + Bond
Address:
Attention:
Project Location:
Sampled By:
Project Proposal Provided? (for billing purposes)
○ yes ____ proposal date

Telephone:
Project # B-0631
Client PO#

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

# of Containers: 1
** Preservation: I
***Container Code: A

ANALYSIS REQUESTED

Dissolved Metals
○ Field Filtered
○ Lab to Filter

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	PCB (SOXHLET)
19	B-9 (1-3) HOLD	4/1/14	0900	X		S	U	X
20	B-9 (4-6) HOLD	↓	0910	↓		↓	↓	X
21	B-10 (1-3) HOLD	↓	0915	↓		↓	↓	X
22	B-10 (4-6) HOLD	↓	0920	↓		↓	↓	X
23	B-11 (1-3) HOLD	↓	0925	↓		↓	↓	X
24	B-11 (4-6) HOLD	↓	0930	↓		↓	↓	X
25	B-12 (1-3)	↓	0935	↓		↓	↓	X
26	B-12 (4-6)	↓	0940	↓		↓	↓	X
27	B-13 (1-3)	↓	0945	↓		↓	↓	X
28	B-13 (4-6)	↓	0950	↓		↓	↓	X

Comments: Results by Friday 4/04/14 on all samples

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

***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

Signature	Date/Time
Relinquished by: (signature) [signature]	4/1/14 1550
Received by: (signature) [signature]	4-1-14 1550
Relinquished by: (signature) [signature]	4-1-14 1700
Received by: (signature) Rebecca [signature]	4/1/14 1705

Turnaround ††
☐ 7-Day
☐ 10-Day
☐ Other
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

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

14D0037

39 Spruce Street
East longmeadow, MA 01028

Company Name: Tighe + Bond
Address:
Attention:
Project Location:
Sampled By:

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

Telephone:
Project # B-0631
Client PO#

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

ANALYSIS REQUESTED

1												# of Containers
A												** Preservation
I												***Container Cod

Dissolved Metal
○ Field Filtered
○ Lab to Filter

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
29	B-14(1-3)	4/1/14	0955				
30	B-14(4-6)		1000				
31	B-15(1-3) HOLD		1005				
32	B-15(4-6) HOLD		1010				
33	B-16(1-3) HOLD		1015				
34	B-16(4-6) HOLD		1020				
35	B-17 (7-9)		1025				
36	B-17 (10-12) HOLD		1030				
37	B-18 (7-9)		1035				
38	B-18 (10-12) HOLD		1040				

***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: Results by Friday 4/4/14 on run samples

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:
Matt Ahl	4/1/14 1550
Received by: (signature)	Date/Time:
[signature] 4-1-14	1550
Relinquished by: (signature)	Date/Time:
[signature] 4-1-14	1707
Received by: (signature)	Date/Time:
Rebecca Daniel	4/1/14 1705

Turnaround ††
☐ 7-Day
☐ 10-Day
☐ Other ____
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 Analytical Certification Form Required
○ RCP Analysis Certification Form Required
○ MA State DW Form Required PWSID # _____

ACCREDITED IN ACCORDANCE WITH nelac
AIHA ACCREDITED LABORATORY Environmental Lead & Industrial Hygiene

NELAC & AIHA Certified
WBE/DBE Certified

†† TURNAROUND TIME (business days) 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.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

Page 49 of 53 14D0037_1 Contest_Final 04 04 14 1207

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

14D0037

39 Spruce Street
East longmeadow, MA 01028

Company Name: Tighe + Bond
Address:
Attention:
Project Location:
Sampled By:

Telephone:
Project # B-0631
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

# of Containers																							
** Preservation																							
***Container Code	I	A	I																				

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
39	B-19 (1-3)	4/1/14	1200	X		S	U
40	B-19 (4-6)		1205	X		S	U
—	B-17 (OW)		1300			GW	U
—	B-18 (OW)		1330			GW	U

Comments: Results by Friday, 4/4/14 on soil samples. Normal 5 DAY TAT on groundwater samples.

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] 4/1/14	1550
Received by: (signature) [signature] 4-1-14	Date/Time: 5:00
Relinquished by: (signature) [signature] 4-1-14	Date/Time: 1700
Received by: (signature) [signature]	Date/Time: 4/1/14 1705

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

Detection Limit Requirements
Massachusetts: RCS-1
RC/GW-1
Connecticut:
Other:

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

ACCREDITED IN ACCORDANCE WITH nelac
ACCREDITED LABORATORY AIHA Environmental Lead & Industrial Hygiene

NELAC & AIHA Certified
WBE/DBE Certified

†† TURNAROUND TIME (business days) 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.

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: Tighe & Bond **RECEIVED BY:** RLF **DATE:** 4/1/14

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 6.0 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 _____ 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	25
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:

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.	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:** **Date/Time:**

RLF 4/1/14 1705

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory	Project #: 14D0037
Project Location: Needham St., Newton	RTN:

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

14D0037-01 thru 14D0037-40

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: M Erickson Position: Laboratory Director

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

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

March 31, 2014

Matt Abraham
Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303

Project Location: 71 Needham St., Newton, MA
Client Job Number:
Project Number: B-0631
Laboratory Work Order Number: 14C0829

Enclosed are results of analyses for samples received by the laboratory on March 27, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa A. Worthington
Project Manager

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

Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303
ATTN: Matt Abraham

REPORT DATE: 3/31/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: B-0631

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14C0829

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

PROJECT LOCATION: 71 Needham St., Newton, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Paint	14C0829-01	Soil		SM 2540G	
				SW-846 8082A	
TB-15 (1-3)	14C0829-02	Soil		SM 2540G	
				SW-846 8082A	
TB-15 (4-5)	14C0829-03	Soil		SM 2540G	
				SW-846 8082A	
Stockpile #2	14C0829-04	Soil		SM 2540G	
				SW-846 8082A	

