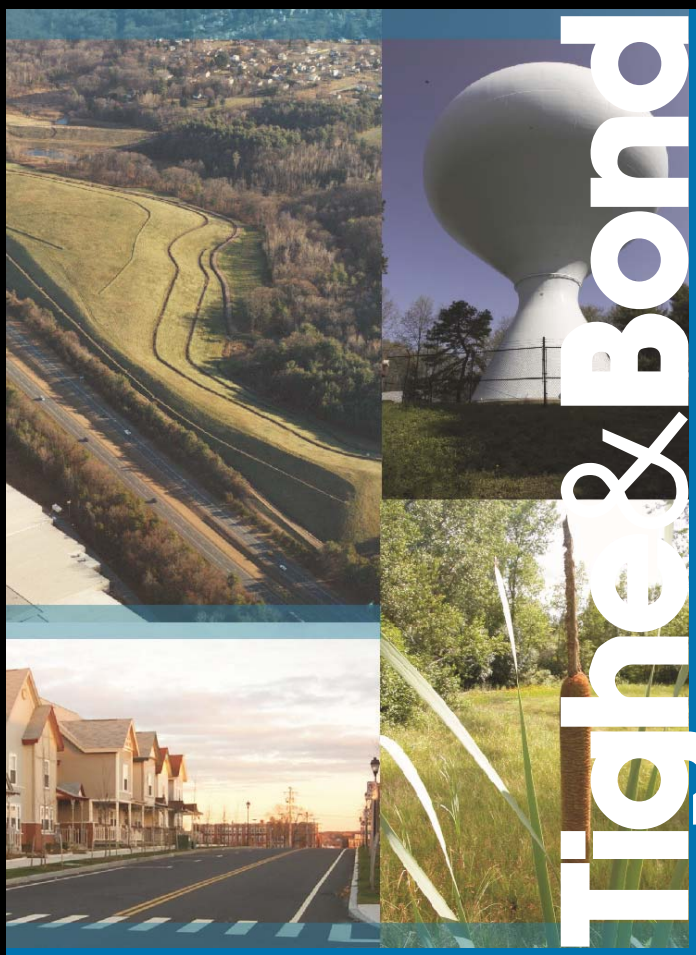

Former Polymerine Facility
241 Duchaine Boulevard
New Bedford, Massachusetts
(RTN 4-1347)

TSCA Notification and Phase IV Remedy Implementation Plan

Prepared For:

City of New Bedford

July 2015

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Section 1 Introduction

On behalf of the City of New Bedford, Tighe & Bond has prepared this PCB Cleanup Plan for the former Polymerine, Inc. facility (Polymerine) located at 241 Duchaine Boulevard in New Bedford, Massachusetts (the site). This information is provided in accordance with U.S. Environmental Protection Agency's (EPA's) *Risk-Based Disposal Approval* procedures listed under the Toxic Substance Control Act (TSCA) regulations at 40 CFR §761.61(c), with some elements of this cleanup plan meeting the *Self-Implementing Cleanup and Disposal of PCB Remediation Waste* procedures listed at 40 CFR §761.61(a). This submittal also meets the requirements for an "interim" Phase II Comprehensive Site Assessment (Phase II) for a portion of the site, a Phase III Identification, Evaluation, and Selection of Comprehensive Response Action Alternatives (Phase III), and a Phase IV Remedy Implementation Plan (Phase IV RIP) under the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). A Site Locus, a Massachusetts Geographic Information Systems (MassGIS) Priority Resource Map, an Aerial Photograph, and a Conceptual Site Model Plan are provided in Appendix A as Figures 1, 2, 3, and 4, respectively.

The Massachusetts Department of Environmental Protection (MassDEP) first assigned Release Tracking Number (RTN) 4-1347 to the site in October 1993 for the release of PCBs to site soils. The source of the PCB contamination was identified as the PCB-containing oil used in manufacturing operations at the site. Between April 2000 and March 2001, a Removal Program was conducted by EPA's Emergency Planning and Response Branch. Subsequent site assessment activities were completed by Tighe & Bond, and those results were reported in a Phase II Comprehensive Site Assessment (CSA) Report submittal to MassDEP in May 2009 for site RTN 4-1347.

The City is planning the demolition of the abandoned industrial building and the cleanup of environmental impacts at the site using funding from MassDevelopment. Based on the limitations of the project funding and because of the volume of impacted material, a targeted/risk-based approach to cleanup has been selected, with a goal of achieving a Permanent Solution Partial Statement for site RTN 4-1347. This approach was discussed during our meeting with EPA and MassDEP officials at City offices in April 2015. In general, the PCB Cleanup Plan includes the excavation of soils with PCBs equal to or greater than 500 milligram per kilogram (mg/kg) for off-site disposal, and the consolidation of the remaining PCB impacted soil in "upland areas" (i.e., outside of the wetland areas) beneath a capping system installed in accordance with §761.61(a)(7), and to place a restriction on the deed for both low occupancy use and for the capped area in accordance with §761.61(a)(8). In the impacted upland areas outside the capping system, the goal is to remove soils with PCB concentrations greater than 1 mg/kg in the top 0 to 2 feet below surface grade (BSG) and soils with PCB concentrations greater than 25 mg/kg greater than 2 feet BSG for consolidation under the proposed cap. This PCB Cleanup Plan also addresses the cleanup of PCB-impacted concrete from the building and other site building materials.

1.1 Reports and Submittals Referenced

Several reports and submittals that are referenced herein were used for developing this PCB Cleanup Plan. Those reports include the following:

- A September 7, 1993 letter report regarding "Polymerine, Inc. Facility, 241 Duchaine Boulevard, New Bedford, Massachusetts," prepared Polymerine, Inc. by Geraghty & Miller, Inc.
- *Removal Program Preliminary Assessment/Site Investigation Report for the Polymerine Site, New Bedford, Massachusetts, 7 January 1998*, prepared for EPA by F. Weston, Inc. (Weston)
- *PCB Delineation Report, Former Polymerine, Inc. Site, 241 Duchaine Boulevard, New Bedford, Massachusetts* (dated November 24, 1998), prepared for Lawson & Weitzen, LLP by Paragon Environmental Services (Paragon)
- *Request for a Removal Action at the Polymerine Site, New Bedford, Bristol County, Massachusetts - ACTION MEMORANDUM ADDENDUM*, prepared by EPA and dated September 13, 2000
- *Polymerine Site, Removal Action Administrative Record File and Index* (dated December 2000), prepared for EPA by Weston
- *Removal Program After Action Report for the Polymerine Site, New Bedford, Massachusetts, 12 April 2000 Through October 2001* (dated November 2001), prepared for EPA by Weston
- *Phase II Comprehensive Site Assessment (CSA) Report, Former Polymerine, 241 Duchaine Boulevard, New Bedford, Massachusetts, RTN 4-1347* (dated May 2009), prepared for City of New Bedford by Tighe & Bond

A copy of these reports is provided on the attached diskette for further reference.

1.2 Conceptual Site Model

The site is located in the New Bedford Business Park, on the northwestern portion of the City of New Bedford. There is no security or other restrictions preventing the general public from entering the New Bedford Business Park area. The site parcel consists of approximately eight acres of land, the majority of which is undeveloped, forested wetland that is part of the Hobomock Swamp. The eastern portion of the site parcel is developed by a single-story 33,757 square foot manufacturing building scheduled to be demolished.

The site is located within a Potentially Productive Aquifer (PPA) that is mapped as Non-Potential Drinking Water Source Area along the eastern, developed portion of the site. No public water supplies are located within one-half mile of the site, and no known potable water wells are located in the site vicinity. Portions of the Hobomock Swamp on the site parcel are mapped as Priority Habitat. The site is generally underlain by fill sand, a peat layer (in some areas), then medium sand. PCB impacts extend into the forested wetland, which has organic soils to at least two feet below surface grade (BSG). The groundwater table is generally situated between two and four feet BSG across the developed portion of the site, with shallower depths nearer to the forested wetland.

The property was first developed in 1960 and used for the manufacturing of composite fiberglass boards through the mid-1990s. For a majority of those operations, PCB-containing oil was used in a closed-looped heat transfer system. That system was used for bonding the fiberglass sheets together. The heat transfer system was reportedly modified to use non-PCB oil at an unknown date. After fiberglass board manufacturing operations ceased at the site, the site building was used for other manufacturing

operations through to the late 2000s. Those operations reportedly did not involve the use of PCB-containing oils. The City of New Bedford took ownership of the property in June 2006 through tax title foreclosure, and the site has been vacant since 2009. Since the building has been abandoned, there is evidence of trespassers at the site, and there has been some dumping of household items around the perimeters of the building. There is also evidence that trespassers have previously accessed the locked building.

A reported spill incident in April 1991 involved a release of oil and hazardous materials (OHM) from one or more drums at the site. A 1992 report indicated that the property owner and shop foreman were involved in litigation concerning violations relating to the storage and transportation of hazardous waste, and that the facility utilized OHM in large volumes during manufacturing. An underground storage tank (UST) was also removed from the site at an unknown date prior to 1998. That former tank was reportedly located immediately off the northern end of the site building. No records regarding the contents, size or condition of that former tank were reviewed.

Based on the site history and the known extent of PCB impacts, it appears that poor industrial housekeeping (i.e., storage and handling of PCB oils) and/or possible illegal dumping during the composite fiberglass board manufacturing operations was the primary cause(s) of the impacts to the site environment. The apparent source areas for those impacts are a loading dock area off the north end of the site building (where a former boiler room, machine shop, and the hydraulic press/manufacturing area were located) and in unpaved areas to the immediate northwest and to the immediate south/southwest of the site building. Although undocumented, these areas were likely impacted by spills, leaking containers or drums (e.g., exterior areas used for drum storage), and/or illegal dumping.

During limited site investigations conducted in 1993, 1997, and 1998, PCBs were detected in surficial soils at concentrations up to 49,000 milligrams per kilogram (mg/kg). PCBs were also detected in wipe samples collected from interior building surfaces at concentrations up to 18,000 micrograms per 100 square centimeters.

In June 1998, EPA issued a Unilateral Administrative Consent Order (UAO) to the property owner at that time. The owner subsequently conducted limited excavation activities to address hot spot areas to the immediate south, west, and northwest of the site building. Due to a lack of funding, the property owner's excavation activities ceased and the stockpiled soils were left on site.

Weston conducted response actions at the site between April 2000 and March 2001 under an EPA Removal Program. As part of that program, Weston further assessed PCB impacts in site soils. This included the collection of composite surficial soil samples in 25-foot by 25-foot grid cells in the unpaved areas at the site. Grab samples were also collected from the base of the loading dock area (presumably a catch basin sample) and the former tank grave both located to immediate north of the site building. PCBs were detected above 1 mg/kg in the vast majority of the grid cells, with PCBs detected greater than 100 mg/kg in soils to the immediate northwest and south of the site building, and in the loading dock sample.

Subsequent to those results, Weston conducted soil excavation activities over 65 of the 25-foot by 25-foot grid cells in unpaved areas to the northwest, west, southwest, and south of the site building where PCBs were detected. This included clearing and grubbing of an approximate 40,000-square-foot area. Soil excavation occurred to at least 12 inches below surface grade (BSG) in the grid cells. The deepest excavation

occurred to 72 inches BSG in a grid cell to the immediate northwest of the site building. Groundwater removal was not part of the EPA Removal Program; therefore, excavation ceased in some areas where PCBs greater than 1 mg/kg were still detected but where groundwater was observed. At the completion of the removal activities, approximately 2,000 tons of PCB contaminated soils were generated and transported off site for disposal. Weston collected confirmatory soil samples from the base of the final excavations in the 25-foot by 25-foot grid cells. Laboratory and field screening results indicated residual PCB concentrations in the post-removal samples ranged from non-detect to 230 mg/kg. To minimize exposure, Weston placed a geotextile fabric in the grids where elevated (EPA defined as greater than 2 mg/kg) PCB concentrations remained prior to backfilling to grade.

Also as part the EPA Removal Program, 45 wipe samples were collected from the interior building surfaces (floors, walls, and various pieces of machinery) for PCB analysis. PCB concentrations were above TSCA's High Occupancy Standard of 10 micrograms per 100 square centimeters in two of the samples, which were collected from a punch press unit and from the hydraulic press unit used for fiberglass bonding.

In 2008, Tighe & Bond completed additional investigations at the site. As part of that program, a 10-foot by 10-foot soil sampling grid was established. In general, soil samples were collected from varying depths where EPA's earlier program indicated remaining soils had PCBs greater than 1 mg/kg, from beneath the building slab floor (previously not assessed), and to the immediate north of the site building. A total of 253 samples were submitted for PCB analysis. PCBs were detected in soils at concentrations up to 18,000 mg/kg, with the highest concentrations detected in soils at or immediately below the groundwater table to the northwest of the site building (i.e., in general vicinity of where EPA reported post-removal results of 230 mg/kg in soils) and in soils immediately adjacent to the catch basin in the loading dock area to the north of the site building. As part of a groundwater assessment program, nine monitoring wells were installed. In general, groundwater results were below applicable MCP Method 1 standards. PCBs were also not detected in two surface water samples collected from Hobomock Swamp.

Also as part of our program, potential PCB impacts from historical site operations to site building materials and equipment were further evaluated. This included sampling of floor and walls (through concrete dust samples), machinery (through wipe samples), and subsurface pits (through water samples) within the building. In general, those findings further indicated building materials had been impacted by earlier site operations, with the most PCB-impacted concrete identified on the north/northwestern portion of the building where a machine shop, boiler room, and heat transfer system were located.

In 2013, the City obtained funding for conducting building demolition and remedial response actions at the site. In preparation for those activities, Tighe & Bond conducted supplemental investigations at the site in 2013 and 2014. This included a comprehensive in-situ soil sampling program for refining the delineation of the horizontal and vertical extent of PCB impacts in soils in previously un-sampled 10-foot by 10-foot grid cells across the known impacted areas, followed by further horizontal delineation in select grid cells further into the forested swamp. As part of these supplemental investigations, approximately 492 additional soil and "wetland" soil samples were submitted for PCB analysis. Our findings indicate that PCB impacts are more expansive than previous investigations had indicated, as the total volume of remaining soils (and wetland soils) impacted by PCBs greater than 1 mg/kg is estimated to be in excess of

6,000 cubic yards. This includes PCB impacts over 100 feet into the forested wetland to the west and northwest of the site building, with those impacts extending beyond the property line boundary into a west to east-oriented utility line easement and beyond.

There are no set redevelopment plans for the site, other than the area may be used for parking in the future, possibly by the industrial facility abutting the site to the south as part of future expansion of their operations. However, there is no current financial commitment from that abutting owner, and the funds available from MassDevelopment for this project are limited. Since site impacts extend well into a forested wetland which are too costly to address using the available funding, and since there are concerns that the former industrial building (with PCB impacts) and abandoned property are unrestricted to trespassers, the project goal at this time is generally limited to the following:

- Demolish the site building
- Remove soils with PCBs ≥500 mg/kg for off-site disposal
- Consolidate the remaining impacted soils from "upland" areas only by relocating PCB soils to achieve PCBs <1 ppm within the top 2 feet and <25 ppm from areas greater than 2 feet.
- Place a permanent capping system over the consolidated area
- Place a deed restriction on the property.

The selected approach is intended to be protective of human health (while not addressing the potential environmental/ecological risks at this time with in the forested wetland), with a goal of achieving a Permanent Solution Partial Statement for the site release in accordance with the MCP.

Section 2
Current Site Characteristics

2.1 General Site Description

The 241 Duchaine Boulevard property consists of an approximately 8-acre, elongated parcel of land located in an industrial setting (see Figure 3). The eastern portion of the parcel is currently developed with a single-story 33,757 square foot manufacturing building that was constructed circa 1960. The building is currently vacant and is scheduled for demolition. The site is identified as Lot 321 on the City of New Bedford's Assessor's Map No. 136. The site is currently zoned Industrial C.

The site building is a slab-on-grade facility constructed with concrete masonry unit (CMU) walls. Some interior CMU walls are also present in the general manufacturing area of the building. Two open subsurface pits and a holding tank are also located on the northern end of the building. The eastern portion of the building where the building's office area was located has brick masonry wall facades.

The exterior portions of the site are summarized as follows:

- An abandoned railroad spur line is located along the southern boundary of the site property. To the south of the rail spur is a complex occupied by the Titleist-Acushnet Company at 215 Duchaine Boulevard.
- Along the west (rear) side of the site building is lawn area that has become mostly overgrown since the site was abandoned. To the immediate west of this area is forested wetland that is part of Hobomock Swamp.
- Along the north end of the site building is a loading dock with a slightly pitched entrance with a catch basin at the base. The isolated catch basin is apparently not connected to an outlet pipe. A gravel covered area to the immediate west of the loading dock. An underground storage tank (UST) was previously located in the gravel covered area. The remaining areas to the north of the site building are covered by asphalt (generally in poor condition) that was previously used for parking for employees. To the north of the parking lot is undeveloped (privately owned) land that is also within Hobomock Swamp. A general west to east utility line easement is located within that area, to the immediate north of the site property line.
- To the east of the site building is landscaped lawn area with a drainage swale that borders Duchaine Boulevard.

Figures 3 and 4 show site area features.

2.2 Surrounding Resource Areas

As shown on Figure 2, the developed portion of the site parcel straddles the boundary between a Potentially Productive Aquifer (PPA) and a Non-Potential Drinking Water Source Area. The site is not located within one-half mile of a Zone II or an Interim Wellhead Protection Area of a public water supply, or a Public Surface Water Supply Protection Area (Zone A). Inland wetland areas associated with Hobomock Swamp are mapped to the west, southwest, and north of the site building. As shown on figures 1

and 2, Hobomock Swamp (and other swamp areas) extends further to the west, north and south of the site parcel. As also shown on Figure 2, portions of the swamp area also contain Priority Habitats of Rare Species and Estimated Habitats of Rare Wildlife as mapped under the Natural Heritage and Endangered Species Program (NHESP). Based on our Request for Information submittal to NHESP, the state-listed rare species found in the vicinity of the site is the Eastern Box Turtle, which is listed as a species of Special Concern.

No known potable water wells are located in the site vicinity.

2.3 Physical Characteristics

2.3.1 Site Topography

The Site Locus (Figure 1) identifies the property on the New Bedford North, Massachusetts Quadrangle map published by the USGS in 1979. The subject site is situated approximately 24 meters (80 feet) above mean sea level. Site topography is generally flat, with Hobomock Swamp abutting the site to the west and north. Within the forested swamp, the ground surface is fairly undulating in localized areas.