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 8082A

Qualifications:

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, Aroclor-1016 [2C]
B092711-MS1, B092711-MSD1

A five times dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

14C0829-02[TB-15 (1-3)], 14C0829-03[TB-15 (4-5)]

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, Decachlorobiphenyl [2C], Tetrachloro-m-xylene, Tetrachloro-m-xylene [2C]
14C0829-01[Paint]

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: 71 Needham St., Newton, MA
Sample Description:
Work Order: 14C0829

Date Received: 3/27/2014

Field Sample #: Paint
Sampled: 3/21/2014 10:06

Sample ID: 14C0829-01

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	8.5	mg/Kg dry	200		SW-846 8082A	3/27/14	3/28/14 16:04	JMB
Aroclor-1221 [1]	ND	8.5	mg/Kg dry	200		SW-846 8082A	3/27/14	3/28/14 16:04	JMB
Aroclor-1232 [1]	ND	8.5	mg/Kg dry	200		SW-846 8082A	3/27/14	3/28/14 16:04	JMB
Aroclor-1242 [1]	ND	8.5	mg/Kg dry	200		SW-846 8082A	3/27/14	3/28/14 16:04	JMB
Aroclor-1248 [1]	50	8.5	mg/Kg dry	200		SW-846 8082A	3/27/14	3/28/14 16:04	JMB
Aroclor-1254 [1]	ND	8.5	mg/Kg dry	200		SW-846 8082A	3/27/14	3/28/14 16:04	JMB
Aroclor-1260 [1]	ND	8.5	mg/Kg dry	200		SW-846 8082A	3/27/14	3/28/14 16:04	JMB
Aroclor-1262 [1]	ND	8.5	mg/Kg dry	200		SW-846 8082A	3/27/14	3/28/14 16:04	JMB
Aroclor-1268 [1]	ND	8.5	mg/Kg dry	200		SW-846 8082A	3/27/14	3/28/14 16:04	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	3/28/14 16:04
Decachlorobiphenyl [2]	*	30-150	S-01	3/28/14 16:04
Tetrachloro-m-xylene [1]	*	30-150	S-01	3/28/14 16:04
Tetrachloro-m-xylene [2]	*	30-150	S-01	3/28/14 16:04

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

Project Location: 71 Needham St., Newton, MA
Sample Description:
Work Order: 14C0829

Date Received: 3/27/2014

Field Sample #: Paint
Sampled: 3/21/2014 10:06

Sample ID: 14C0829-01

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	90.9		% Wt	1		SM 2540G	3/28/14	3/29/14 8:40	MXG

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

Project Location: 71 Needham St., Newton, MA
Sample Description:
Work Order: 14C0829

Date Received: 3/27/2014

Field Sample #: TB-15 (1-3)
Sampled: 3/27/2014 08:00

Sample ID: 14C0829-02

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	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:22	JMB
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:22	JMB
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:22	JMB
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:22	JMB
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:22	JMB
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:22	JMB
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:22	JMB
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:22	JMB
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:22	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	106	30-150		3/28/14 19:22
Decachlorobiphenyl [2]	109	30-150		3/28/14 19:22
Tetrachloro-m-xylene [1]	103	30-150		3/28/14 19:22
Tetrachloro-m-xylene [2]	99.5	30-150		3/28/14 19:22

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

Project Location: 71 Needham St., Newton, MA
Sample Description:
Work Order: 14C0829

Date Received: 3/27/2014

Field Sample #: TB-15 (1-3)
Sampled: 3/27/2014 08:00

Sample ID: 14C0829-02

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	81.7		% Wt	1		SM 2540G	3/28/14	3/29/14 8:40	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: 71 Needham St., Newton, MA Sample Description: Work Order: 14C0829

Date Received: 3/27/2014

Field Sample #: TB-15 (4-5) Sampled: 3/27/2014 08:30

Sample ID: 14C0829-03

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	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:35	JMB
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:35	JMB
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:35	JMB
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:35	JMB
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:35	JMB
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:35	JMB
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:35	JMB
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:35	JMB
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	3/27/14	3/28/14 19:35	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	112	30-150		3/28/14 19:35
Decachlorobiphenyl [2]	112	30-150		3/28/14 19:35
Tetrachloro-m-xylene [1]	99.0	30-150		3/28/14 19:35
Tetrachloro-m-xylene [2]	96.2	30-150		3/28/14 19:35

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

Project Location: 71 Needham St., Newton, MA
Sample Description:
Work Order: 14C0829

Date Received: 3/27/2014

Field Sample #: TB-15 (4-5)
Sampled: 3/27/2014 08:30

Sample ID: 14C0829-03

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	83.2		% Wt	1		SM 2540G	3/28/14	3/29/14 8:40	MXG

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

Project Location: 71 Needham St., Newton, MA
Sample Description:
Work Order: 14C0829

Date Received: 3/27/2014

Field Sample #: Stockpile #2
Sampled: 3/27/2014 09:30

Sample ID: 14C0829-04

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	0.43	mg/Kg dry	20		SW-846 8082A	3/27/14	3/28/14 16:57	JMB
Aroclor-1221 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	3/27/14	3/28/14 16:57	JMB
Aroclor-1232 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	3/27/14	3/28/14 16:57	JMB
Aroclor-1242 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	3/27/14	3/28/14 16:57	JMB
Aroclor-1248 [1]	4.5	0.43	mg/Kg dry	20		SW-846 8082A	3/27/14	3/28/14 16:57	JMB
Aroclor-1254 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	3/27/14	3/28/14 16:57	JMB
Aroclor-1260 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	3/27/14	3/28/14 16:57	JMB
Aroclor-1262 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	3/27/14	3/28/14 16:57	JMB
Aroclor-1268 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	3/27/14	3/28/14 16:57	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	119	30-150		3/28/14 16:57
Decachlorobiphenyl [2]	133	30-150		3/28/14 16:57
Tetrachloro-m-xylene [1]	113	30-150		3/28/14 16:57
Tetrachloro-m-xylene [2]	118	30-150		3/28/14 16:57

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

Project Location: 71 Needham St., Newton, MA
Sample Description:
Work Order: 14C0829

Date Received: 3/27/2014

Field Sample #: Stockpile #2
Sampled: 3/27/2014 09:30

Sample ID: 14C0829-04

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	93.1		% Wt	1		SM 2540G	3/28/14	3/29/14 8:40	MXG

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
14C0829-01 [Paint]	B092754	03/28/14
14C0829-02 [TB-15 (1-3)]	B092754	03/28/14
14C0829-03 [TB-15 (4-5)]	B092754	03/28/14
14C0829-04 [Stockpile #2]	B092754	03/28/14

Prep Method: SW-846 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14C0829-01 [Paint]	B092711	5.20	10.0	03/27/14
14C0829-02 [TB-15 (1-3)]	B092711	10.0	10.0	03/27/14
14C0829-03 [TB-15 (4-5)]	B092711	10.2	10.0	03/27/14
14C0829-04 [Stockpile #2]	B092711	10.1	10.0	03/27/14

con-test® ANALYTICAL LABORATORY

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

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 B092711 - SW-846 3540C										
Blank (B092711-BLK1)				Prepared: 03/27/14 Analyzed: 03/28/14						
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	*0.237*		mg/Kg wet	0.200		119	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.235*		mg/Kg wet	0.200		117	30-150			
Surrogate: Tetrachloro-m-xylene	*0.217*		mg/Kg wet	0.200		109	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.202*		mg/Kg wet	0.200		101	30-150			
LCS (B092711-BS1)				Prepared: 03/27/14 Analyzed: 03/28/14						
Aroclor-1016	0.21	0.10	mg/Kg wet	0.200		106	40-140			
Aroclor-1016 [2C]	0.20	0.10	mg/Kg wet	0.200		100	40-140			
Aroclor-1260	0.21	0.10	mg/Kg wet	0.200		107	40-140			
Aroclor-1260 [2C]	0.22	0.10	mg/Kg wet	0.200		111	40-140			
Surrogate: Decachlorobiphenyl	*0.240*		mg/Kg wet	0.200		120	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.238*		mg/Kg wet	0.200		119	30-150			
Surrogate: Tetrachloro-m-xylene	*0.212*		mg/Kg wet	0.200		106	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.204*		mg/Kg wet	0.200		102	30-150			
LCS Dup (B092711-BSD1)				Prepared: 03/27/14 Analyzed: 03/28/14						
Aroclor-1016	0.21	0.10	mg/Kg wet	0.200		104	40-140	2.65	30	
Aroclor-1016 [2C]	0.19	0.10	mg/Kg wet	0.200		97.4	40-140	2.84	30	
Aroclor-1260	0.21	0.10	mg/Kg wet	0.200		103	40-140	3.68	30	
Aroclor-1260 [2C]	0.21	0.10	mg/Kg wet	0.200		107	40-140	3.09	30	
Surrogate: Decachlorobiphenyl	*0.224*		mg/Kg wet	0.200		112	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.224*		mg/Kg wet	0.200		112	30-150			
Surrogate: Tetrachloro-m-xylene	*0.198*		mg/Kg wet	0.200		99.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.192*		mg/Kg wet	0.200		95.9	30-150			

con-test® ANALYTICAL LABORATORY

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

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 B092711 - SW-846 3540C											
Matrix Spike (B092711-MS1)		**Source: 14C0829-04**		Prepared: 03/27/14 Analyzed: 03/28/14							
Aroclor-1016	2.8	0.11	mg/Kg dry	0.215	0.0	**1320**	*	40-140			MS-21
Aroclor-1016 [2C]	2.4	0.11	mg/Kg dry	0.215	0.0	**1110**	*	40-140			MS-21
Aroclor-1260	0.26	0.11	mg/Kg dry	0.215	0.0	122		40-140			
Aroclor-1260 [2C]	0.27	0.11	mg/Kg dry	0.215	0.0	128		40-140			
Surrogate: Decachlorobiphenyl	*0.211*		mg/Kg dry	0.215		98.3		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.235*		mg/Kg dry	0.215		109		30-150			
Surrogate: Tetrachloro-m-xylene	*0.232*		mg/Kg dry	0.215		108		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.215*		mg/Kg dry	0.215		100		30-150			
Matrix Spike Dup (B092711-MSD1)		**Source: 14C0829-04**		Prepared: 03/27/14 Analyzed: 03/28/14							
Aroclor-1016	3.2	0.11	mg/Kg dry	0.215	0.0	**1490**	*	40-140	12.0	50	MS-21
Aroclor-1016 [2C]	2.9	0.11	mg/Kg dry	0.215	0.0	**1350**	*	40-140	20.1	50	MS-21
Aroclor-1260	0.28	0.11	mg/Kg dry	0.215	0.0	130		40-140	6.15	50	
Aroclor-1260 [2C]	0.29	0.11	mg/Kg dry	0.215	0.0	135		40-140	5.36	50	
Surrogate: Decachlorobiphenyl	*0.223*		mg/Kg dry	0.215		104		30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.243*		mg/Kg dry	0.215		113		30-150			
Surrogate: Tetrachloro-m-xylene	*0.240*		mg/Kg dry	0.215		112		30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.230*		mg/Kg dry	0.215		107		30-150			

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

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-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.