In preparation for wetlands permitting, the City of New Bedford had their surveyor complete a limited survey across the developed portion of the site and into forested wetland area to the west of the site building for establishing one-foot contours of the PCB-impacted areas near and within Hobomock Swamp. Using that survey information, a Partial Topographic Survey Plan was developed and is provided in Appendix B. As shown, site topography gently slopes to the west toward the wetland/swamp. The flagged bordering vegetated wetlands (BVW) boundary and property lines to the north and south of the site parcel are also shown on the surveyed plan. The approximate BVW/ wetland boundary line is also depicted on Figure 4 in Appendix A.

According to the Flood Insurance Rate Map (Panel No. 2552160005B, dated January 5, 1984) obtained from the Federal Emergency Management Agency (FEMA), the subject site is located in Zone C (areas of minimal flooding).

2.3.2 Site Geology

According to the *Soil Survey of Bristol County Southern Part* issued in October 1981 (published by the Soil Conservation Service in cooperation with USDA-National Resources Conservation Service), the soils located on the eastern portion of the site are classified as Urban land (Ur). Urban land consists of nearly level to moderately steep areas, where the soils have been altered or obscured by urban works or structures to the extent that classification is impossible. The soils on the western portion of the site are classified as Freetown Muck (Fm). Freetown Muck is described as consisting of nearly level, deep, poorly drained soils located in depressions. The top two inches consist of reddish brown mucky peat, followed by black and dark reddish brown muck to depths of 60 inches.

Soils encountered during assessment activities varied across the site. Soils in the vicinity of a former underground storage tank (UST) located off the north end of the building generally consisted of fine to coarse sands and gravel. Coarser fill was also encountered beneath the building. Soils on the northwestern and southern portions of the site varied depending on the depth of EPA's previous excavation activities. The soils used to backfill EPA's earlier excavations generally consisted of fine to medium sand and silt. Underlying the fill material to the northwest of the building was peat with silt and

clay to approximate depths of four to six feet BGS. This layer was followed by fine to medium sand with some silt and trace clay (to approximately 10 feet BGS).

According to the *Bedrock Geologic Map of Massachusetts* (1983), the bedrock underlying the site consists of granite. Bedrock was not encountered in the soil borings advanced at the site (maximum depth of 12 feet BGS).

2.3.3 Site Hydrogeology

The Hobomock Swamp wetland is situated to west of the site building and to the north of the site property. There are no streams or surface water bodies mapped in the disposal site area. The nearest water bodies are Black Pond located approximately 750 feet southeast of the site (within Hobomock Swamp), and an unnamed pond located approximately 750 feet to the west/northwest of the site across the north-south trending Conrail railroad tracks (see Figures 1 and 2).

The depth to groundwater at the site generally ranges between approximately four feet BSG on the eastern portion of the site, to less than two feet BSG to the immediate west of the site building. In the impacted portion of the forested wetland swamp, groundwater is typically less than one foot BSG, with pockets of standing water observed on the undulating ground surface in this area.

During the Phase II investigation, the groundwater flow direction was determined to be to the east-southeast (i.e., in the opposite direction of the swamp) at a shallow gradient of approximately 0.01 feet per foot.

2.4 Site History Overview

The site history and previous actions were detailed in the November 2001 Removal Program report as follows:

> *The site was first developed in 1960 as Polyply, Inc., a manufacturing facility for composite fiberglass boards in the New Bedford Industrial Park. In 1990, Polyply, Inc., filed for bankruptcy and restructured under the name Polymerine, Inc. Polyrnerine, Inc., ceased operations, but the building on site currently houses two non-related companies: New England Plastics Corporation, and A WT Environmental, Inc.*
>
> *Polyply, Inc., and Polymerine, Inc., were both involved in the production of composite plastic fiberglass boards. These boards were created by laminating several layers of fiberglass sheets together, coating them with a water-based epoxy resin, then bonding them using pressure and heat. In later years, the boards were purchased pre-impregnated, and then joined at the facility. For a majority of the life of the company, the oil used in the heat transfer system contained polychlorinated biphenyls (PCBs). At an unknown date, the heat transfer system was modified to use a non-PCB heat transfer fluid.*
>
> *On 26 October 1992, a study was conducted by Rizzo Associates, Inc. (Rizzo) to investigate the property for evidence of potential oil or hazardous material contamination of the soil or groundwater. Rizzo submitted a Level I Environmental Report for Shawmut Bank, stating that waste oils, resins, solvents, and other hazardous materials were observed being stored on site. The report also referenced a Massachusetts Department of Environmental Protection (MADEP) Spills database that recorded an incident involving the release of a hazardous material and a petroleum product at the site on 23 April 1991. In addition, at the time of the Rizzo investigation/report, the property owner and the shop*

foreman were involved in litigation concerning violations relating to the storage and transportation of hazardous waste.

In March 1993, Rizzo performed a Limited Environmental Audit on the property to address environmental issues that could result in either significant expenditures involved with ceasing operations at the site, or which would require the registration/transfer of permits to a new property owner.

In May 1993, Rizzo submitted a Level II Environmental Site Assessment Report for Shawmut Bank. This report stated that low levels of volatile organic compounds (VOCs) were detected in the soil and in groundwater collected from on-site monitoring wells, elevated levels of metals were detected in sediment samples, and PCBs were detected in soil/sediment samples at levels as high as 49,000 parts per million (ppm).

On 21 November 1997, at the request Of the MA DEP, EPA and Roy F. Weston, Inc., Superfund Technical Assessment and Response Team (START) personnel conducted a Preliminary Assessment/Site Investigation (PA/SI) at the site. At this time, START collected three wipe samples from interior surfaces of the building which were analyzed for PCBs, and 12 surface soil grab samples from exterior portions of the building which were analyzed for PCBs, pesticides, and metals. Samples collected during the PA/SI indicated PCB levels as high as 13,000 ppm in surface soil in the western section of the site, as well as low-level metals contamination (Refer to Removal Program Preliminary Assessment/Site Investigation Report for the Polymerine Site, New Bedford, Massachusetts, 7 January 1998 for sample locations and analytical results).

On 24 June 1998, the EPA issued a Unilateral Administrative Order (UAO) to the property owner. The owner began removal work at the site, but inadequate funding terminated activities. PCB contaminated soil, totaling approximately 220 tons, was excavated and stockpiled in the parking lot on site, but was not disposed of. The PCB-contaminated soil was not properly secured, and the polyethylene tarp covering the pile had been repeatedly blown, or taken off. The lot where the soil was staged was not restricted, and adverse weather conditions threatened to spread the contamination past the confines of the pile.

During Paragon's 1998 investigation, an area to the immediate north of the site building was identified as a former UST location where crushed gravel had been placed (i.e., to the immediate east of the loading dock). During our Phase I investigation, no information was available or reviewed in site records or in municipal and state files relative to the former tank capacity, contents, years installed or removed, or condition of the tank at the time of removal.

After Polymerine ceased operations in the mid-1990s, the site was occupied by New England Plastics Corp. and Aquapoint, Inc. New England Plastics Corp performed plastic fabrication operations, and Aquapoint designed and manufactured wastewater treatment systems. The City of New Bedford took ownership of the property in June 2006 through a tax title. Following the City's acquisition, the two tenants still occupied the site building. By approximately 2008, Aquapoint vacated the site, and after early 2009 New England Plastics Corp vacated the site. The site building remains vacant at this time and is scheduled for demolition.

Historical aerials available at http://www.historicaerials.com/aerials indicate that site area was undeveloped, wooded area prior to the development of the industrial park circa 1960. After building construction, there appears to be limited changes in site conditions other than that overgrown vegetation encroaches upon the western (rear) side of the building and the western edge of the parking area to the north of the building at various

times. This indicates that the lawn area to the west of the site building and northern parking area was not actively managed as such throughout site operations.

2.5 Risk-Based Standards for Soil and Groundwater

Under the MCP, soil and groundwater at disposal sites are categorized for risk assessment purposes based upon the location and uses of the site and site groundwater. The 2009 Phase II CSA stated that most "accessible" soils at the site (i.e., soils between 0 and 3 feet BSG in unpaved areas) met the criteria of the S-2 soil category based on site use. With the site building now being vacant, the S-3 soil category for accessible site soils in unpaved areas is applicable because there is only evidence of infrequent trespassers and their "intensity of use" is considered low.

The Phase II CSA also indicated that the GW-2 groundwater category (i.e., protective of vapor intrusion into occupied structures) was applicable to the interior monitoring wells MW-5 and MW-6 because they were installed within the site building and the groundwater table is less than 15 feet BSG. The GW-1 groundwater category was applicable to monitoring wells MW-2, MW-3, MW-7 and MW-8 because these wells were installed along the edge of the transition between the boundaries of the PPA and the Non-Potential Drinking Water Source Area (see Figure 3). [Note: The GIS mapping of that transition boundary appears to be slightly off-set to the east because it appears that it was designed to, at a minimum, capture all of the site building and the paved surface area to the north of the building.] The GW-3 groundwater category applies to all groundwater in Massachusetts because it has the potential to discharge to surface water.

The Phase II CSA also noted that TSCA regulations are applicable to the site due to the presence of PCBs in site soils that meet the definition of a bulk PCB remediation waste. At the time of our earlier Phase II submittal, the site building was occupied, and the site was considered to be a high occupancy area as defined in §761.3. However, since the site is now vacant, the site now meets the low occupancy area criteria. Furthermore, the planned future use of the site as parking area only also meets the low occupancy area criteria. Therefore, in addition to PCBs being compared to MCP Method 1, Risk Characterization Standards, PCB concentrations will also be compared to the TSCA's Risk Based Standard for low occupancy use. The cleanup standards for PCBs in a low occupancy area is at concentrations up to 25 mg/kg for unrestricted use, at concentrations >25 mg/kg and ≤50 mg/kg if the site is secured by a fence meeting TSCA regulations, and at concentrations >25 mg/kg and ≤100 mg/kg if the area is covered with a cap meeting TSCA regulations. Risk-based approval is required for cleanup standards >100 mg/kg.

Section 3
Summary of Previous Site Investigations

As previously mentioned, copies of previous site investigation reports are provided on the attached diskette for further reference.

3.1 Brief Overview of Pre-Removal Investigations

A brief summary of Geraghty & Miller's 1993 investigation and Weston's 1997 investigation were reviewed in the previous section.

Paragon's 1998 investigation included sampling surficial soils in 50 grid locations in unpaved areas to the northwest, west, and south of the site building, and along the immediate north of the site building where the former UST was located. The highest PCB concentrations (up to 19,000 mg/kg) were detected in soils off the northwest corner and southern portion of the site building, and in the unpaved tank grave area.

3.2 Summary of EPA's Removal Program

As mentioned earlier in the site history review, a total of approximately 220 tons of PCB-impacted soils were excavated from the site by the former owner circa 1998. As shown on a "Site Diagram and Work Zones" figure in the EPA report, this reportedly included the excavation of contaminated soils from 0 to 8 feet BSG (no dimensions shown) in an unpaved area immediately off the southern portion of the site building, from 0 to 2 feet BSG across a 25 foot by 60 foot area off (to the west) of the northwest corner of the site building, and across a 6 foot by 6 foot (depth reported as unknown) in an unpaved area to the northwest of the site building. For further reference, a copy of that EPA report figure is presented as CSM Plan B (Historical) in Appendix A.

As part of EPA's Removal Program, Weston collected composite surficial soil samples in a 25-foot by 25-foot sampling grid pattern across the unpaved areas to the northwest, west, and south of the site building between April 18, 2000 and April 20, 2000. Each sample was collected from 0 to 3 inches BSG. Using this sampling grid pattern, Weston conducted a supplemental soil sampling event between August 24, 2000 and August 28, 2000 in unpaved areas further to the northwest and south of the site building, as well as to the southeast of the site building. Two grab samples (0 to 12-inches) were also collected from the grass swale off Duchaine Boulevard to the northeast of the site building. A grab soil sample was also collected from the loading dock area (presumably from the catch basin at the base of the pitched loading dock), and two grab samples were also collected from the gravel covered former tank grave to the immediate north of the site building.

Between October 16, 2000 and March 13, 2001, Weston conducted soil excavation over 65 of the 25-foot by 25-foot grid cells in unpaved areas to the northwest, west, southwest, and south of the site building where PCBs were detected. This reportedly included clearing and grubbing of an approximate 40,000-square-foot area, and the use of swamp pads for accessing the forested wetland areas along the western and northern perimeters of where excavation occurred. Soil excavation occurred to at least 12 inches BSG in each grid cell, except in five grid cells to the south of the railroad spur on the southern portion of the site where total excavation depths were between 6 and 12 inches BSG. The deepest excavation occurred to 72 inches BSG in grid cell to the

immediate northwest of the site building. Groundwater removal was not part of those activities. Therefore, Weston ceased further vertical excavation in areas where groundwater was observed and where PCB impacts greater than 1 mg/kg were still detected in field screening samples. As part of these activities, approximately 2,000 tons of PCB-contaminated soil was transported off-site for disposal. This included the 220 tons of stockpiled soils that had been generated prior to EPA's Removal Program, as summarized above.

Weston collected confirmatory soil samples from the base of the final excavations in the same 25-foot by 25-foot grid cells. A total of 64 confirmatory soil samples were collected from the 65 different cells where contaminated soil excavation had occurred. [Note: In a "hot spot" area to the northwest of the site building, two abutting cells were represented by one sample). Each sample was analyzed for PCBs utilizing a Gas Chromatograph Electron Capture Detector (GC/ECD) in the EPA mobile laboratory, and 10% of the samples were also submitted to EPA's New England Regional Laboratory (NERL) in Lexington, Massachusetts for confirmation analysis. Laboratory and field screening results indicated residual PCB concentrations ranged from non-detect to 230 mg/kg in the 64 samples. Of those samples, 26 samples had PCBs concentrations greater than 1 mg/kg, and one sample had PCBs greater than 100 mg/kg. To minimize exposure to residual PCB impacted soils, a geotextile fabric was placed in the grids where PCB concentrations in excess of 2 mg/kg remained.

Also as part of the Removal Program, EPA collected 45 wipe samples from the site building. The samples were collected from the interior floors and walls, as well as from the hydraulic press unit (two samples) located on the northern portion of the building and from a punch press (one sample) located on the southern portion of the building. Laboratory analytical results indicated that PCB concentrations ranged from 0.25 micrograms per 100 square centimeters (µg/100 cm^2) to 64 µg/100 cm^2 in the wipe samples. PCB concentrations in three of the wipe samples exceeded TSCA's High Occupancy Standard of 10 µg/100 cm^2, and those samples were identified as the "NEP Hydraulic Press" (sample ID: W29), the "NEP Punch Press" (sampled ID: W47), and the "NEP Press Room" (floor sample ID: W18).

3.3 Summary of Tighe & Bond Phase II Investigations

Between April 2008 and February 2009, Tighe & Bond conducted Phase II investigation activities at the site. In general, the primary goals of that investigation were as follows: 1) to further delineate PCB impacts in soils at depth in areas identified by Weston as having PCBs greater than 2 mg/kg following the removal program; 2) to further delineate PCB impacts to the northwest of the site building where the EPA excavation ceased; 3) to evaluate potential PCB impacts to soils in areas beneath the site building which was not previously investigated; and 4) to evaluate potential PCB impacts (and other contaminants of potential concern) in site groundwater. In summary, the following activities were completed as part of the Phase II:

- Collection of 253 soil samples from depth in the remaining areas of concern identified by Weston after EPA's removal program was completed, and from areas beneath and to the immediate north of the site building, in the vicinity of the loading dock catch basin and the apparent former UST grave. For soils, we established a 10-foot by 10-foot sampling grid across the site, with sample depth intervals established every one foot. Each sample was submitted for PCB analysis. Select samples were also submitted for extractable petroleum

hydrocarbons (EPH) analysis with target polycyclic aromatic hydrocarbons (PAHs).

- Collection of 12 groundwater samples from nine site monitoring wells (MW-1 through MW-9). The groundwater samples were collected in general compliance with EPA Region I's Low Stress (low flow) Purging and Sampling Procedure. Each sample was submitted for laboratory analysis for PCBs, EPH (with target PAHs), and volatile organic compounds (VOCs).
- Collection of two surface water samples (identified as SW-1 and SW-2) from areas of standing water present in Hobomock Swamp to the west of the developed portion of the site. Each sample was submitted for PCB analysis.
- Collection of water samples from a small, open pit identified in the boiler room (referred to a "water pit") and from the open pit associated with the hydraulic press unit. The water samples were collected using a peristaltic pump and submitted for PCB analysis.
- Collection of 73 concrete samples from the site building for PCB analysis. Of those samples, 54 samples were collected from the concrete floor and 19 samples from interior CMU walls. The concrete samples were collected by advancing a hammer drill approximately one-half inches into the concrete surface. At eight of the concrete floor sample locations, the samples were collected at deeper depths (0.5-inch to one-inch depth interval) to further delineate the depth of impacts to the concrete in those areas. For reference, the thickness of the concrete floor was generally found to be three inches (or less) across the site, except in the small "tank room" located on the southern end of the building where the concrete floor thickness was approximately eight inches.
- Collection of five wipe samples from the non-porous metal surfaces associated with the former hydraulic press unit for PCB analysis. The samples were collected from the four corners (samples Wipe 1 through Wipe 4) and from the center (sample Wipe 5) of the unit.

The sample locations and laboratory reports for these earlier samples are provided in the attached Phase II CSA report (attached). For reference, the approximate locations of where building samples were collected are also shown on the Building Materials Sampling Plan provided as Figure 5 in Appendix A. [Note: The former room uses labeled on Figure 5 are based on the "Wipe Sample Location Diagram" provided in EPA/Weston's Removal Program report of November 2001.] Also for reference, the approximate locations of the monitoring wells and the earlier surface water sample locations are shown on Figure 4. Figures showing the soil sampling grid across the impacted areas are further reviewed in Section 4 below.

3.3.1 Phase II Soil Results

Table 3-1 provided in Appendix C summarizes the soil results from the earlier Phase II investigation. In summary, PCB concentrations ranged from non-detect to 18,000 mg/kg in the 253 samples, with PCB results greater than 1 mg/kg in 70 of the samples and PCB results greater than 100 mg/kg in 12 of the samples.

3.3.2 Phase II Groundwater Results

Table 3-2 provided in Appendix C summarizes the groundwater results from the earlier Phase II investigation. As shown, PCBs were detected above laboratory reporting limits in monitoring wells MW-4, MW-5, and MW-6 at concentrations ranging between 0.83

micrograms per liter (µg/L) and 15 µg/L. PCBs were not detected above laboratory reporting limits in the other six monitoring wells installed at the site.

3.3.3 Phase II Surface Water and Process Water Results

Table 3-3 provided in Appendix C summarizes the surface water results (samples SW-1 and SW-2) from the Phase II investigation. As summarized, PCBs were not detected in the two surface water samples.

Table 3-3 also summarizes the process water results collected from pits within the building. As shown, PCBs were detected at 0.55 µg/L in the "water pit" sample.

3.3.4 Phase II Concrete Results

Table 3-4 provided in Appendix C summarizes the concrete dust sample results. The table includes sample depth for floor samples and sample height for CMU wall samples. Table 3-4 also includes a general description of the sample area.

In summary, PCB concentrations ranged from non-detect to 100,000 mg/kg in the samples, with PCB results greater than 50 mg/kg in 17 of the 73 samples. PCB results greater than 500 mg/kg were identified in five sample areas, including in wall sample C-22 (100,000 mg/kg), floor sample C-24 (4,200 mg/kg), floor samples C-25 (51,000 mg/kg for 0 to 0.5-inches, and 78,000 mg/kg for 0.5 to 1-inches), wall sample C-26 (1,600 mg/kg), and floor samples C-23 (790 mg/kg for 0 to 0.5-inches, and 630 mg/kg for 0.5 to 1-inches). As shown on Figure 5, these samples were each collected from the former boiler room area on the northern portion of the site building. The PCB results for the concrete samples are color coded on Figure 5 (for the floor samples collected from 0 to 0.5-inches only, and for the wall samples), with PCB concentrations from non-detect (green), between 1 mg/kg and less than 50 mg/kg (red) and 50 mg/kg or greater (black). As shown, PCBs at 50 mg/kg or greater were located on the northern portion of the building in the former boiler room, former machine shop, and in the former "main room" that contains the former hydraulic press.

3.3.5 Phase II Wipe Sample Results

Table 3-5 provided in Appendix C summarizes the five wipe sample results from our Phase II investigation. PCBs were detected in all five wipe samples at concentrations ranging from 79 micrograms per 100 square centimeters (µg/100 cm^2) in sample Wipe-1 to 3,100 µg/100 cm^2 in sample Wipe-5.

Section 4
Supplemental Site Investigations

Between April 2013 and August 2014, Tighe & Bond conducted supplemental investigations at the site. This involved additional soil, groundwater, and building materials sampling.

4.1 Supplemental Soil Sampling

Tighe & Bond collected supplemental soil samples from the site between April 2013 and August 2014 for further delineation of the PCB impacts to site soils. The 10-foot by 10-foot sampling grid that Tighe & Bond previously established for the site was used for identification of the samples. Figures 6 through 11 provided in Appendix A show the grid cells for samples collected from depths within the 0 to 12-inch interval (Figure 6), the 12 to 24-inch interval (Figure 7), within the 24 to 36-inch interval (Figure 8), within the 36 to 48-inch interval (Figure 9), within the 48 to 60-inch interval (Figure 10), and from depths greater than 60-inches below grade (Figure 11). These figures also include samples collected during the Phase II investigation.

4.1.1 April-May 2013 Event

Tighe & Bond personnel collected 12 soil samples on April 24, 2013 and 11 additional soil samples on May 30, 2013. The samples were collected from select cells from shallow depths of 0 to 1-foot or 1 to 2-feet BSG using hand auger equipment.

4.1.2 March 2014 Event

Between March 17 and March 24, 2014, Tighe & Bond completed a comprehensive in-situ soil sampling program intended to refine the delineation of the horizontal and vertical extent of PCB impacts in soils in grid cell areas where earlier investigations indicated PCBs were present at concentrations greater than 1 mg/kg. This program involved the use of drilling equipment operated by Martin GeoEnvironmental, LLC (Martin) under Tighe & Bond observation. This included the use of a hand-operated pneumatic hammer to drive a split-spoon sampler for collection of soil samples in the wetland resource areas. For the upland areas, a rubber tracked-mounted Geoprobe® 6610DT vibratory direct-push drill rig unit was used. As part of this program, a total of approximately 459 soil samples (plus seven duplicates) were collected from varying depths (in one-foot intervals) between 0 and eight feet BSG for PCB analysis.

The findings from the comprehensive in-situ soil sampling program included the following:

- Visual and olfactory evidence of petroleum was identified in soils situated generally between 4 to 7 feet BGS in abutting grid cells L-39 and M-39 to the northwest of the site building, between monitoring wells MW-4 and MW-8. Evidence of petroleum-type contamination (odors or staining) was not observed at other locations sampled.

- Drilling in grid cell T-34 in the loading dock area off the north end of the building occurred adjacent (to the immediate north) of the catch basin located in this area. This catch basin structure consists of a precast concrete structure with a three foot radius by approximately four feet in depth, and there was no apparent

outlet pipe. At the time of this drilling event, this structure was filled with silty water beginning approximately six inches BSG. During boring advancement in this area, groundwater was also encountered in the top one foot. As shown on the surveyed plan in Appendix B, the base of this loading dock area is at least two feet lower in elevation than in surrounding grade outside of the loading dock. Therefore, the water in the catch basin is presumably groundwater, and the catch basin is presumably a "beehive" type structure that allows surface runoff to drain into groundwater at this location.

- Boring refusals occurred at shallow depths in abutting grid cells Z-34 and AA-34 off the north end of the building and to the east of the apparent former UST grave. The refusals were caused by the presence of the process water holding tank located beneath the building floor and apparently extends partially beyond the building footprint (see Figure 5).

- Boring advancement was planned for grid cells S-32, U-33, V-33, and W-33 beneath the northern portion of the building, but those interior borings could not be advanced due to the presence of the old boiler (cells U-33, V-33, and W-33) and other heavy machinery (cell S-32).

4.1.3 July 2014 Event

On July 9, 2014, Tighe & Bond collected 14 additional wetland soil samples in areas further to the north and west of the site, in Hobomock Swamp. The purpose of these samples was to help further define the limits of the PCB impacts in the swamp. The samples were each collected from the 0 to 1-foot interval approximately at locations up to 50 feet from one another using the same 10-foot by 10-foot grid cell numbering system (see Figure 6 for reference).

4.1.4 August 2014 Event

On August 6, 2014, Tighe & Bond collected seven additional wetland soil samples in areas further into Hobomock Swamp on the site parcel at distances 30 feet (or greater) from earlier grid samples. These samples were each collected from the 0 to 1-foot interval using the same 10-foot by 10-foot grid cell numbering system (see Figure 6 for reference).

4.2 Supplemental Groundwater Sampling

On April 24, 2013, Tighe & Bond collected groundwater samples from the existing exterior well MW-4 and from the existing interior well MW-5 (see Figure 4). The road box cover and the gripper cap on interior well MW-5 were missing at the time of this sampling event.

Groundwater samples were collected using low-flow procedures, in general compliance with EPA Region I's Low Stress (low flow) Purging and Sampling Procedure. During low flow purging of the wells, field measurements for pH, reduction-oxidation potential (redox), dissolved oxygen (DO), specific conductance, temperature, and turbidity were monitored. Low flow purging of the wells occurred for at least 30 minutes prior to beginning the collection of samples for laboratory analysis of PCBs. Prior to collection of the samples for laboratory analysis, the turbidity readings in wells MW-4 and MW-5 were 14 NTUs and 73 NTUs, respectively. These values are higher than the 5 NTU reading that EPA considers to be stabilized by default.

On May 30, 2013, Tighe & Bond re-sampled well MW-5 using low-flow procedures. During this event, low flow purging was conducted for 60 minutes and the final turbidity readings in well MW-5 before sampling was 11.2 NTUs. During this event, it was also noted that there was significant iron staining in this well. The sample was field-filtered using a 0.45 micron filter prior to submittal for PCB analysis.

On July 9, 2014, Tighe & Bond collected groundwater samples from wells MW-4, MW-5, and MW-8 using low-flow procedures. During this event, final turbidity readings were 9.5 NTUs in well MW-5, 6.9 NTUs in well MW-4, and 2.1 NTUs in well MW-8 before sampling occurred. The samples were submitted for total PCBs and dissolved PCBs (field-filtered using a 0.45 micron filter prior to submittal).

4.3 Supplemental Building Materials Sampling

On May 1, 2013, Tighe & Bond collected four samples of other suspect building materials that may contain PCBs (i.e., PCB Bulk Product Wastes) in preparation for building demolition activities. These four samples are described as follows:

- Sample PCB-01: Expansion joint caulking (original inner layer) of the CMU walls along the western exterior portion of the building.
- Sample PCB-02: Paint chip sample on the exterior of the CMU walls near former tank room on the southern portion of the building.
- PCB-03: Window glazing compound collected from the window system on east wall of the former office area.
- PCB-04: Caulking material from the interior of the building between the metal window frame and the brick on north entranceway to the former office area.

The approximate locations of these four samples are shown on Figure 4.

4.4 Laboratory Results

All soil, groundwater, and building material samples collected during our supplemental investigations were submitted to ESS Laboratory (ESS) of Cranston, RI for PCB analysis. Laboratory reports are provided (on a diskette) in Appendix D. [Note: As part of our March 2014 program, additional soil samples were collected from the grid cells and held for analysis. The "hold" samples on the chain of custodies that were ultimately not analyzed for PCBs are not discussed further herein.]

4.4.1 Soil Results

Table 4-1 provided in Appendix C summarizes the results for the 492 supplemental soil samples that were submitted for PCB analysis. In summary, PCB concentrations ranged from non-detect to 13,100 mg/kg in the samples, with PCB concentrations ≥1 mg/kg in 182 of the samples and PCB concentrations ≥ 100 mg/kg in 19 of the samples.

4.4.2 Groundwater Results

Table 4-2 provided in Appendix C summarizes the supplemental groundwater results. As shown, total PCBs were detected at 6.19 µg/L and 512 µg/L in wells MW-4 and MW-5, respectively, during the April 24, 2013 event. During the May 30, 2013 event, dissolved PCBs were not detected above the laboratory reporting limit of 0.10 µg/L in well MW-5.

During the July 2014 event, total and dissolved PCB results were below 10 µg/L in wells MW-4 and MW-5, and no PCBs were detected in well MW-8.

4.4.3 Bulk Product Sample Results

A summary of the PCB results in the four building material samples is summarized in Table 3-3 provided in Appendix C. As shown, PCBs were detected between 0.956 mg/kg and 5.45 mg/kg in samples PCB-01 through PCB-03, and PCBs greater than 50 mg/kg were detected in the caulk sample PCB-04.

4.4.4 Data Usability

All soil, groundwater, and building material samples collected during our supplemental investigations were submitted for PCB analysis using soxhlet extraction (EPA Method 3540C). Between the sampling events, a total of 36 separate laboratory reports were generated, with 32 of those lab reports for soil/wetland soil samples.

During our supplemental investigations, six duplicate samples were submitted for PCB analysis. Table 4-4 provided in Appendix C summary those results. As shown, PCB results were generally consistent for the duplicate samples, with the slight differences likely being associated with the heterogeneity of the soils matrix in those cells.

All soil and groundwater samples collected during our supplemental investigations were also submitted in compliance with MassDEP Data Quality Enhancement (DQE) protocols of July 2010. The MCP Case Narratives and Analytical Method Report Certification Forms are included in the analytical reports. In accordance with the DQE protocols, the laboratory analytical reports were reviewed for compliance with the DQE policy. Presumptive Certainty requirements were met for each laboratory analytical reports. As indicated in several of the MCP Forms from those laboratory reports, not all data achieved the QC performance standards in order to meet the "Presumptive Certainty" status of the MCP. However, this is a common occurrence, especially when a significant number of samples are submitted for laboratory analysis. In addition, the majority of the laboratory reports contain data for wetland soil samples that are not being addressed as part this PCB Cleanup Plan/Phase IV RIP, as further discussed in the sections below. The relevant data from these supplemental investigations (and during future site cleanup) that will be used as part site release closure will be further reviewed in upcoming submittals.

4.5 Updated Risk Characterization Summary

In the 2009 Phase II CSA submittal, a Method 1 Risk Characterization was performed in accordance with the MCP to evaluate the potential risks to human health posed by contaminants in site soils and groundwater.

Since the Phase II CSA submittal, the site has been vacated, and the City is planning to demolish the site building and place a capping system (i.e., paved surface) over the "to be consolidated" PCB-impacted soil area (further discussion below). The paved area may be used for parking in the future, possibly by the industrial facility abutting the site to the south as part of future expansion of their operations on their property. Therefore, Method 1, GW-2 standards currently do not apply to the site, and will not apply to the site in the foreseeable future.

Within Table 3-1 (Phase II soil results), Table 3-2 (Phase II groundwater results), Table 4-1 (supplemental soil results), and Table 4-2 (supplemental groundwater results), soil

and groundwater results are compared to applicable Method 1 standards in accordance with the MCP. Since the earlier Phase II CSA submittal, some Method 1 standards were changed (including for PCBs) with the changes to the MCP, current version effective date of April 25, 2014. Within the tables, soil and groundwater results are also compared to Method 3 Upper Concentration Limits (UCLs). As shown, PCBs were detected above the S-1 standard of 1 mg/kg and above the S-2 and S-3 standard of 4 mg/kg in numerous samples. PCBs were also detected above the Method 3 UCL of 100 mg/kg in 31 soil samples. Further discussion on PCB impacts to site soils is provided in the section below.

In groundwater, total PCBs were detected above the Method 3 UCL value of 100 µg/L in well MW-5 during the April 24, 2013 event. However, during the two subsequent events, PCBs were not detected above the GW-3 standard of 10 µg/L, and dissolved PCBs were not detected above laboratory reporting limits during either event. In well MW-4, total PCBs were detected above the GW-1 standard of 0.5 µg/L (but below the GW-3 standard), but dissolved PCBs were not detected above laboratory reporting limits in that well during the July 9, 2014 sampling event.

Also in the 2009 Phase II CSA submittal, a Stage 1 screening was performed to evaluate whether the current site conditions represent "apparent significant harm" or "potentially significant exposure" to environmental receptors in accordance with the MCP. In summary, significant environmental harm was determined to be not readily apparent at the site. However, a potentially significant exposure to habitat was identified due to the detection of PCBs in the wetland "sediments" above toxicity effects concentrations (TEC) screening thresholds established by MassDEP. Upon further review, TECs are not applicable because the samples collected from Hobomock Swamp are not sediments as defined in the MCP because there is no water body "bank," as defined in the Wetlands Protection Act Regulations (310 CMR 10.00) associated with the portion of the Hobomock Swamp impacted by the site release. Therefore, the samples collected from Hobomock Swamp are considered to be wetland soils for the purpose of this MCP submittal. However, since PCBs are present within two feet of the ground surface and environmental receptors are identified at the site (including a species of Special Concern) further habitat evaluation under Stage II will be warranted in the future.

4.6 Further Discussion of PCB Impacts in Site Soils

Between the 2009 Phase II investigations and the supplemental investigations described herein, Tighe & Bond submitted a total of 745 soil (and wetland soil) samples for PCB analysis. Table 4-5 provided in Appendix C summarizes PCB results for all of these samples, with PCB results shown in **green** for concentrations of non-detect, in **blue** for concentrations less than 1 mg/kg, in **orange** for concentrations between 1 mg/kg and less than 25 mg/kg, in **red** for concentrations between 25 mg/kg and less than 50 mg/kg, in **purple** for concentrations between 50 mg/kg and less than 100 mg/kg, in **black** for concentrations between 100 mg/kg and less than 500 mg/kg, and in **black** for concentrations equal to or greater than 500 mg/kg. This same color-coding results scheme is also presented in Figures 6 through 11. For further reference, the figures also include the post-remedial PCB results from the earlier EPA Removal Program for the 25-foot by 25-foot grid cells based on figures presented in that earlier report.

Table 4-6 provided in Appendix C further summarizes the delineation of PCBs in site soils from Tighe & Bond's investigations. As shown, the total number of soil samples with PCBs either as non-detect or less than 1 mg/kg is 472, or approximately 64% of the

samples. The total number of samples with PCBs equal to or greater than 100 mg/kg is 31 (or approximately 4% of the samples), and the total number of samples with PCBs equal to or greater than 500 mg/kg is 11 (or approximately 1.5% of the samples). As also shown, 76% of our soil samples were collected from depths of 0 to 3 feet BSG, where the vast majority of the PCB contamination is located in areas outside of where the earlier EPA removal program occurred. However, as shown on Figure 6, the horizontal extent of the PCB impacts has not been fully delineated within the 0 to 12-inch interval within the wetland areas to the west and northwest of the site building. For further reference, Figure 6A provided in Appendix A includes the sampling grid results for the 0-12-inch interval overlain on aerial photograph imagery.

Based on these findings and some conservative assumptions relative to PCB impacts in grid cells not sampled and/or where certain depth intervals were not sampled, the estimated total volumes of soils impacted by PCBs greater than 1 mg/kg is 6,500 cubic yards, greater than 100 mg/kg is 1,200 cubic yards, and greater than 500 mg/kg is 425 cubic yards.

Section 5
MCP Remedial Alternative Evaluation

The MCP requires that the Phase III include the identification, evaluation and selection of one or more comprehensive Remedial Action Alternatives (RAAs) and includes a Remedial Action Plan (RAP) in accordance with 310 CMR 40.0861. The RAP includes a recommended remedial alternative that will achieve a level of No Significant Risk and constitute a Permanent or Temporary Solution for environmental conditions at the site. Included in this plan is a determination of the feasibility of implementing the solution selected as a result of this process. A Permanent Solution means implementation of measures that attain a level of control such that no substance of concern will present a risk to health, safety, public welfare or the environment during any foreseeable period of time. A Temporary Solution means implementation of measures that eliminate any substantial hazard that is presented by oil and/or hazardous materials (OHM) at a disposal site until a Permanent Solution can be achieved.