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	06/30/2014
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2014
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

Page 17 of 20 14C0829_1 Contest_Final 03 31 14 1248 03/31/14 12:49:08

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

14C0829

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Page 1 of 1

Company Name: Tighe & Bond
Address: 446 Main Street
Worcester, MA
Attention: Matt Abraham
Project Location: 71 Needham St., Newton, MA
Sampled By: MAA

Telephone: 508-471-9602
Project # B-0631
Client PO# B-0631

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

Project Proposal Provided? (for billing purposes)
◉ yes 71 Needham Street 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 (soxhelt)
1	PAINT	3/21/14	1006		X	S	U	X
2	TB-15 (1-3)	3/27/14	800	X		S	U	X
3	TB-15 (4-5)	3/27/14	830	X		S	U	X
4	stockpile #2	3/27/14	930	X		S	U	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: PLEASE HAVE RESULTS READY ON MONDAY 3/31/14.
[redacted]

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: 3/27/14 1230
Received by: (signature) [signature] 3/27/14	Date/Time: 1230
Relinquished by: (signature) [signature] 3/27/14	Date/Time: 1400
Received by: (signature) [signature] 5.4°C 3.27.14	Date/Time: 14:00

Turnaround ††
☐ 7-Day
☐ 10-Day
◉ Other X 48HR

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 #

AIHA LAP, LLC ACCREDITED LABORATORY
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

con-test® ANALYTICAL LABORATORY

Sample Receipt Checklist

CLIENT NAME: Tighe & Bond **RECEIVED BY:** CC **DATE:** 3.27.14

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°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 _____ 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	4
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.	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:** CC **Date/Time:** 3-27-14 14:00

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory	Project #: 14C0829
Project Location: 71 Needham St., Newton, MA	RTN:

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

14C0829-01 thru 14C0829-04

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 ( )	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: M Erickson Position: Laboratory Director

Printed Name: Michael A. Erickson Date: 03/31/14

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

April 10, 2014

Matt Abraham
Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303

Project Location: Needham St., Newton
Client Job Number:
Project Number: B-0631
Laboratory Work Order Number: 14D0229

Enclosed are results of analyses for samples received by the laboratory on April 7, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa A. Worthington
Project Manager

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

Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303
ATTN: Matt Abraham

REPORT DATE: 4/10/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: B-0631

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14D0229

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

PROJECT LOCATION: Needham St., Newton

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
B-10 (1-3)	14D0229-01	Soil		SM 2540G	
				SW-846 8082A	
B-10 (4-6)	14D0229-02	Soil		SM 2540G	
				SW-846 8082A	
B-11 (1-3)	14D0229-03	Soil		SM 2540G	
				SW-846 8082A	
B-11 (4-6)	14D0229-04	Soil		SM 2540G	
				SW-846 8082A	

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 8082A

Qualifications:

A five times dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

14D0229-03[B-11 (1-3)]

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, Decachlorobiphenyl [2C], Tetrachloro-m-xylene, Tetrachloro-m-xylene [2C]

14D0229-01[B-10 (1-3)]

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: Needham St., Newton | Sample Description: | Work Order: 14D0229

Date Received: 4/7/2014

Field Sample #: B-10 (1-3) | Sampled: 4/1/2014 09:15

Sample ID: 14D0229-01

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	5.3	mg/Kg dry	250		SW-846 8082A	4/8/14	4/10/14 8:37	JMB
Aroclor-1221 [1]	ND	5.3	mg/Kg dry	250		SW-846 8082A	4/8/14	4/10/14 8:37	JMB
Aroclor-1232 [1]	ND	5.3	mg/Kg dry	250		SW-846 8082A	4/8/14	4/10/14 8:37	JMB
Aroclor-1242 [1]	ND	5.3	mg/Kg dry	250		SW-846 8082A	4/8/14	4/10/14 8:37	JMB
Aroclor-1248 [1]	39	5.3	mg/Kg dry	250		SW-846 8082A	4/8/14	4/10/14 8:37	JMB
Aroclor-1254 [1]	ND	5.3	mg/Kg dry	250		SW-846 8082A	4/8/14	4/10/14 8:37	JMB
Aroclor-1260 [1]	ND	5.3	mg/Kg dry	250		SW-846 8082A	4/8/14	4/10/14 8:37	JMB
Aroclor-1262 [1]	ND	5.3	mg/Kg dry	250		SW-846 8082A	4/8/14	4/10/14 8:37	JMB
Aroclor-1268 [1]	ND	5.3	mg/Kg dry	250		SW-846 8082A	4/8/14	4/10/14 8:37	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	4/10/14 8:37
Decachlorobiphenyl [2]	*	30-150	S-01	4/10/14 8:37
Tetrachloro-m-xylene [1]	*	30-150	S-01	4/10/14 8:37
Tetrachloro-m-xylene [2]	*	30-150	S-01	4/10/14 8:37

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0229

Date Received: 4/7/2014

Field Sample #: B-10 (1-3)
Sampled: 4/1/2014 09:15

Sample ID: 14D0229-01

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	91.9		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0229

Date Received: 4/7/2014

Field Sample #: B-10 (4-6) | Sampled: 4/1/2014 09:20

Sample ID: 14D0229-02

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	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 8:50	JMB
Aroclor-1221 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 8:50	JMB
Aroclor-1232 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 8:50	JMB
Aroclor-1242 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 8:50	JMB
Aroclor-1248 [1]	0.32	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 8:50	JMB
Aroclor-1254 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 8:50	JMB
Aroclor-1260 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 8:50	JMB
Aroclor-1262 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 8:50	JMB
Aroclor-1268 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 8:50	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	125	30-150		4/10/14 8:50
Decachlorobiphenyl [2]	123	30-150		4/10/14 8:50
Tetrachloro-m-xylene [1]	133	30-150		4/10/14 8:50
Tetrachloro-m-xylene [2]	119	30-150		4/10/14 8:50

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0229

Date Received: 4/7/2014

Field Sample #: B-10 (4-6)
Sampled: 4/1/2014 09:20

Sample ID: 14D0229-02

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	61.9		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0229