5.1 Initial Screening of Remedial Action Alternatives

In this initial screening, remedial technologies typically utilized for the remediation of PCBs in site soils are reviewed. Groundwater at the site has not been significantly impacted by the release, and therefore groundwater treatment alternatives are not reviewed. Also, since building demolition is scheduled to occur and no future buildings are planned for the site, potential indoor air exposure is not a concern. Consequently, RAAs considered for this initial screening focused on the remediation of PCBs in soil at the site. Due to these conditions and because the site cleanup is also governed under TSCA regulations, there are limited RAAs that are being considered for this initial screening, which include the following:

- Excavation of impacted soils (potentially including wetland soils) for off-site disposal.

- Placement of barrier cap (e.g., pavement) over the impacted area, with implementation of a deed restriction that meets TSCA and MCP requirements

As discussed, PCB impacts in site soils extend to depths greater than seven feet BSG in the most impacted areas. Since PCB impacts extend below the groundwater table, dewatering efforts will be warranted. Furthermore, control of water would also be warranted for the excavation of the impacted wetland soils in Hobomock Swamp. Since the site building is scheduled to be demolished, there will be fewer impediments for accessing impacted soils adjacent to and beneath the building.

As discussed, PCB impacts from the release extend into wetland soils within Hobomock Swamp. Since it is infeasible to cap those areas, excavation of impacted wetland soils would be warranted for off-site disposal and/or for consolidation under a barrier cap. The use of a barrier cap alone is not a feasible alternative for the site because there are limited areas where PCBs are well above Method 3 UCLs and TSCA's Risk Based Standards. Therefore, this alternative would need to be combined with some targeted excavation of impacted soils for off-site disposal.

5.2 Detailed Evaluation of Remedial Action Alternatives

In performing the detailed evaluation, the following items of concern are noted:

- The City is using MassDevelopment funding for this project, and that funding is limited to approximately $1,370,000. There are no set redevelopment plans for the site, other than use of the area for parking in the future, possibly by the industrial facility abutting the site to the south as part of future expansion of their operations. However, there is no current financial commitment from the abutting property owner, and there are no additional funding options available for this project at this time.

- This project not only involves the cleanup of environmental impacts at the site, but also involves demolition of an abandoned building that has evidence of trespassers. Building demolition will include abatement of asbestos and hazardous materials, including the proper decontamination, handling, and/or disposal of PCB remediation waste (e.g., PCB-impacted concrete) and PCB bulk product waste under 40 CFR §761.

- The delineation of the PCB impacts into Hobomock Swamp has not been completed to date. Therefore, a Permanent Solution for the site release cannot be achieved without completing either additional assessment and/or a Method 3 (Stage II) Ecological Risk Characterization.

As also indicated above, there are limited remedial options for the site that are technical viable for reducing contamination and considered potentially feasible for implementation. Therefore, our detailed evaluation reviews these three general options for the removal (and off-site disposal) and/or consolidation of PCB-impacted soils:

- Option 1: Excavation and off-site disposal of all soils and wetland soils with PCBs ≥1 mg/kg.

- Option 2: Excavation and off-site disposal of all soils and wetland soils with PCBs ≥100 mg/kg, and consolidate the remaining soils with PCBs ≥ 1 mg/kg under a TSCA cap.

- Option 3: Excavation and off-site disposal of all soils and wetland soils with PCBs ≥500 mg/kg, and consolidate the remaining upland soils with PCBs ≥ 1 mg/kg under a TSCA cap.

Table 5-1 provided in Appendix C summarizes our opinion of probable construction costs for the cleanup of the site (and building demolition) under these three general scenarios. In general, each of these options are technically feasible alternatives, but the estimated costs to complete Option 3 (i.e., the least expensive option) still exceeds the available funding for this project.

5.3 Selection of Remedial Action Alternative and Remedial Action Plan

As reviewed during the meeting with EPA and MassDEP officials at the City's offices in April 2015, a targeted/risk-based approach to cleanup has been selected, with a goal of

achieving a Permanent Solution Partial Statement for site RTN 4-1347. As part of this proposed approach:

- Cleanup of impacted wetland soils on the abutting, off-site property will not be addressed under the subject site's RTN in accordance with the liability relief provision of the Massachusetts Brownfields Act.

- Soils with PCBs ≥500 mg/kg will be excavated for off-site disposal. [Note: No individual soil sample collected from abutting properties had PCBs ≥500 mg/kg.] For areas beneath the proposed capping system, the cleanup goal will be PCBs <500 mg/kg in individual representative samples, with calculated Exposure Point Concentrations (EPCs) for PCBs less than the MCP Method 3 Upper Concentration Limit (UCL) of 100 mg/kg.

- As part of building demolition, the uncoated/unpainted concrete floor with PCBs ≥500 mg/kg will be segregated for off-site disposal, and the remaining "oil-stained" concrete floor with PCBs <500 mg/kg will be segregated, processed, and reused on site under the capping system. This separation of coated and uncoated concrete is necessary to avoid additional MassDEP solid waste permitting related to reusing painted/coated concrete on-site.

- For the upland areas between where the proposed capping system will be constructed and the wetland boundary, soils with PCBs ≥25 mg/kg will be excavated for consolidation under the proposed capping system. The cleanup goal of PCBs <25 mg/kg in individual representative soil samples from these areas will meet TCSA's "low occupancy use" requirements per Part 761.3, which will be applicable to the site under the anticipated reuse of the site for parking only.

  From a MCP standpoint, the EPC for PCBs outside of the capping system in upland areas on site greater than 24 inches BSG will be less than 20 mg/kg, which will pose No Significant Risk to a future construction worker receptor. In addition, since PCBs are known to bio-accumulate in biota, the cleanup goal will be PCBs <1 mg/kg in the top 24 inches of upland soils on site in areas outside the capping system. This will reduce potential risks associated with environmental receptors in upland areas on site, but will not address potential risks associated with environmental receptors in the forested wetland.

- For the consolidated PCB-impacted soil/processed concrete area, a TSCA capping system will be installed over this area, which will consist of a warning barrier, followed by 12 inches of gravel borrow, and 6 inches of pavement.

Our opinion of probable costs to complete this remedial action plan is approximately $1,425,000, which includes environmental consulting and permitting costs as well as a 15% project contingency. With the ability to use some personnel/equipment from the City to complete some of the demolition/cleanup tasks to deflect some of the contractor costs, the City is prepared to move forward with this approach using the available funding. The proposed cleanup plan for the site is further detailed in the following section.

Section 6
Cleanup Plan

This PCB Cleanup Plan has been developed to provide for the removal and off-site (or on-site) management of PCB-containing soil and PCB impacted building materials. The specific components of the plan are presented in the following sections.

6.1 Demolition and Management of PCB-Impacted Building Materials

Prior to demolition work, asbestos and other OHM will be abated from the site building for proper management and off-site disposal. As part of building demolition, we proposed that the PCB bulk product waste, PCB remediation waste, and other PCB-containing materials be handled as follows.

6.1.1 PCB Bulk Product Waste

The following PCB Bulk Product Wastes will be managed prior to and during building demolition in accordance with the requirements of 761.62.

Caulking sample PCB-04 identified PCBs >50 ppm, while other caulking and window glazing samples identified PCBs well below 50 ppm. Sample PCB-04 is located between the metal window frame and the brick on north entranceway to the former office area. Similar caulking materials was identified on the south entranceway to the former office area, and is also assumed to contain PCBs >50 ppm. This caulking (approximately 50 feet) will be removed from the building prior to demolition and disposed at a state permitted landfill that meets bulk product waste requirements of 761.62(b). In addition, 12 inches of the abutting brick will also be segregated for disposal as a PCB Bulk Product Waste during the demolition work.

In addition, other miscellaneous caulking areas that total less than 300 linear feet were identified, including sample PCB-01 which had PCBs well less than 50 ppm. Due to the variability of these caulking areas and to avoid additional caulking characterization, miscellaneous caulking will be abated as a PCB Bulk Product Waste, including removal of 12-inches of any adjacent brick/CMU block for disposal also as a PCB Bulk Product Waste.

6.1.2 Non-Porous Surfaces

Results of PCB wipe sampling identified elevated PCB concentration of the former hydraulic press and the punch press unit. Additionally, since PCBs are attributed to the former heat transfer fluids, the heat exchangers and associated piping are also assumed to have been impacted. Therefore, prior to or as part of building demolition activities, non-porous surfaces will be decontaminated in accordance with 40 CFR 761.360 through 40 CFR 761.378 of the TSCA regulations. The proposed verification program for these surfaces is described below.

6.1.3 PCB-Remediation Wastes (Concrete)

The building concrete classified as PCB-remediation waste for the site includes the following:

- Painted/coated and oil-stained CMU walls
- Unpainted concrete floor/slab with PCBs

CMU Walls: We propose that the oil-stained CMU materials, which are located on the northern end of the building, be segregated during building demolition activities. More specifically, this will include the CMU walls in the former boiler room (including the interior separation walls between the former boiler room and the former machine shop, the former "main" room, and the hallway entrance), in the former machine shop (including the interior separation between the former machine shop and the former "main" room), and on the western portion of the former "main" room in the vicinity of the former hydraulic press.

As shown on Figure 5, the vast majority of the wall samples collected from these areas had PCBs ≥50 ppm (also see Table 3-4). As a conservative assumption, the entire CMU wall (floor to ceiling) will be segregated during building demolition. This PCB-remediation waste will be disposed at a TSCA chemical waste landfill per 40 CFR 761.75.

Concrete Floor: It is assumed that all of the building's concrete floor/slab is impacted by PCBs >1 ppm based on sampling performed. During demolition/concrete slab removal, we propose that the areas where the concrete floor contains PCBs ≥500 ppm will be segregated from the remaining impacted concrete floor areas as further summarized below:

- **Concrete Floor with PCBs ≥500 ppm**: Concrete floor samples that contained PCBs ≥500 ppm included samples C-24 (4,200 mg/kg), C-25 (51,000 mg/kg for 0 to 0.5-inches, and 78,000 mg/kg for 0.5 to 1-inches), and samples C-23 (790 mg/kg for 0 to 0.5-inches, and 630 mg/kg for 0.5 to 1-inches). As shown on Figure 5, these samples were each collected from the former boiler room area on the northern portion of the site building, but there were other concrete samples collected from former boiler room which did not have PCBs ≥500 ppm. However, as a conservative measure, the concrete floor from the entire former boiler room area (including the "water pit" concrete walls and base) will be segregated during building demolition and treated as containing PCBs ≥500 ppm. This PCB-remediation waste will be disposed at a TSCA chemical waste landfill per 40 CFR 761.75

- **Concrete Floor with PCBs <500 ppm**: As summarized in Table 3-4, the highest PCB result for the 48 concrete floor samples collected from areas *outside of the former boiler room* was 60 ppm (see sample CS-20 collected from former machine shop). Since we are proposing that contaminated soils with PCBs <500 mg/kg will remain on site under a TSCA cap (see below for further discussion), these concrete floor materials will be crushed on site to less than 3-inches in any dimension, and consolidated with the PCB-impacted soils (see further description below) under the TSCA cap. It should also be noted that uncoated/unpainted concrete that is properly processed can be reused as backfill without the need for a separate Beneficial Use Determination (BUD) permit under the Massachusetts Solid Waste Facility Regulations (310 CMR 19.000).

6.1.4 Excluded PCB Wastes

The materials identified to contain PCBs at concentrations <50 ppm that would not otherwise be classified as PCB Remediation Waste or a PCB Bulk Product Waste include the following:

- **Non-Oil Stained CMU Wall Surfaces**: As mentioned earlier, the painted CMU walls that are not stained by PCB-oils from former site operations will be segregated during building demolition activities. This includes CMU materials in the former processing areas (including the eastern interior wall between the former processing areas and former "main" room), the former warehouse room, and the former tank room. As shown on Figure 5 (also see Table 3-4), PCBs ≥1 ppm were detected in the vast majority of those concrete wall samples, but no samples had PCBs ≥50 ppm. Since PCBs were detected at 5.33 ppm in a paint chip sample collected from the exterior (rear) portion of the site building (see Table 4-3), there is sufficient evidence that paints used on the interior and exterior walls contained low levels of PCBs. These segregated CMU materials with low levels PCBs from paint will be managed as a regulated solid waste at a state permitted solid waste facility.

- **Water in Pits**: As reviewed earlier in Section 3.3, low levels of PCBs (less than 1 µg/L) were detected in a sample collected from the "water pit" in former boiler room, and no PCBs were detected in a water sample collected from the former hydraulic press pit in the former "main" room. As part demolition activities, the water from these two open pits as well as from the former holding tank located beneath the eastern end of the former boiler room will be pumped out to a frac tank for temporary storage. The water will be treated through activated carbon adsorption before being discharged on site. Prior to discharge, sample(s) will be collected and analyzed for PCBs. Further discussion on water management is provided below.

6.2 Proposed Soil Excavations

The proposed soil excavations include the following:

- The excavation of impacted soils (for off-site disposal) with PCBs ≥500 mg/kg, which were identified in three separate portions of the site.

- The excavation of impacted soils (for consolidation on site) with PCBs ≥25 mg/kg located in "upland" areas of the site.

- The excavation of the top 2 feet of soils (for consolidation on site) with PCBs ≥1 mg/kg located in "upland" areas of the site.

Figure 12 provided in Appendix A depicts the proposed excavation locations.

6.2.1 Excavation of Soils with PCBs ≥500 mg/kg

As reviewed earlier, a total of 11 individual samples collected from the site had PCBs ≥500 mg/kg detected. The excavation of soils with PCBs ≥500 mg/kg is proposed for off-site disposal in the three separate areas summarized below, with each of the 11 individual soil samples with PCBs ≥500 mg/kg identified.

- **Excavation Area #1 w/PCBs ≥500 mg/kg**: As shown on Figure 12, this area is off the north end of the site building. [Note: This area is scheduled to be incorporated under the TSCA cap, as further reviewed below.]

  Excavation is proposed beginning from the surface to approximately 1.5 feet BSG across an approximate 20 foot by 15 foot area on the eastern portion of this

area, which will incorporate sample V-34 (0-12”). Excavation is also proposed beginning from the surface to approximately 6 feet BSG across an approximate 20 foot by 20 foot area on the western portion of this area, which will incorporate the loading dock catch basin and samples T-34 (0-6”), T-34 (12-24”), and T-34 (24-36”). Since PCBs were detected at 213 mg/kg and at 480 mg/kg in sample S-34 (48-60”) and sample T-34 (60-84”), respectively, excavation will occur to at least 6 feet BSG in this area before verification sampling is conducted. Based on these dimensions, it is anticipated that approximately 120 cubic yards (includes an additional 10% contingency) will be generated from this excavation.

- **Excavation Area #2 w/PCBs ≥500 mg/kg**: As shown on Figure 12, this area is approximately 50 feet to the northwest of the site building along the boundary between the “upland” area and the flagged BVW where earlier EPA excavation occurred. [Note: This area will not be incorporated under the TSCA cap, as further reviewed below.]

  In this area, soil excavation is proposed from approximately 0 to 7.5 feet BSG across an approximate 30 foot by 30 foot area, which will incorporate samples M-39 (24-36”), N-39 (24-36”), M39 (48-60”), and M-39 (60-72”). This will also incorporate several other samples where PCBs >100 mg/kg were detected, including samples L-39 (48-60”; at 427 mg/kg), M-40 (48-60”; at 335 mg/kg), M-40 (60-72”; at 293 mg/kg), and M-41 (48-60”; at 230 mg/kg). Based on these dimensions, it is anticipated that approximately 275 cubic yards (includes an additional 10% contingency) will be generated from this excavation.

- **Excavation Area #3 w/PCBs ≥500 mg/kg**: As shown on Figure 12, this area is approximately 30 feet to the south/southwest of the site building. This area is scheduled to be incorporated under the TSCA cap, as further reviewed below.

  In this area, soil excavation is proposed from approximately 0 to 2.5 feet BSG across an approximate 30 foot by 25 foot area, which will incorporate samples Q-09 (12-24”), Q-10 (12-24”), and R-09 (12-24”). This will also incorporate sample S-09 (12-24”; at 152 mg/kg). Based on these dimensions, it is anticipated that approximately 75 cubic yards (includes an additional 10% contingency) will be generated from this excavation.

6.2.2 Excavation of Soils with PCBs ≥25 mg/kg in Upland Areas

The excavation of soils with PCBs ≥25 mg/kg (and <500 mg/kg) is proposed for two separate upland areas that are not scheduled to be within the TSCA cap limits. These impacted soils will be consolidated under the TSCA cap, as further reviewed below.

- **Excavation Area #4 w/PCBs ≥25 mg/kg**: As mentioned above, the proposed Excavation Area #2 with PCBs ≥500 mg/kg is located outside of the proposed cap area. Following verification sampling in Excavation Area #2, we propose to excavate from approximately 0 to 4 feet BSG to the immediate south of Excavation Area #2 across an approximate 90 foot by 30 foot area. In general, this will incorporate earlier EPA confirmation samples that contained PCBs at 80 mg/kg (see Figure 8), at 66 mg/kg (see Figure 8), and at 38 mg/kg (see Figure 9), as well as some individual samples collected by Tighe & Bond where PCBs were detected at ≥25 mg/kg.

- **Excavation Area #5 w/PCBs ≥25 mg/kg**: As shown on Figure 12, this area is approximately 40 feet to the southwest of the site building. In this area, soil excavation is proposed from approximately 0 to 3.5 feet BSG across an approximate 30 foot by 25 foot area. This will incorporate two isolated samples where PCBs were detected ≥25 mg/kg, including samples M-09 (12-24"; at 39 mg/kg) and L-09 (24-36"; at 433 mg/kg).

6.2.3 Excavation of Soils with PCBs ≥1 mg/kg in Top 2 Feet in Upland Areas

The excavation of soils with PCBs ≥1 mg/kg is proposed from 0 to 2 feet BSG in upland areas that are not anticipated to be within the TSCA cap limits. As described earlier, the goal of this shallow excavation is to help reduce potential risks associated with environmental receptors in upland areas on site under the MCP. These impacted soils will be consolidated under the TSCA cap, as further reviewed below.

- **Excavation Area #6 w/PCBs ≥1 mg/kg**: As shown on Figure 12, this proposed area is an extension of Excavation Area #5. Most of this area was previously part of EPA's earlier removal program, and the majority of the samples collected from this depth interval had non-detects or PCBs <1 mg/kg. However, this shallow excavation area will incorporate samples Q-45 (0-12"), M-29 (12-24'), N-28 (12-24"), and N-26 (12-24"), which each had PCBs ≥1 mg/kg.

6.2.4 Groundwater Management

During contaminated soil excavation in the proposed Excavation Areas #1, #2, #4, and #5, groundwater management will be warranted. Groundwater will be pumped from sumps installed within the excavations to a frac tank for temporary storage, then treated through activated carbon before being discharged to the subsurface within or immediately upgradient of the respective excavations. To confirm that PCBs in the treated groundwater are less than 0.5 µg/L (i.e., the Method 1, GW-1 standard), we propose that a sample be collected for the first 5,000 gallons of discharge and then one sample collected for every 20,000 gallons generated thereafter.

6.3 Proposed Consolidation of Impacted Soils

From the two areas where soils with PCBs ≥25 mg/kg are scheduled to be excavated outside the proposed TSCA capping system (i.e., from Excavation Areas #4 and #5), a total of approximately 330 cubic yards will be generated. In addition, in Excavation Area #6, approximately 200 additional cubic yards of soils with PCBs ≥1 mg/kg will be generated. These soils (along with the processed concrete floor material discussed above) will be consolidated within the area scheduled for capping.

6.4 Proposed Verification Sampling

6.4.1 Non-Porous Surfaces

The decontaminated non-porous surfaces will be sampled using wipe samples to confirm that the residual PCB concentrations are less than the high occupancy standard of 10 micrograms per 100 square centimeters (µg/100 cm^2). A total of 5 wipe samples per individual decontaminated equipment will be collected.

6.4.2 Porous Surfaces

Porous substrate areas that remain in locations where caulking and associated porous substrates were removed as a Bulk Product Waste, will be verify sampled. One sample per 20 feet of substrate will be sampled to confirm the remaining substrate is less than 1 ppm.

6.4.3 Verification Sampling in Soil Excavation Areas

For Excavation Areas #1, #2, and #3, we propose that samples be collected at 10-foot intervals along the sidewalls and at the base of the excavation. For sidewall samples, we propose samples collected vertically every two feet. If PCBs ≥500 mg/kg are detected in the verification samples, soil excavation will continue in those representative sample areas, and verification sampling will be conducted in a similar manner.

For Excavation Areas #4 and #5, we also propose that samples be collected at 10-foot intervals along the sidewalls and at the base of the excavation. For sidewall samples, we propose samples collected vertically every two feet. If PCBs ≥25 mg/kg are detected in the verification samples, soil excavation will continue in those representative sample areas, and verification sampling will be conducted in a similar manner. However, since PCBs ≥25 mg/kg are present in some individual wetland soil samples that are not being addressed as part of this PCB Cleanup Plan, there will be only limited horizontal expansion (e.g., 10 feet) of the proposed excavation along the western portion of Excavation Area #4, if warranted.

For Excavation Area #6, we propose that samples be collected at 25-foot intervals along the sidewalls across the two foot excavation depth interval. If PCBs ≥1 mg/kg are detected in the verification samples, soil excavation will continue horizontally in those representative sample areas (only in upland areas), and verification sampling will be conducted in a similar manner. No sampling at the base is proposed because there is no earlier data to suggest that PCBs ≥25 mg/kg are present in these soils, and PCBs ≥1 at depths below 2 feet BSG in the upland areas outside the cap are not a concern as discussed earlier.

6.4.4 Post-Remedial Sampling of Groundwater

After the PCB excavation areas are backfilled, we propose that shallow groundwater monitoring wells be installed in former Excavation Areas #1 and #2 where PCBs ≥500 mg/kg in soils are schedule to be excavated at depths below the groundwater table. The wells will be sampled to confirm that PCB concentrations in groundwater in these two hot spot areas are below Method 1, GW-3 standards.

6.5 Conceptual Capping System and Fencing System

Tighe & Bond is in the process of completing a parking lot and stormwater management design for the consolidated impacted soil area to be capped. As part of that design, Tighe & Bond will perform a drainage study which will be used to create design for directing, treating and discharging stormwater runoff without impacting the proposed capping system/consolidated PCB-impacted soils. The design will include a permanent capping system consisting of a filter fabric barrier, 12 inches of gravel borrow (with an orange warning barrier located in the middle), and six inches of asphalt placed over the consolidated PCB-impacted soils to meet TSCA capping requirements per 40 CFR 761.61(a)(7). The parking lot will <u>not</u> include lighting, closed drainage, or landscaped islands since the pavement will serve as the capping system.

In general, the proposed consolidation area will incorporate the footprint of the existing building and areas to the immediate south and north of this area. The conceptual area where a TSCA cap will be installed is shown on Figure 12. For the remaining paved surfaces to the north of where the TSCA cap will be installed, the asphalt material will be removed and incorporated into the capped area. The final design of the parking lot/capping system will be completed prior to beginning the building demolition and cleanup work, and that design plan will be forwarded to EPA (and MassDEP) in an Addendum to this PCB Cleanup Plan.

We also propose that a 4-foot high black vinyl chain link/decorative fence fence be installed along the perimeter between the clean "upland" area and the "impacted" wetland area that is not being addressed at this time. In general, the fence will be installed approximately 10-feet off this boundary in the upland area where PCB cleanup is proposed under this submittal and where the earlier EPA removal program was conducted.

6.6 Dust Monitoring and Control Measures

Dust (particulate) monitoring will be conducted during the commencement of building demolition activities, at the commencement of contaminated soil excavation, and at the commencement of the consolidation 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, given that no off-site migration potential exists, periodic monitoring will be conducted for the duration of remedial 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 not to exceed level for the site. If elevated particulate readings are identified, additional dust control options will be executed 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.

Dust control measures will also be employed during the building demolition and concrete crushing operations.

6.7 Waste Management

The PCB/TSCA regulated remediation waste to be generated for off-site disposal during this cleanup project includes the following:

- PCB Remediation Waste (i.e., contaminated soils and concrete). The soils and concrete with PCBs ≥50 mg/kg will be disposed at a TSCA chemical waste landfill per 40 CFR 761.75.
- PCB Bulk Product Waste (i.e., caulking and glazing) with confirmed or assumed PCBs ≥50 mg/kg (including 12 inches of abutting CMU/brick substrate) will be disposed at a state permitted landfill that meets bulk product waste requirements per 40 CFR 761.75.

The contractor will also 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 and MassDEP.

6.8 Health & Safety Plan

Work completed under this 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 areas.
- 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 cleanup activities, such as use of personal protective equipment to protect workers and localized dust monitoring.

6.9 TSCA Deed Restriction

A restriction will be placed on the property deed to meet TSCA requirements per 40 CFR 761.61(a)(8). The TSCA deed notice will also meet the requirements of an Activity Use Limitation (AUL) in accordance with the MCP. The TSCA deed notice will describe the location of the capped area, and it will restrict the use of this area as a low occupancy area as defined in 40 CFR 761.3. The TSCA deed notice will also include language describing the maintenance requirements for the cap. The deed restriction documents will be recorded at the Registry of Deeds in Bristol County.

6.10 Equipment Decontamination

Construction equipment that will come in contact with PCB-impacted materials will be decontaminated in accordance with 40 CFR 761.79(c2) 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.

6.11 Record Keeping and Documentation

Following completion of the cleanup 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 cleanup activities will be prepared for submittal to EPA within 60 days of recording of the TSCA deed notice. The report will include a description of the work activities, verification analytical results, volumes of disposed materials and waste disposal documentation. That report will also be completed as a Phase IV Completion submittal in accordance with MCP. The findings from Phase IV Completion will also likely result in the filing of a Permanent Solution Partial Statement.

6.12 Required Federal, State and Local Permits

6.12.1 Wetland Permitting

A Notice of Intent (NOI) will be required for proposed work within jurisdictional resource areas in accordance with the Massachusetts Wetlands Protection Act and the applicable local ordinances. Since the paved capping system is part of the design for site cleanup, the design of the stormwater management system for the site will also be incorporated into the NOI submittal. Also, since the work associated with the soil excavation is within areas mapped by NHESP, review under the Massachusetts Endangered Species Act (MESA) will be required. A copy of the Notice of Intent filed for the project will be submitted to NHESP for streamlined review under MESA.

6.12.2 TSCA Permitting

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:

City of New Bedford Office of Environmental Stewardship
Contact: Michele Paul, Director
133 William Street - Room 304
New Bedford, Massachusetts 02740
(508) 991-6188

Signature _____

Printed Michele Paul

Date 8/4/15

6.13 Public Notification

Licensed Site Professional (LSP) services will be provided by Todd D. Kirton (LSP #2365) of Tighe & Bond.

In accordance with the Public Involvement requirements cited in 310 CMR 40.1403(3)(d)(2), the Mayor of New Bedford and the New Bedford Health Department will be notified within at least three days prior to the commencement of Phase IV response actions. A copy of the public notice letter that will be forwarded to the City at the appropriate time is provided in Appendix E.

Section 7
Regulatory Limitations

Each report and any and all work product provided in connection with the performance of each environmental site assessment is subject to the following conditions:

1. Each report is prepared on behalf of and for the exclusive use of the City of New Bedford (Client) and is subject to and issued in accordance with the Agreement and the provisions thereof. Each report and any findings contained therein shall not, in whole or in part, be provided to or used by any other person, firm, entity or governmental agency in whole or in part, without the prior written consent of Client and Tighe & Bond. However, Tighe & Bond acknowledges and agrees that, subject to the Limitations set forth herein and prior written approval by Tighe & Bond, a report may be provided to specific financial institutions, attorneys, title insurers, lessees and/or governmental agencies identified by Client at or about the time of issuance of a report in connection with the conveyance, mortgaging, leasing, or similar transaction involving the real property which is the subject matter of a report and any work product. Use of a report for any purpose by any persons, firm, entity, or governmental agency shall be deemed acceptance of the restrictions and conditions contained therein, these Limitations and the provisions of Tighe & Bond's Agreement with Client. No warranty, express or implied, is made by way of Tighe & Bond's performance of services or providing an environmental site assessment, including but not limited to any warranty with the contents of a report or with any and all work product.

2. In preparing a report, Tighe & Bond, Inc. may rely on certain information provided by governmental agencies or personnel as well as information and/or representations provided by other persons, firms, or entities, and on information in the files of governmental agencies made available to Tighe & Bond at the time of the site assessment. To the extent that such information, representations, or files may be inaccurate, missing, incomplete or not provided to Tighe & Bond, Tighe & Bond is not responsible. Although there may be some degree of overlap in the information provided by these various sources, Tighe & Bond does not assume responsibility for independently verifying the accuracy, authenticity, or completeness of any and all information reviewed by or received from others during the course of the site assessment.

3. No attempt is made to assess the compliance status of any past or present Owner or Operator of a site with any Federal, state, or local laws or regulations, unless specifically indicated otherwise in writing.

4. Tighe & Bond does not assume responsibility for the impacts of any changes in environmental standards, practices, or regulations subsequent to the preparation of each report.

5. If additional environmental or other relevant information is developed at a later date, Client agrees to bring such information to the attention of Tighe & Bond promptly. Upon evaluation of such information, Tighe & Bond reserves the right to recommend modification of this report and its conclusions.

6. Chemical constituents that are not the subject of this investigation and which are not included in the list of analyzed parameters for a study may be present in soil and/or ground water at a site, and Tighe & Bond assumes no responsibility therefore.

7. If included, any database search is conducted under the Notice of Disclaimer/Waiver of Liability included in the database search report.

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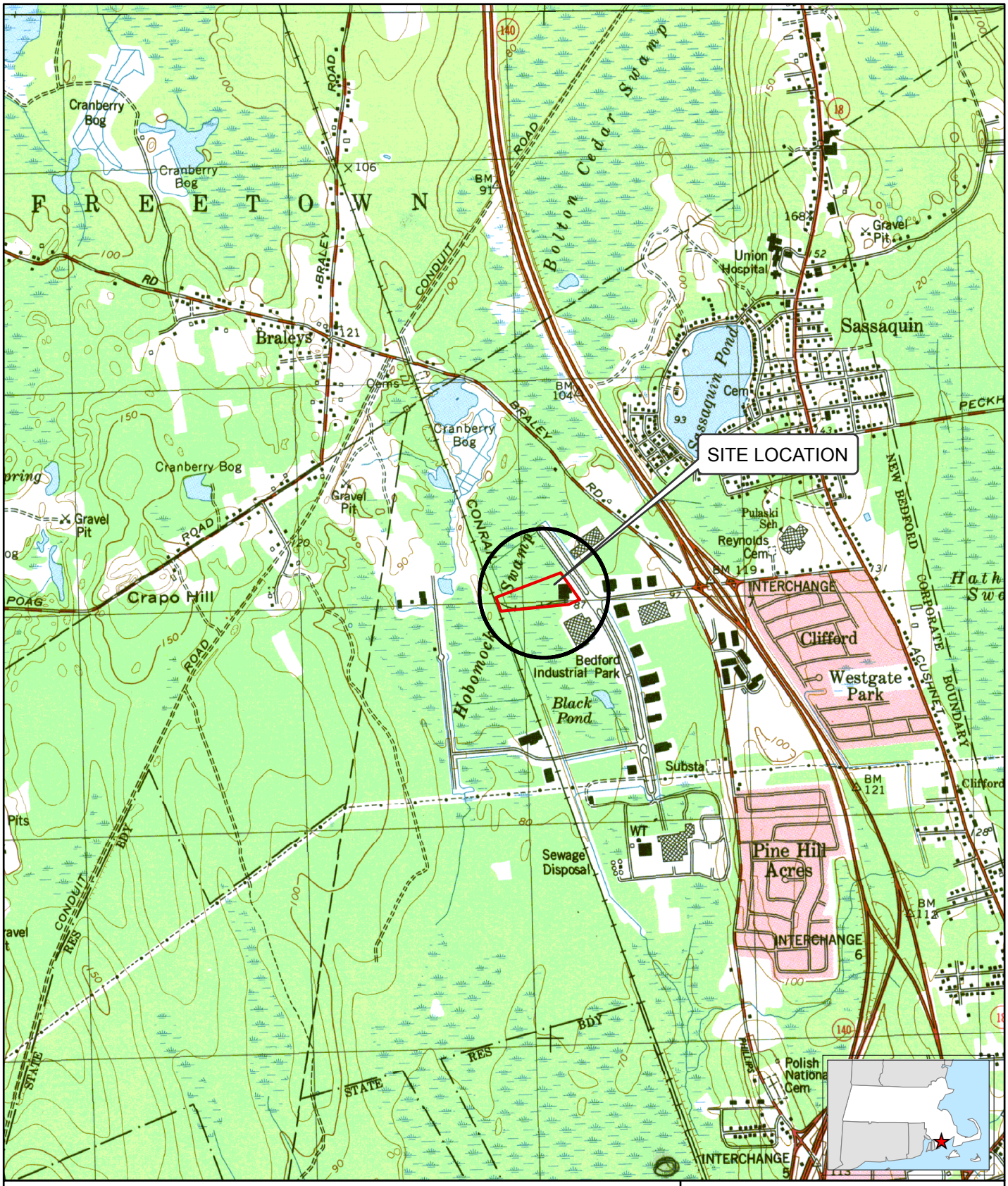
Tighe&Bond

APPENDIX A



Legend

Parcel Boundary (Approximate)

Tighe&Bond
Consulting Engineers
Environmental Specialists

Based on USGS Topographic Map for
New Bedford North, MA Quadrangle. Revised 1979.