Date Received: 4/7/2014

Field Sample #: B-11 (1-3)
Sampled: 4/1/2014 09:25

Sample ID: 14D0229-03

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	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 19:39	JMB
Aroclor-1221 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 19:39	JMB
Aroclor-1232 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 19:39	JMB
Aroclor-1242 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 19:39	JMB
Aroclor-1248 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 19:39	JMB
Aroclor-1254 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 19:39	JMB
Aroclor-1260 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 19:39	JMB
Aroclor-1262 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 19:39	JMB
Aroclor-1268 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 19:39	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	102	30-150		4/9/14 19:39
Decachlorobiphenyl [2]	101	30-150		4/9/14 19:39
Tetrachloro-m-xylene [1]	107	30-150		4/9/14 19:39
Tetrachloro-m-xylene [2]	94.0	30-150		4/9/14 19:39

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0229

Date Received: 4/7/2014

Field Sample #: B-11 (1-3)
Sampled: 4/1/2014 09:25

Sample ID: 14D0229-03

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	62.9		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0229

Date Received: 4/7/2014

Field Sample #: B-11 (4-6)
Sampled: 4/1/2014 09:30

Sample ID: 14D0229-04

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	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 9:02	JMB
Aroclor-1221 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 9:02	JMB
Aroclor-1232 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 9:02	JMB
Aroclor-1242 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 9:02	JMB
Aroclor-1248 [1]	1.3	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 9:02	JMB
Aroclor-1254 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 9:02	JMB
Aroclor-1260 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 9:02	JMB
Aroclor-1262 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 9:02	JMB
Aroclor-1268 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/10/14 9:02	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	124	30-150		4/10/14 9:02
Decachlorobiphenyl [2]	117	30-150		4/10/14 9:02
Tetrachloro-m-xylene [1]	129	30-150		4/10/14 9:02
Tetrachloro-m-xylene [2]	119	30-150		4/10/14 9:02

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

Project Location: Needham St., Newton
Sample Description:
Work Order: 14D0229

Date Received: 4/7/2014

Field Sample #: B-11 (4-6)
Sampled: 4/1/2014 09:30

Sample ID: 14D0229-04

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	70.2		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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
14D0229-01 [B-10 (1-3)]	B093413	04/08/14
14D0229-02 [B-10 (4-6)]	B093413	04/08/14
14D0229-03 [B-11 (1-3)]	B093413	04/08/14
14D0229-04 [B-11 (4-6)]	B093413	04/08/14

Prep Method: SW-846 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14D0229-01 [B-10 (1-3)]	B093369	10.3	10.0	04/08/14
14D0229-02 [B-10 (4-6)]	B093369	10.3	10.0	04/08/14
14D0229-03 [B-11 (1-3)]	B093369	10.2	10.0	04/08/14
14D0229-04 [B-11 (4-6)]	B093369	10.0	10.0	04/08/14

con-test® ANALYTICAL LABORATORY

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

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 B093369 - SW-846 3540C										
Blank (B093369-BLK1)				Prepared: 04/08/14 Analyzed: 04/09/14						
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	*0.238*		mg/Kg wet	0.200		119	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.224*		mg/Kg wet	0.200		112	30-150			
Surrogate: Tetrachloro-m-xylene	*0.208*		mg/Kg wet	0.200		104	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.182*		mg/Kg wet	0.200		91.0	30-150			
LCS (B093369-BS1)				Prepared: 04/08/14 Analyzed: 04/09/14						
Aroclor-1016	0.21	0.10	mg/Kg wet	0.200		106	40-140			
Aroclor-1016 [2C]	0.21	0.10	mg/Kg wet	0.200		105	40-140			
Aroclor-1260	0.23	0.10	mg/Kg wet	0.200		117	40-140			
Aroclor-1260 [2C]	0.22	0.10	mg/Kg wet	0.200		112	40-140			
Surrogate: Decachlorobiphenyl	*0.244*		mg/Kg wet	0.200		122	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.233*		mg/Kg wet	0.200		116	30-150			
Surrogate: Tetrachloro-m-xylene	*0.200*		mg/Kg wet	0.200		99.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.178*		mg/Kg wet	0.200		89.2	30-150			
LCS Dup (B093369-BSD1)				Prepared: 04/08/14 Analyzed: 04/09/14						
Aroclor-1016	0.22	0.10	mg/Kg wet	0.200		112	40-140	4.85	30	
Aroclor-1016 [2C]	0.21	0.10	mg/Kg wet	0.200		107	40-140	2.66	30	
Aroclor-1260	0.24	0.10	mg/Kg wet	0.200		119	40-140	1.67	30	
Aroclor-1260 [2C]	0.22	0.10	mg/Kg wet	0.200		112	40-140	0.536	30	
Surrogate: Decachlorobiphenyl	*0.242*		mg/Kg wet	0.200		121	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.230*		mg/Kg wet	0.200		115	30-150			
Surrogate: Tetrachloro-m-xylene	*0.204*		mg/Kg wet	0.200		102	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.181*		mg/Kg wet	0.200		90.7	30-150			

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

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.