1:24,000

0 1,000 2,000

Feet

N

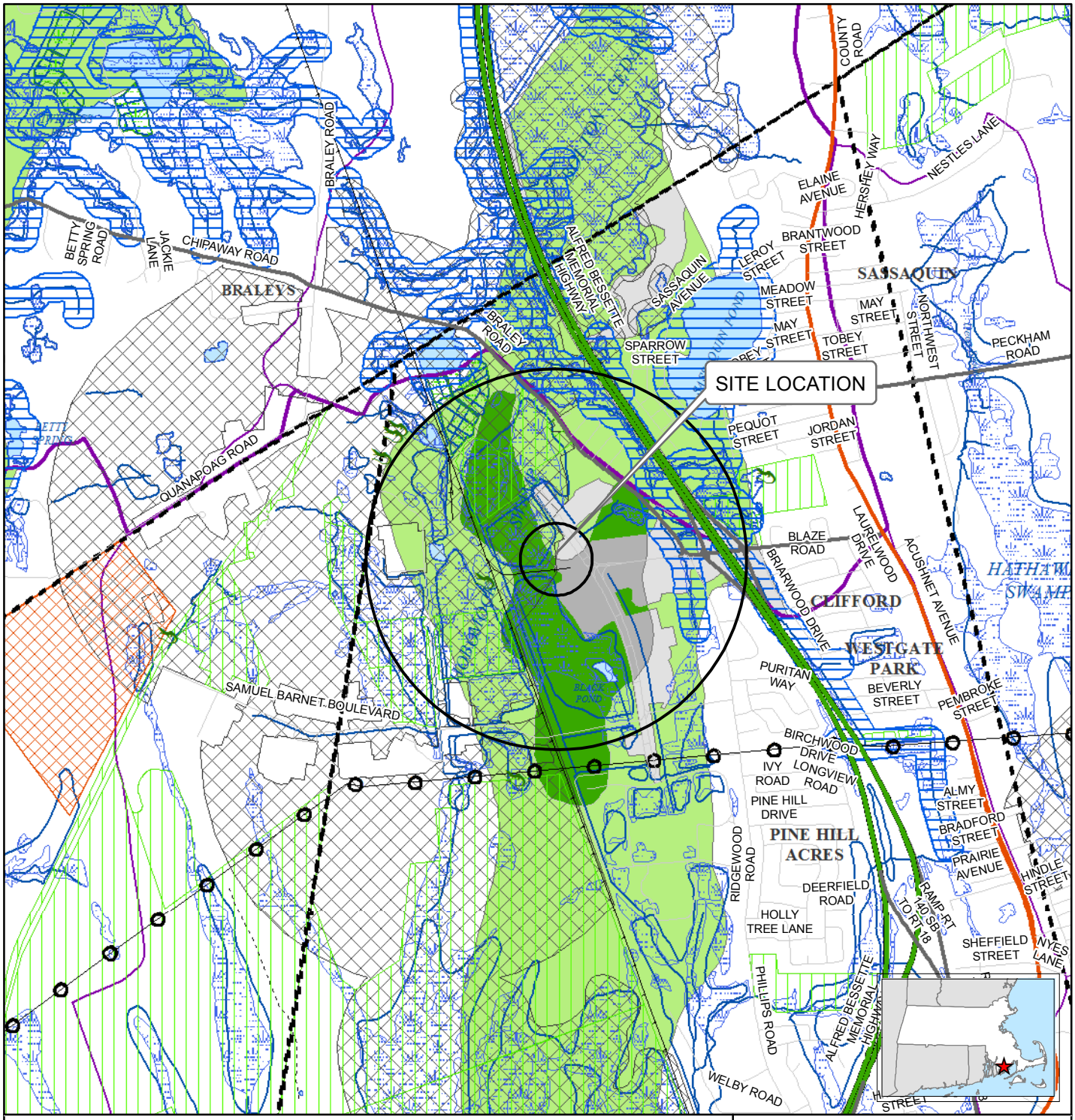
FIGURE 1
SITE LOCATION MAP

Former Polyply
241 Duchaine Blvd
New Bedford, MA

July 2013

G:\MA\NewBedfordMA\avproj\topo_DuchaineBlvd.mxd

N-1011



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

Former Polyply
241 Duchaine Blvd
New Bedford, MA

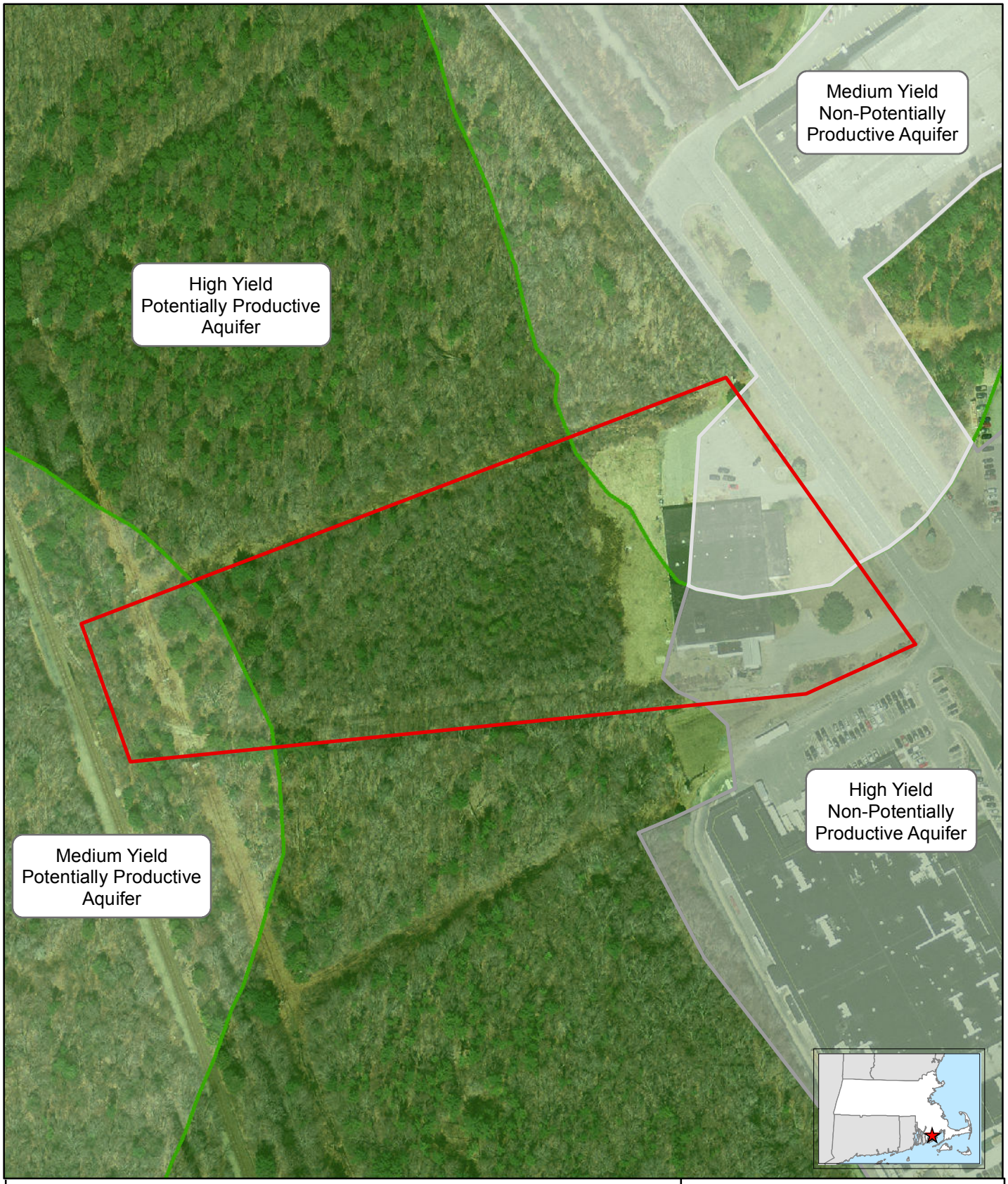
Data source: Office of Geographic and Environmental Information(MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs.
Circles indicate 500-foot and half-mile radii.
Data valid as of October 2012.

May 2013

Tighe&Bond
Consulting Engineers
Environmental Specialists

G:\GIS\MA\NewBedfordMA\avproj\GIS_DuchaineBlvd.mxd

N-1011



Property Parcel Boundary (Approximate)
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

Tighe&Bond
Consulting Engineers
Environmental Specialists

Based on MassGIS Color Orthophotography (April 2009)
Orthophoto Sheet ID # 24478315 & 24478300
30-cm Resolution

1:2,400
0 100 200
Feet

N

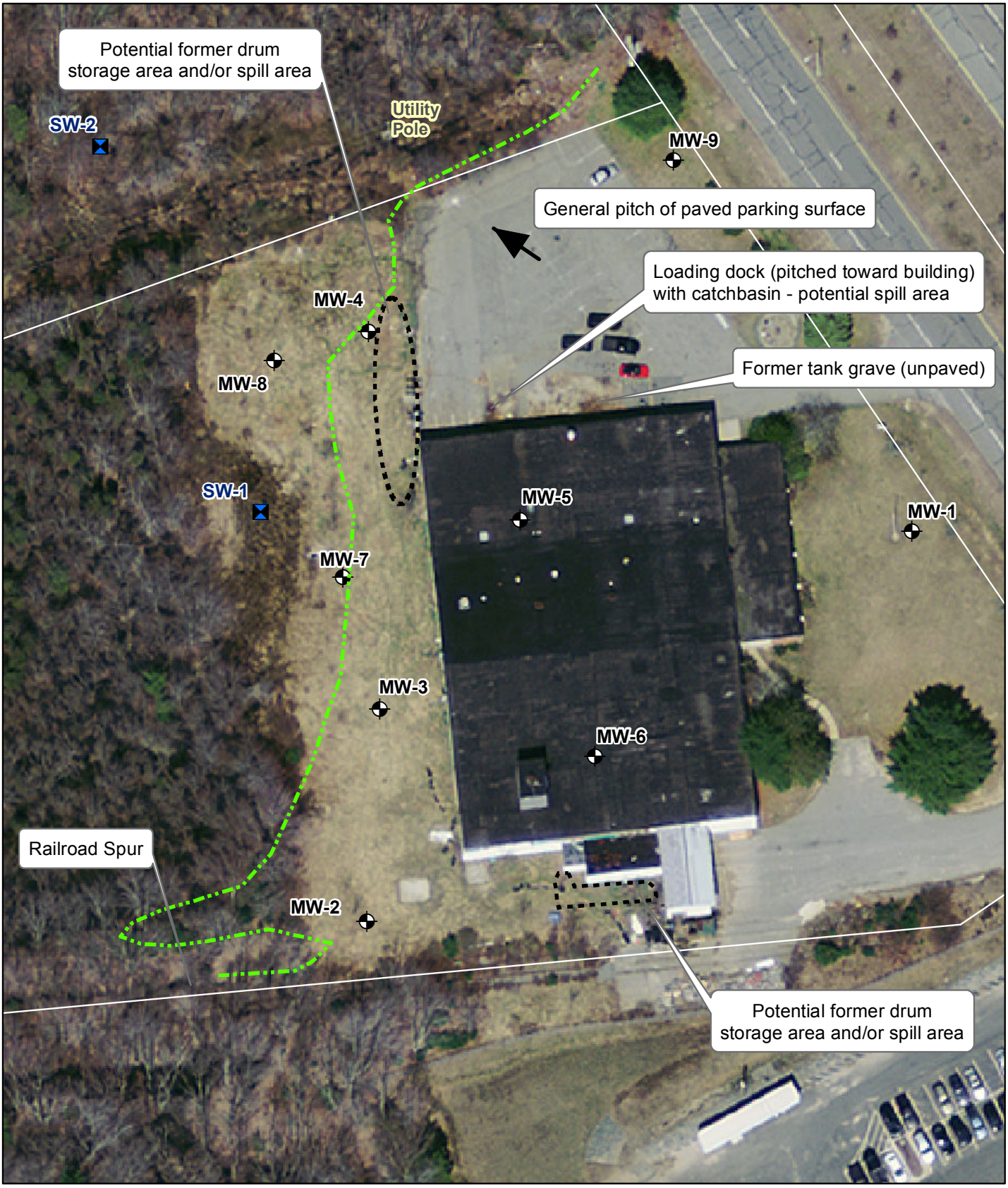
FIGURE 3
AERIAL PHOTOGRAPH

Former Polyply
241 Duchaine Blvd
New Bedford, MA

January 2014

G:\GIS\MA\NewBedfordMA\avproj\DuchaineBlvd_Figure3.mxd

N-1011



All Locations Are Considered Approximate

Phase II Monitoring Well

Phase II Surface Water

Utility Pole

Wetland Boundary

Property Line

Tighe&Bond
Consulting Engineers
Environmental Specialists

Based on MassGIS Color Orthophotography (April 2009)
Orthophoto Sheet ID # 24478315 & 24478300
30-cm Resolution

0 25 50
Feet

N

FIGURE 4
CONCEPTUAL SITE MODEL PLAN

Former Polyply
241 Duchaine Blvd
New Bedford, MA

May 2014

G:\GIS\MA\NewBedfordMA\avproj\DuchaineBlvd_Fig4.mxd

N-1011

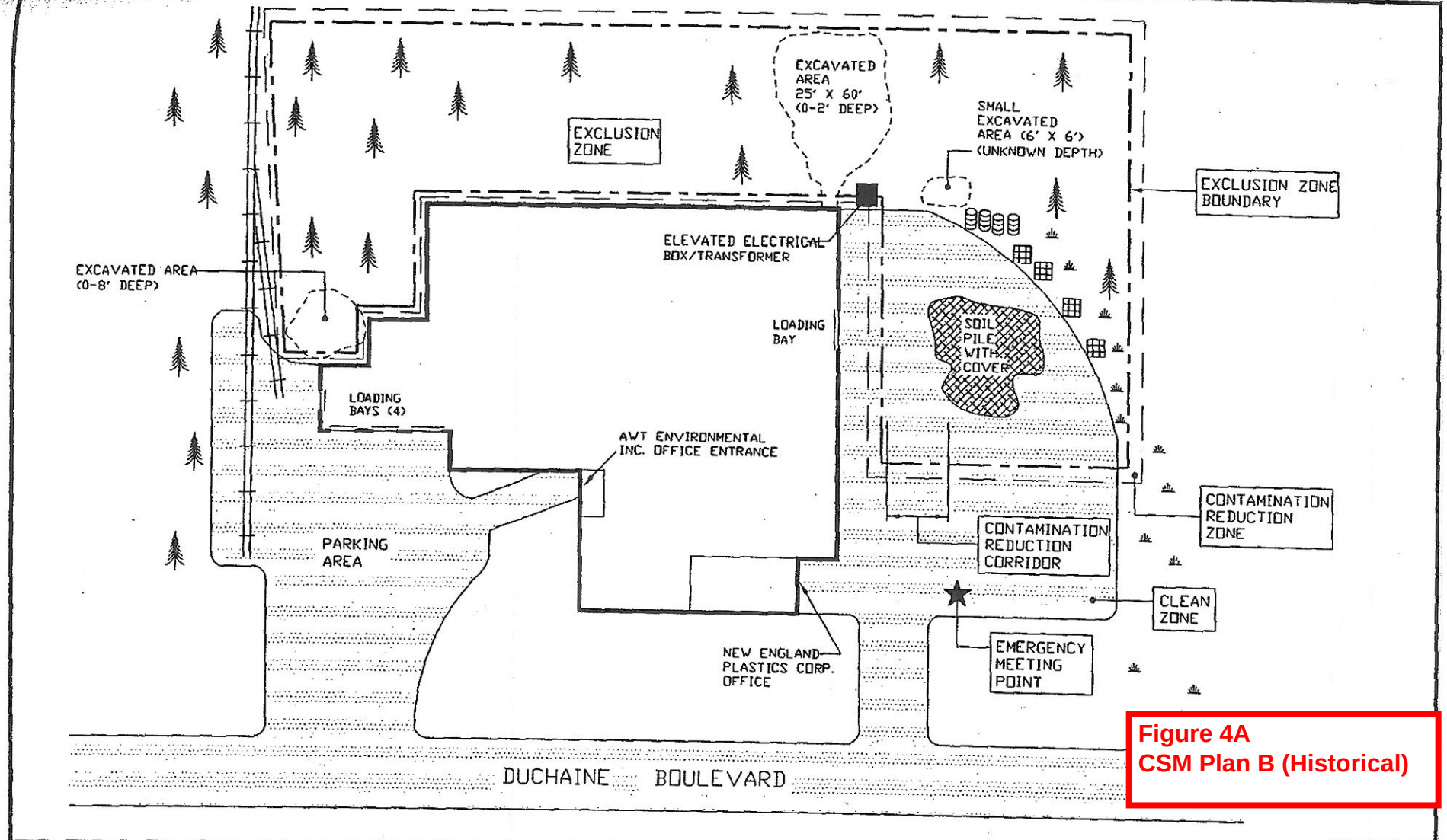


Figure 4A
CSM Plan B (Historical)

NOT TO SCALE

LEGEND

- RAILROAD TRACKS
- WOODED AREA
- 55-GALLON DRUMS (PCB WASTE)
- METAL DEBRIS (AIR DUCTS)
- WETLANDS
- PAVED ROADWAY

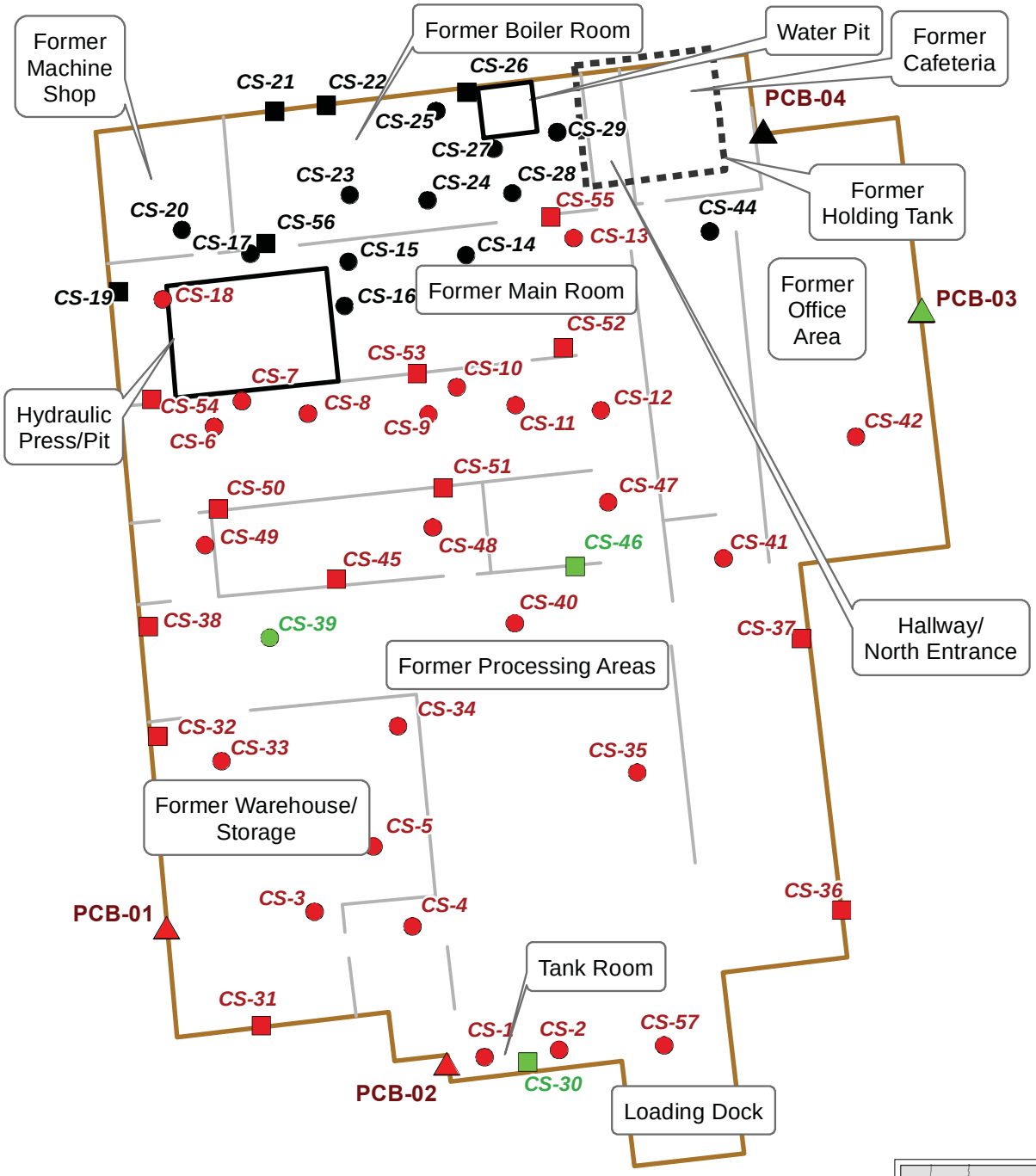
SITE DIAGRAM AND WORK ZONES
POLYMERINE REMOVAL SITE
241 DUCHAINE BOULEVARD
NEW BEDFORD, MASSACHUSETTS
4/12/00 - 4/20/00

WESTON® MANAGERS DESIGNERS/CONSULTANTS
REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #	DRAWN BY:	DATE
01-05-0061	W. SHAW	4/6/00

FILE NAME: R:\050042\Figures2\fig2ko

FIGURE 2



All Tighe & Bond Locations Are Considered Approximate

- Concrete Wall Sample
- Concrete Floor Sample
- Other Building Material Sample

Sample Result <1
Sample Result between 1 and <50
Sample Result ≥ 50

Building
Water Pit
Interior Walls (not all shown)

Tighe&Bond Consulting Engineers Environmental Specialists

Based on MassGIS Color Orthophotography (April 2009)
Orthophoto Sheet ID # 24478315 & 24478300
30-cm Resolution

0 15 30
Feet

N

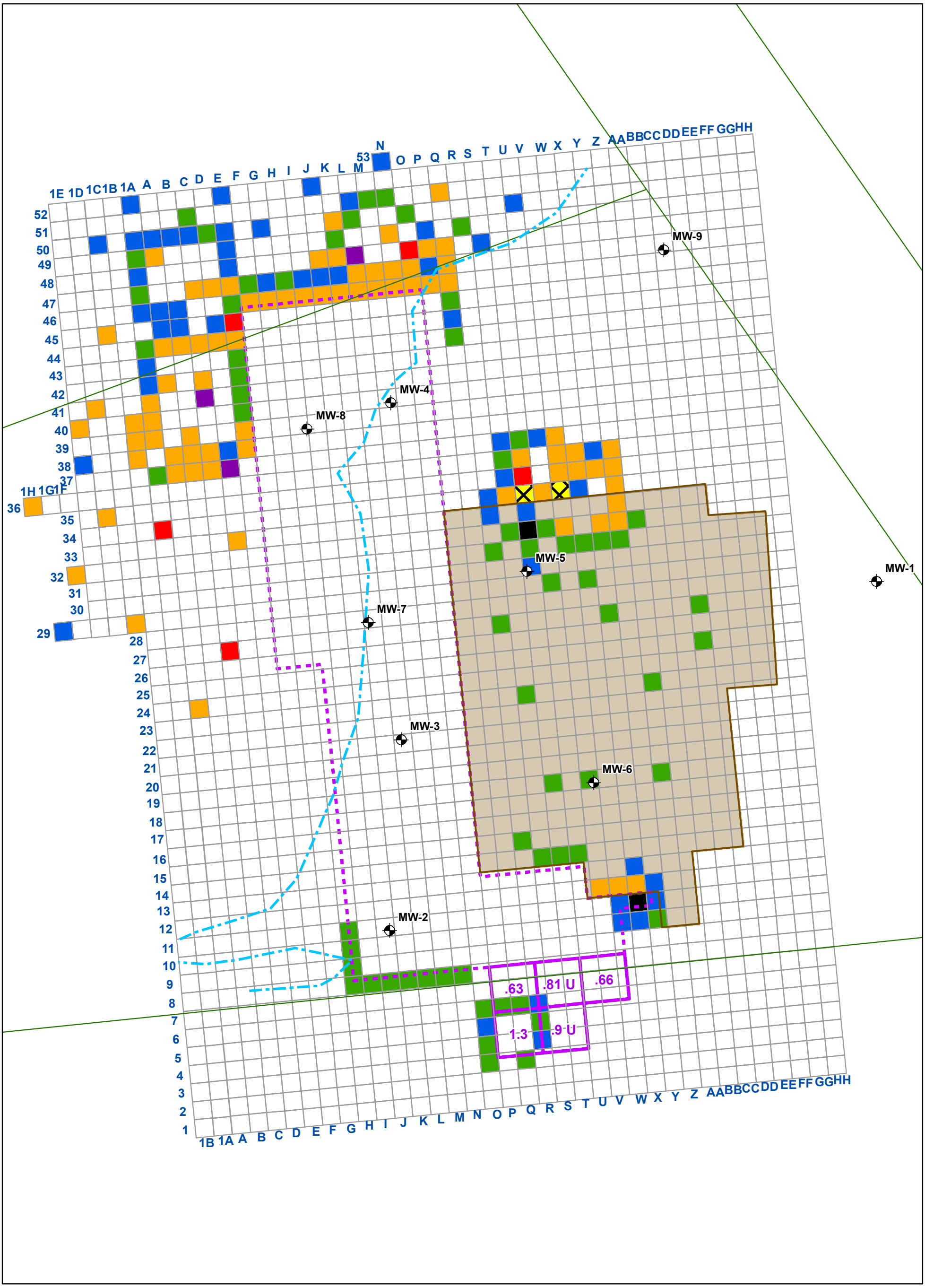
FIGURE 5
BUILDING MATERIALS SAMPLING PLAN

Former Polyply
241 Duchaine Blvd
New Bedford, MA

July 2015

G:\GIS\MA\NewBedfordMA\avproj\DuchaineBlvd_Fig5.mxd

N-1011



Legend

- Non Detect
- Sample Result <1
- Sample Result Between 1 and <25
- Sample Result Between 25 and <50
- Sample Result Between 50 and <100
- Sample Result Between 100 and <500
- Sample Result ≥500
- Monitoring Well
- EPA Excavation Area
- 25' x 25' EPA Confirmatory Soil Sampling Grid
- 10' x 10' T&B Soil Sampling Grid
- Buildings
- Wetland Boundary
- Property Line

FIGURE 6:
T&B PCB GRID SAMPLE RESULTS
0-12 Inches

241 Duchaine Blvd
New Bedford, MA

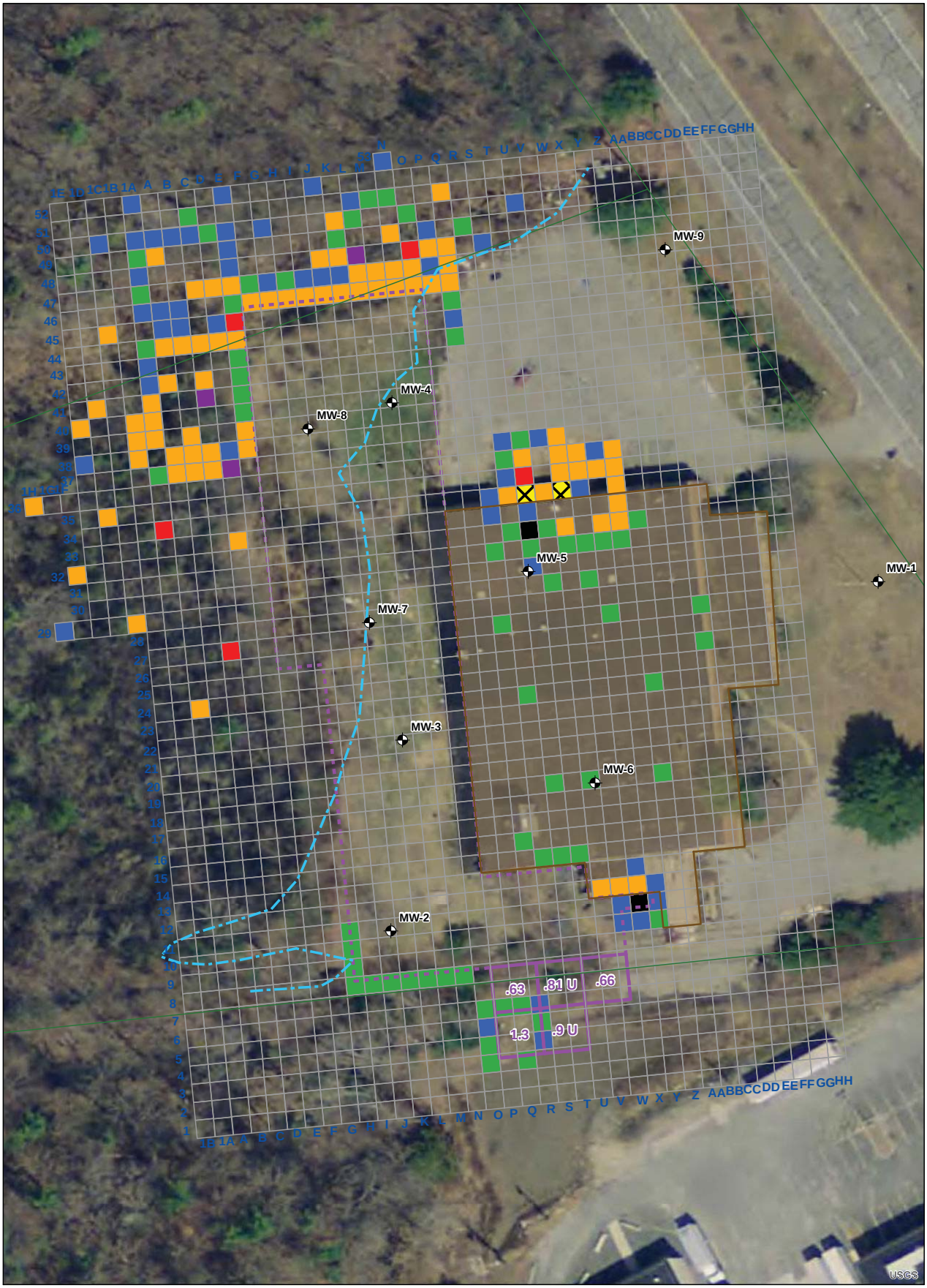
Tighe&Bond

December 2014

0 25 50
Feet

G:\GIS\MA\NewBedfordMA\avproj\DuchaineBlvd_Fig6.mxd

32-38391



Legend

- Non Detect
- Sample Result <1
- Sample Result Between 1 and <25
- Sample Result Between 25 and <50
- Sample Result Between 50 and <100
- Sample Result Between 100 and <500
- Sample Result ≥500
- Monitoring Well
- EPA Excavation Area
- 25' x 25' EPA Confirmatory Soil Sampling Grid
- 10' x 10' T&B Soil Sampling Grid
- Buildings
- Wetland Boundary
- Property Line

FIGURE 6A:
T&B PCB GRID PLAN B (AERIAL)
0-12 Inches

241 Duchaine Blvd
New Bedford, MA

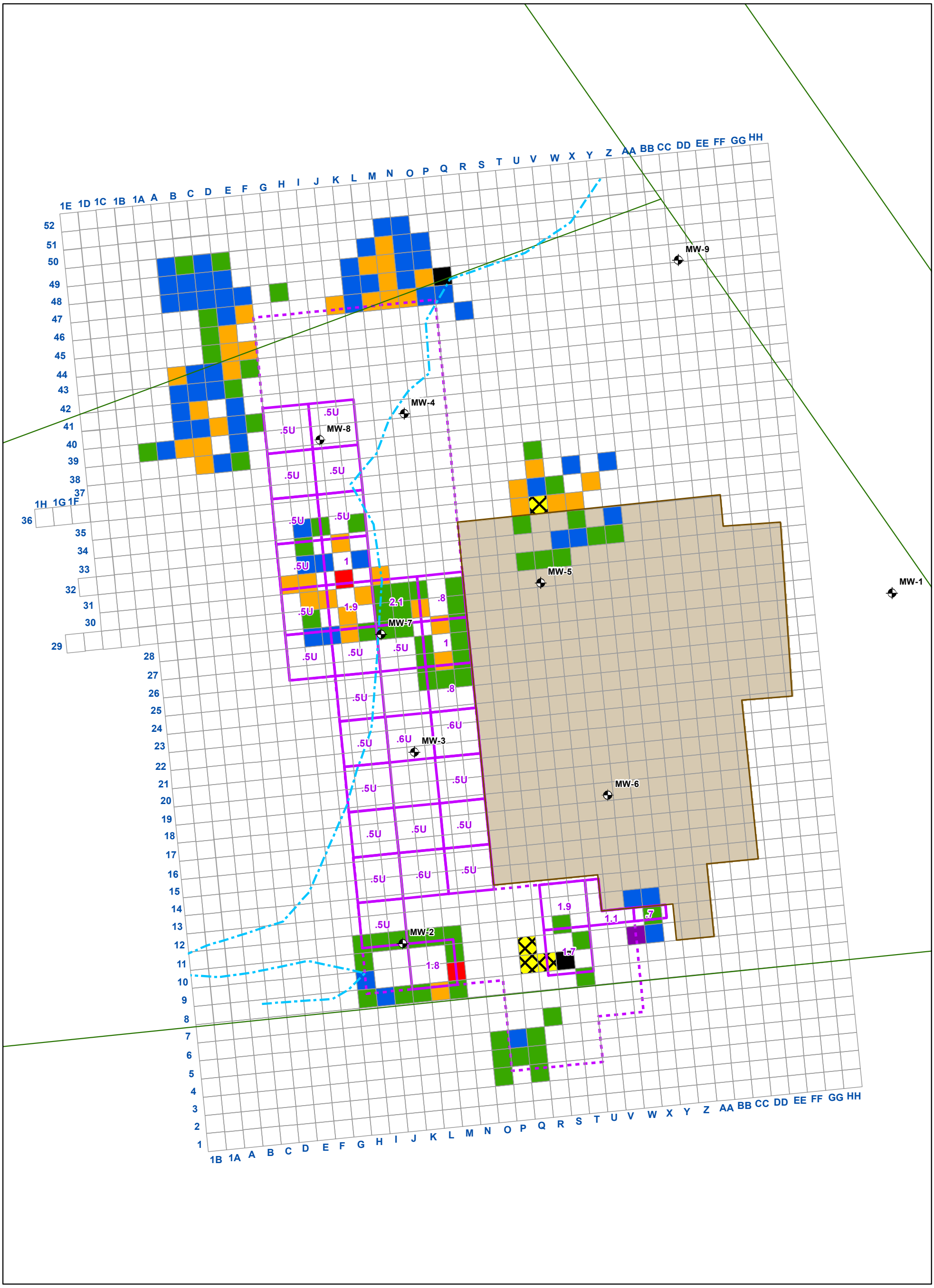
Tighe&Bond

July 2015

0 25 50
Feet

G:\GIS\MA\NewBedfordMA\avproj\DuchaineBlvd_Fig6A.mxd

32-38391



Legend

- Non Detect
- Sample Result <1
- Sample Result Between 1 and <25
- Sample Result Between 25 and <50
- Sample Result Between 50 and <100
- Sample Result Between 100 and <500
- Sample Result ≥500
- Monitoring Well
- EPA Excavation Area
- 25' x 25' EPA Confirmatory Soil Sampling Grid
- 10' x 10' T&B Soil Sampling Grid
- Buildings
- Wetland Boundary
- Property Line

FIGURE 7:
T&B PCB GRID SAMPLE RESULTS
12-24 Inches

241 Duchaine Blvd
New Bedford, MA

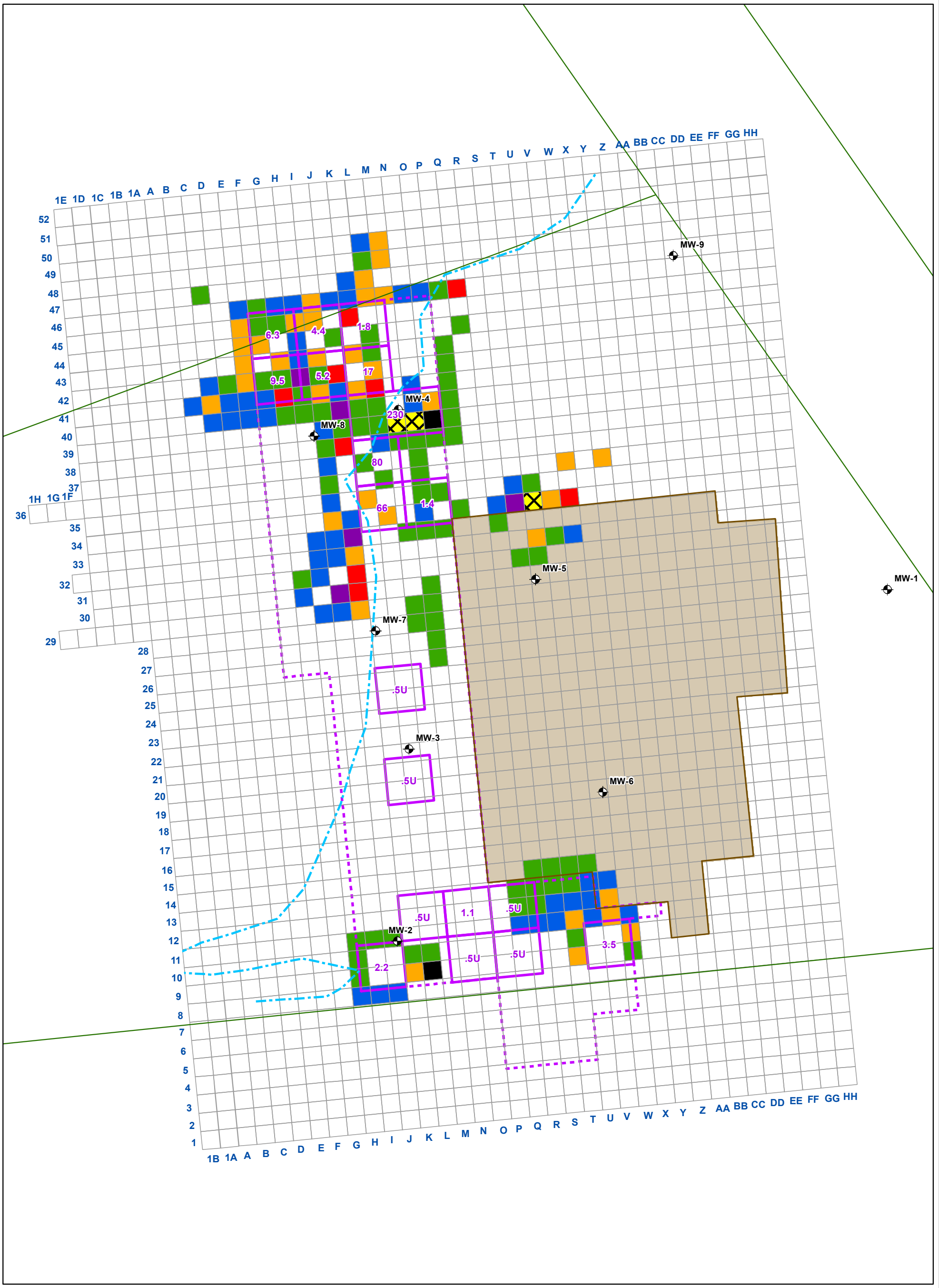
Tighe&Bond

September 2014

0 25 50
Feet

G:\GIS\MA\NewBedfordMA\avproj\DuchaineBlvd_Fig7.mxd

32-38391



Legend

- Non Detect
- Sample Result <1
- Sample Result Between 1 and <25
- Sample Result Between 25 and <50
- Sample Result Between 50 and <100
- Sample Result Between 100 and <500
- Sample Result ≥500
- Monitoring Well
- EPA Excavation
- 25' x 25' EPA Confirmatory Soil Sampling Grid
- 10' x 10' T&B Soil Sampling Grid
- Buildings
- Wetland Boundary
- Property Line