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	06/30/2014
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

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

CHAIN OF CUSTODY RECORD

Rev 04.05.12

14D0637

14D0229

Company Name: Tighe + Bond

Address:

Attention:

Project Location:

Sampled By:

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

Telephone:

Project # B-0631

Client PO#

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

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	PCB (Soxhlet)	# of Containers	** Preservation	***Container Code
19	B-9(1-3) HOLD	4/1/14	0900	X		S	U	K			
20	B-9(4-6) HOLD		0910					K			
01 21	B-10(1-3) HOLD		0915					K			
02 22	B-10(4-6) HOLD		0920					K			
03 23	B-11(1-3) HOLD		0925					K			
04 24	B-11(4-6) HOLD		0930					K			
25	B-12(1-3)		0935					K			
26	B-12(4-6)		0940					K			
27	B-13(1-3)		0945					K			
28	B-13(4-6)		0950					K			

Comments: Results by Friday 4/04/14 on rush samples

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

***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

Dissolved Metals
○ Field Filtered
○ Lab to Filter

Relinquished by: (signature)	Date/Time:
[signature]	4/1/14 1550
Received by: (signature) [signature]	Date/Time: 4-1-14 1550
Relinquished by: (signature) [signature]	Date/Time: 4-1-14
Received by: (signature) Rebecca Jones	Date/Time: 4/1/14 1700

Turnaround ††
☐ 7-Day
☐ 10-Day
☐ Other
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 # _____

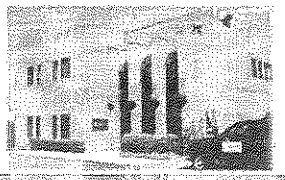
NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† 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

con-test® ANALYTICAL LABORATORY



Sample Receipt Checklist

CLIENT NAME: Tighe & Bond RECEIVED BY: RJF DATE: 4/1/14

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 6°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 _____ 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	25
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:

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.	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.	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: **Date/Time:**

RLF 4/1/14 1705

MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Con-Test Analytical Laboratory	Project #:	14D0229
Project Location:	Needham St., Newton	RTN:	

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

14D0229-01 thru 14D0229-04

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 ( )	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: M Erickson Position: Laboratory Director

Printed Name: Michael A. Erickson Date: 04/10/14

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

April 10, 2014

Matt Abraham
Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303

Project Location: Newton
Client Job Number:
Project Number: B-0631
Laboratory Work Order Number: 14D0240

Enclosed are results of analyses for samples received by the laboratory on April 7, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa A. Worthington
Project Manager

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

Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303
ATTN: Matt Abraham

REPORT DATE: 4/10/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: B-0631

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14D0240

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

PROJECT LOCATION: Newton

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Bldg 1-PX-1	14D0240-01	Soil		SM 2540G	
				SW-846 8082A	
Bldg 1-PX-2	14D0240-02	Soil		SM 2540G	
				SW-846 8082A	

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 8082A

Qualifications:

A five times dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

14D0240-01[Bldg 1-PX-1], 14D0240-02[Bldg 1-PX-2]

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: Newton | Sample Description: | Work Order: 14D0240

Date Received: 4/7/2014

Field Sample #: Bldg 1-PX-1 | Sampled: 4/5/2014 00:00

Sample ID: 14D0240-01

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	0.17	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:04	JMB
Aroclor-1221 [1]	ND	0.17	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:04	JMB
Aroclor-1232 [1]	ND	0.17	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:04	JMB
Aroclor-1242 [1]	ND	0.17	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:04	JMB
Aroclor-1248 [1]	ND	0.17	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:04	JMB
Aroclor-1254 [1]	ND	0.17	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:04	JMB
Aroclor-1260 [1]	ND	0.17	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:04	JMB
Aroclor-1262 [1]	ND	0.17	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:04	JMB
Aroclor-1268 [1]	ND	0.17	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:04	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	110	30-150		4/9/14 20:04
Decachlorobiphenyl [2]	104	30-150		4/9/14 20:04
Tetrachloro-m-xylene [1]	105	30-150		4/9/14 20:04
Tetrachloro-m-xylene [2]	91.3	30-150		4/9/14 20:04

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

Project Location: Newton
Sample Description:
Work Order: 14D0240

Date Received: 4/7/2014

Field Sample #: Bldg 1-PX-1
Sampled: 4/5/2014 00:00

Sample ID: 14D0240-01

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	59.4		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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

Project Location: Newton | Sample Description: | Work Order: 14D0240

Date Received: 4/7/2014

Field Sample #: Bldg 1-PX-2 | Sampled: 4/5/2014 00:00

Sample ID: 14D0240-02

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	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:16	JMB
Aroclor-1221 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:16	JMB
Aroclor-1232 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:16	JMB
Aroclor-1242 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:16	JMB
Aroclor-1248 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:16	JMB
Aroclor-1254 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:16	JMB
Aroclor-1260 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:16	JMB
Aroclor-1262 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:16	JMB
Aroclor-1268 [1]	ND	0.14	mg/Kg dry	5		SW-846 8082A	4/8/14	4/9/14 20:16	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	111	30-150		4/9/14 20:16
Decachlorobiphenyl [2]	104	30-150		4/9/14 20:16
Tetrachloro-m-xylene [1]	99.2	30-150		4/9/14 20:16
Tetrachloro-m-xylene [2]	86.4	30-150		4/9/14 20:16

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

Project Location: Newton
Sample Description:
Work Order: 14D0240

Date Received: 4/7/2014

Field Sample #: Bldg 1-PX-2
Sampled: 4/5/2014 00:00

Sample ID: 14D0240-02

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	67.8		% Wt	1		SM 2540G	4/8/14	4/9/14 8:12	MXG

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
14D0240-01 [Bldg 1-PX-1]	B093413	04/08/14
14D0240-02 [Bldg 1-PX-2]	B093413	04/08/14

Prep Method: SW-846 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14D0240-01 [Bldg 1-PX-1]	B093369	10.0	10.0	04/08/14
14D0240-02 [Bldg 1-PX-2]	B093369	10.3	10.0	04/08/14

con-test® ANALYTICAL LABORATORY

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

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 B093369 - SW-846 3540C										
Blank (B093369-BLK1)				Prepared: 04/08/14 Analyzed: 04/09/14						
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	*0.238*		mg/Kg wet	0.200		119	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.224*		mg/Kg wet	0.200		112	30-150			
Surrogate: Tetrachloro-m-xylene	*0.208*		mg/Kg wet	0.200		104	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.182*		mg/Kg wet	0.200		91.0	30-150			
LCS (B093369-BS1)				Prepared: 04/08/14 Analyzed: 04/09/14						
Aroclor-1016	0.21	0.10	mg/Kg wet	0.200		106	40-140			
Aroclor-1016 [2C]	0.21	0.10	mg/Kg wet	0.200		105	40-140			
Aroclor-1260	0.23	0.10	mg/Kg wet	0.200		117	40-140			
Aroclor-1260 [2C]	0.22	0.10	mg/Kg wet	0.200		112	40-140			
Surrogate: Decachlorobiphenyl	*0.244*		mg/Kg wet	0.200		122	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.233*		mg/Kg wet	0.200		116	30-150			
Surrogate: Tetrachloro-m-xylene	*0.200*		mg/Kg wet	0.200		99.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.178*		mg/Kg wet	0.200		89.2	30-150			
LCS Dup (B093369-BSD1)				Prepared: 04/08/14 Analyzed: 04/09/14						
Aroclor-1016	0.22	0.10	mg/Kg wet	0.200		112	40-140	4.85	30	
Aroclor-1016 [2C]	0.21	0.10	mg/Kg wet	0.200		107	40-140	2.66	30	
Aroclor-1260	0.24	0.10	mg/Kg wet	0.200		119	40-140	1.67	30	
Aroclor-1260 [2C]	0.22	0.10	mg/Kg wet	0.200		112	40-140	0.536	30	
Surrogate: Decachlorobiphenyl	*0.242*		mg/Kg wet	0.200		121	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.230*		mg/Kg wet	0.200		115	30-150			
Surrogate: Tetrachloro-m-xylene	*0.204*		mg/Kg wet	0.200		102	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.181*		mg/Kg wet	0.200		90.7	30-150			

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

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.

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	06/30/2014
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

14D0240

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

Page_____of_____

Company Name: Tighe & Bond
Telephone: 508-471-9602
Address: 446 Main Street
Project # B-0631-6
Client PO# B-0631-6
Attention: Matthew Abraham
Project Location: Newton
Sampled By: Marc Richards

DATA DELIVERY (check all that apply)
O FAX ◉ EMAIL O WEBSITE
Fax #
Email: maabraham@tighebond.com
Format: ◉ PDF ◉ EXCEL O GIS
O OTHER_____
O "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
O 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	PCB soxhlet											# of Containers	** Preservation	***Container Code
																			2		
01	Bldg 1 - PX-1	4/5/14	4/5/14	X		S		✓													
02	Bldg 1 - PX-2	4/5/14	4/5/14	X		S		✓													

Dissolved Metals
O Field Filtered
O 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 further composite sample.

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: 4/7/14	
Received by: (signature) 4/7/14	Date/Time: 1230	
Relinquished by: (signature) 4/7/14	Date/Time: 448	
Received by: (signature) 4/7/14	Date/Time: 1645	

Turnaround ††
◉ 7-Day
☐ 10-Day
☐ Other ____
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
O RCP Form Required
O MA State DW Form Required PWSID # _____

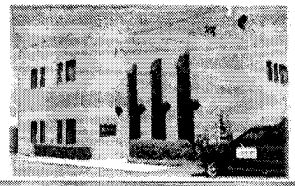
AIHA LAP, LLC ACCREDITED LABORATORY
ACCREDITED IN ACCORDANCE WITH nelac
NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† 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

con-test® ANALYTICAL LABORATORY



Sample Receipt Checklist

CLIENT NAME: Tighe & Bond **RECEIVED BY:** RCF **DATE:** 4/7/14

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 2.6°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 _____ 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	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	2
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.	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.	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: **Date/Time:**

RLF 4/7/14 1645

Doc #277 Rev. 4 August 2013

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory	Project #: 14D0240
Project Location: Newton	RTN:

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

14D0240-01 thru 14D0240-02

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: M Erickson Position: Laboratory Director

Printed Name: Michael A. Erickson Date: 04/10/14

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

April 8, 2014

Matt Abraham
Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303

Project Location: Needham St., Newton
Client Job Number:
Project Number: B-0631
Laboratory Work Order Number: 14D0040

Enclosed are results of analyses for samples received by the laboratory on April 1, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa A. Worthington
Project Manager

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

Tighe & Bond, Inc. - Worcester
446 Main Street
Worcester, MA 01608-2303
ATTN: Matt Abraham

REPORT DATE: 4/8/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: B-0631

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14D0040

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

PROJECT LOCATION: Needham St., Newton

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
B-17 (ow)	14D0040-01	Ground Water		SW-846 8082A	
B-18 (ow)	14D0040-02	Ground Water		SW-846 8082A	

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.

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: Needham St., Newton | Sample Description: | Work Order: 14D0040

Date Received: 4/1/2014

Field Sample #: B-17 (ow) | Sampled: 4/1/2014 13:00

Sample ID: 14D0040-01

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:10	MJC
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:10	MJC
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:10	MJC
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:10	MJC
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:10	MJC
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:10	MJC
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:10	MJC
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:10	MJC
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:10	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	92.7	30-150		4/4/14 12:10
Decachlorobiphenyl [2]	88.8	30-150		4/4/14 12:10
Tetrachloro-m-xylene [1]	85.2	30-150		4/4/14 12:10
Tetrachloro-m-xylene [2]	71.9	30-150		4/4/14 12:10

con-test® ANALYTICAL LABORATORY

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

Project Location: Needham St., Newton | Sample Description: | Work Order: 14D0040

Date Received: 4/1/2014

Field Sample #: B-18 (ow) | Sampled: 4/1/2014 13:30

Sample ID: 14D0040-02

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:22	MJC
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:22	MJC
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:22	MJC
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:22	MJC
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:22	MJC
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:22	MJC
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:22	MJC
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:22	MJC
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/3/14	4/4/14 12:22	MJC

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	90.3	30-150		4/4/14 12:22
Decachlorobiphenyl [2]	86.4	30-150		4/4/14 12:22
Tetrachloro-m-xylene [1]	89.3	30-150		4/4/14 12:22
Tetrachloro-m-xylene [2]	75.3	30-150		4/4/14 12:22

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

Sample Extraction Data

Prep Method: SW-846 3510C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0040-01 [B-17 (ow)]	B093077	1000	10.0	04/03/14
14D0040-02 [B-18 (ow)]	B093077	1000	10.0	04/03/14

con-test® ANALYTICAL LABORATORY

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

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 B093077 - SW-846 3510C										
Blank (B093077-BLK1)				Prepared: 04/03/14 Analyzed: 04/04/14						
Aroclor-1016	ND	0.20	µg/L							
Aroclor-1016 [2C]	ND	0.20	µg/L							
Aroclor-1221	ND	0.20	µg/L							
Aroclor-1221 [2C]	ND	0.20	µg/L							
Aroclor-1232	ND	0.20	µg/L							
Aroclor-1232 [2C]	ND	0.20	µg/L							
Aroclor-1242	ND	0.20	µg/L							
Aroclor-1242 [2C]	ND	0.20	µg/L							
Aroclor-1248	ND	0.20	µg/L							
Aroclor-1248 [2C]	ND	0.20	µg/L							
Aroclor-1254	ND	0.20	µg/L							
Aroclor-1254 [2C]	ND	0.20	µg/L							
Aroclor-1260	ND	0.20	µg/L							
Aroclor-1260 [2C]	ND	0.20	µg/L							
Aroclor-1262	ND	0.20	µg/L							
Aroclor-1262 [2C]	ND	0.20	µg/L							
Aroclor-1268	ND	0.20	µg/L							
Aroclor-1268 [2C]	ND	0.20	µg/L							
Surrogate: Decachlorobiphenyl	*1.98*		µg/L	2.00		99.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.92*		µg/L	2.00		95.8	30-150			
Surrogate: Tetrachloro-m-xylene	*1.66*		µg/L	2.00		83.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.41*		µg/L	2.00		70.4	30-150			
LCS (B093077-BS1)				Prepared: 04/03/14 Analyzed: 04/04/14						
Aroclor-1016	0.49	0.20	µg/L	0.500		97.7	40-140			
Aroclor-1016 [2C]	0.49	0.20	µg/L	0.500		98.5	40-140			
Aroclor-1260	0.52	0.20	µg/L	0.500		103	40-140			
Aroclor-1260 [2C]	0.49	0.20	µg/L	0.500		97.5	40-140			
Surrogate: Decachlorobiphenyl	*1.99*		µg/L	2.00		99.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.93*		µg/L	2.00		96.5	30-150			
Surrogate: Tetrachloro-m-xylene	*1.82*		µg/L	2.00		91.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.54*		µg/L	2.00		77.2	30-150			
LCS Dup (B093077-BSD1)				Prepared: 04/03/14 Analyzed: 04/04/14						
Aroclor-1016	0.52	0.20	µg/L	0.500		103	40-140	5.43	20	
Aroclor-1016 [2C]	0.55	0.20	µg/L	0.500		109	40-140	10.6	20	
Aroclor-1260	0.58	0.20	µg/L	0.500		115	40-140	11.2	20	
Aroclor-1260 [2C]	0.54	0.20	µg/L	0.500		108	40-140	10.4	20	
Surrogate: Decachlorobiphenyl	*2.22*		µg/L	2.00		111	30-150			
Surrogate: Decachlorobiphenyl [2C]	*2.12*		µg/L	2.00		106	30-150			
Surrogate: Tetrachloro-m-xylene	*1.95*		µg/L	2.00		97.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.65*		µg/L	2.00		82.4	30-150			

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

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.

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 Water	
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	06/30/2014
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2014
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

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

14D0040

39 Spruce Street
East longmeadow, MA 01028

Company Name: Tighe + Bond
Address:
Attention:
Project Location:
Sampled By:

Telephone:
Project # B-0631
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
—	B-19 (1-3)	4/1/14	1200	X		S	U
—	B-19 (4-6)	↓	1205	X		S	U
01	B-17 (OW)	↓	1300			GW	U
02	B-18 (OW)	↓	1330			GW	U

# of Containers
** Preservation
***Container Code

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: Results by Friday, 4/4/14 on soil samples. Normal 5 DAY TAT on groundwater samples.

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]	4/1/14 1550
Received by: (signature) [signature]	Date/Time: 1550
Relinquished by: (signature) [signature]	Date/Time: 1705
Received by: (signature) Rebecca Kurst 6C	Date/Time: 4/1/14 1705

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

Detection Limit Requirements
Massachusetts: RCS-1
RC/GW-1
Connecticut:
Other:

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

NELAC & AIHA Certified
WBE/DBE Certified

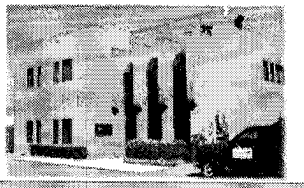
†† TURNAROUND TIME (business days) STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

Page 10 of 13 14D0040_1 Contest_Final 04 08 14 1406

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: Tight & Bond **RECEIVED BY:** RLF **DATE:** 4/1/14

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 6°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 _____ 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	4	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:

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.	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:** **Date/Time:**

RLT 4/1/14 1705

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory	Project #: 14D0040
Project Location: Needham St., Newton	RTN:

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

14D0040-01 thru 14D0040-02

Matrices: 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 ( )	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: M Erickson Position: Laboratory Director

Printed Name: Michael A. Erickson Date: 04/08/14

Tighe&Bond

Offices are located
throughout New England.

www.tighebond.com