FIGURE 8:
T&B PCB GRID SAMPLE RESULTS
24-36 Inches

241 Duchaine Blvd
New Bedford, MA

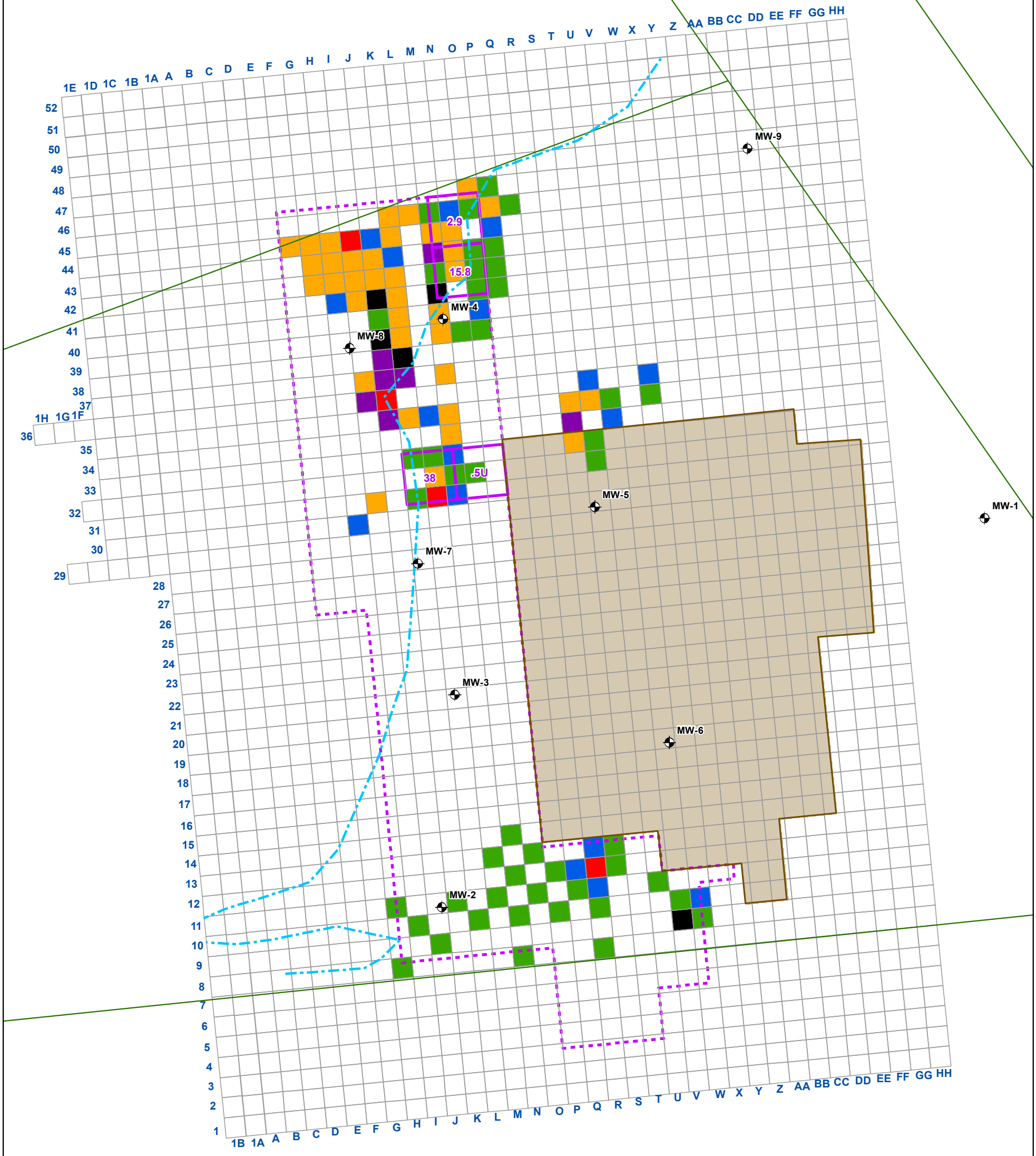
Tighe&Bond
September 2014

N W E S

0 25 50
Feet

G:\GIS\MA\NewBedfordMA\avproj\DuchaineBlvd_Fig8.mxd

32-38391



Legend

- Non Detect
- Sample Result <1
- Sample Result Between 1 and <25
- Sample Result Between 25 and <50
- Sample Result Between 50 and <100
- Sample Result Between 100 and <500
- Sample Result ≥500
- Monitoring Well
- EPA Excavation Area
- 25' x 25' EPA Confirmatory Soil Sampling Grid
- 10' x 10' T&B Soil Sampling Grid
- Buildings
- Wetland Boundary
- Property Line

FIGURE 9:
T&B PCB GRID SAMPLE RESULTS
36-48 Inches

241 Duchaine Blvd
New Bedford, MA

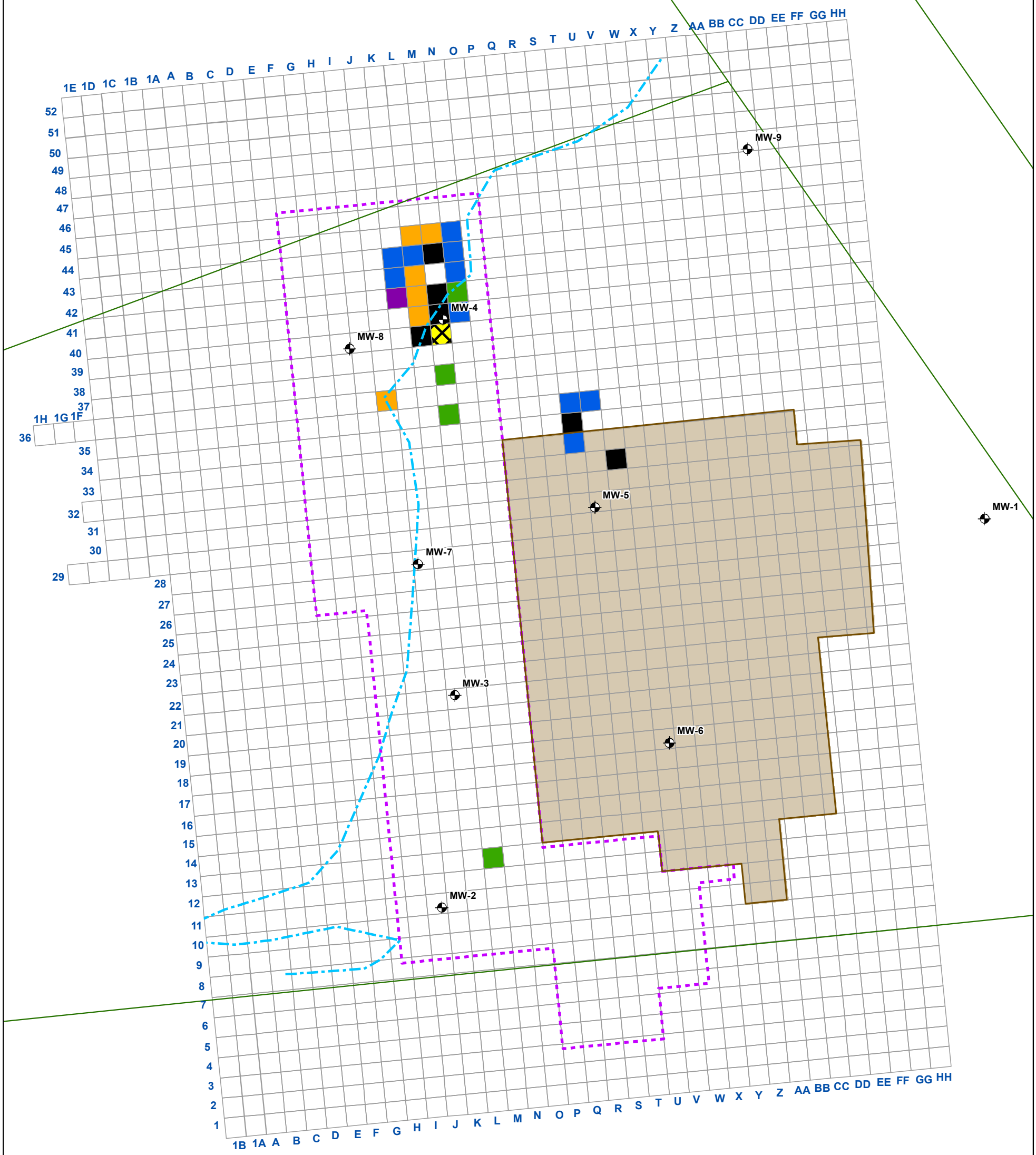
Tighe&Bond
September 2014

N W E S

0 25 50
Feet

G:\GIS\MA\NewBedfordMA\avproj\DuchaineBlvd_Fig9.mxd

32-38391



Legend

- Non Detect
- Sample Result <1
- Sample Result Between 1 and <25
- Sample Result Between 25 and <50
- Sample Result Between 50 and <100
- Sample Result Between 100 and <500
- Sample Result ≥500
- Monitoring Well
- EPA Excavation Area
- 10' x 10' T&B Soil Sampling Grid
- Buildings
- Wetland Boundary
- Property Line

FIGURE 10:
T&B PCB GRID SAMPLE RESULTS

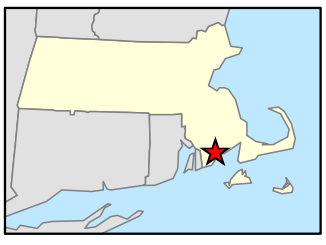
48-60 Inches

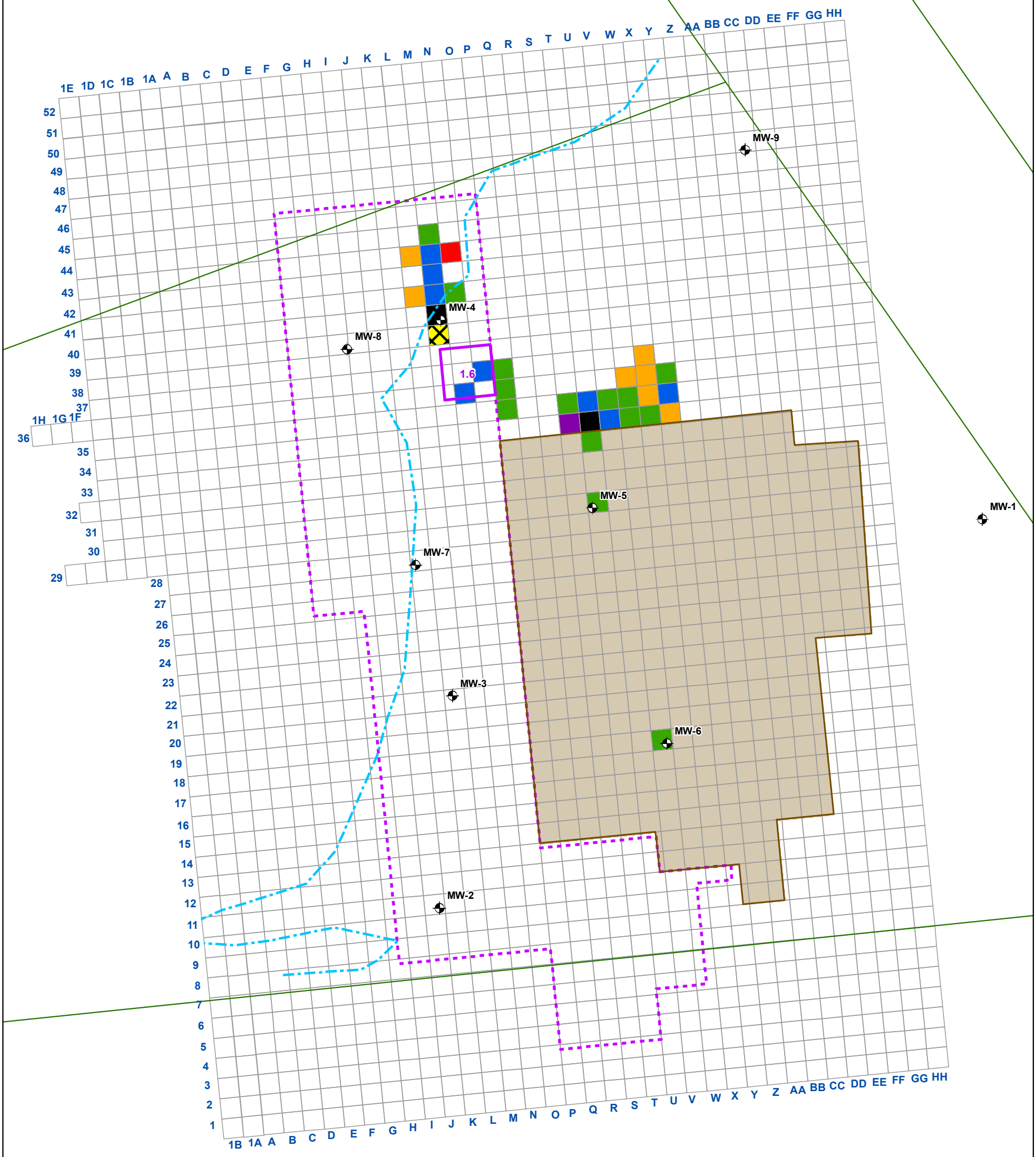
241 Duchaine Blvd
New Bedford, MA

Tighe&Bond
September 2014

N W E S

0 25 50
Feet





Legend

- Non Detect
- Sample Result <1
- Sample Result Between 1 and <25
- Sample Result Between 25 and <50
- Sample Result Between 50 and <100
- Sample Result Between 100 and <500
- Sample Result ≥500
- Monitoring Well
- EPA Excavation Area
- 25' x 25' EPA Confirmatory Soil Sampling Grid
- 10' x 10' T&B Soil Sampling Grid
- Buildings
- Wetland Boundary
- Property Line

FIGURE 11:
T&B PCB GRID SAMPLE RESULTS
60-72 Inches (Or Greater)

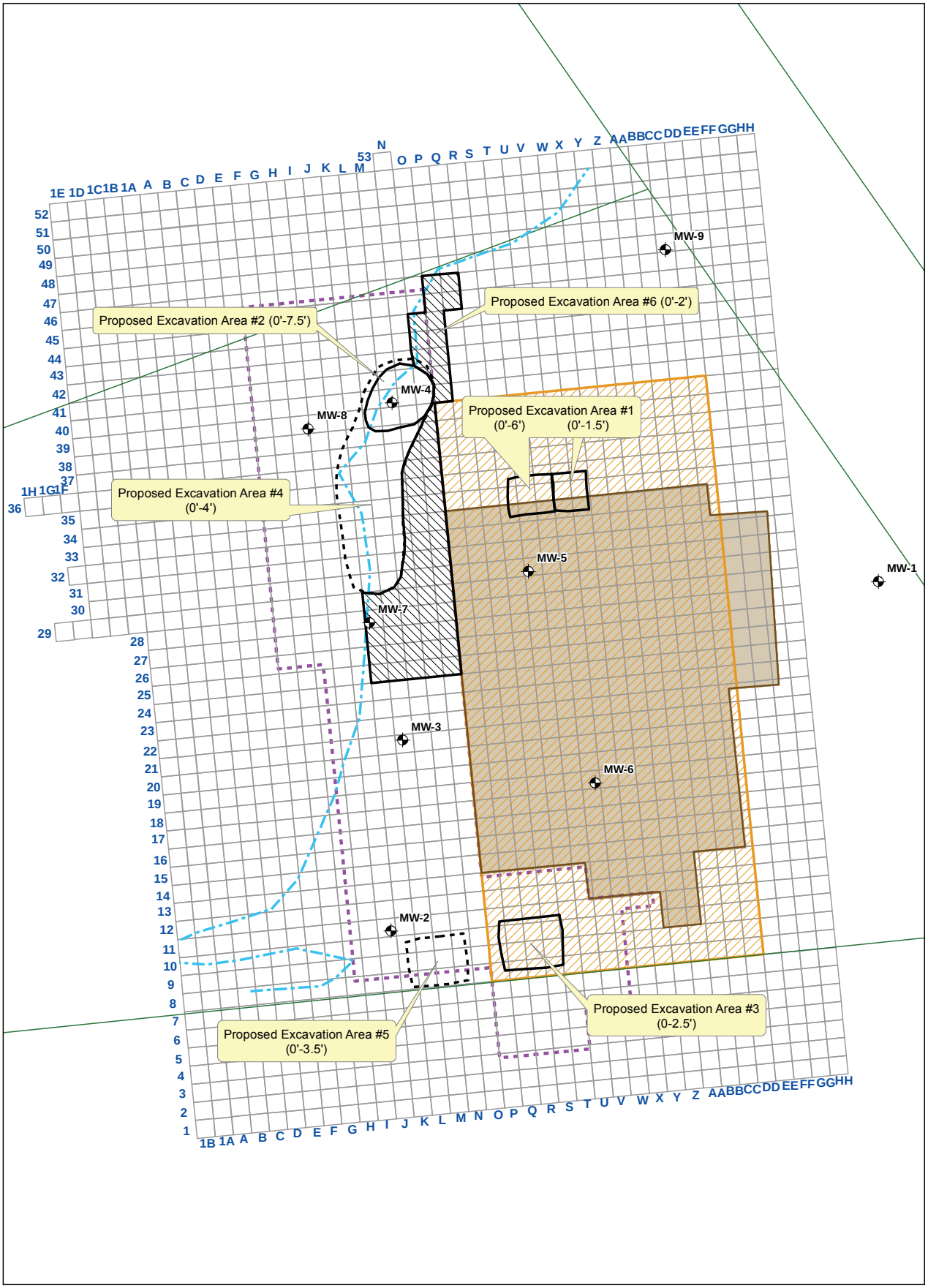
241 Duchaine Blvd
New Bedford, MA

Tighe&Bond
September 2014

0 25 50
Feet

G:\GIS\MA\NewBedfordMA\avproj\DuchaineBlvd_Fig11.mxd

32-38391



Legend

- Monitoring Well
- EPA Excavation Area
- Proposed Excavation of PCBs ≥ 500
- Proposed Excavation of PCBs ≥ 25
- Proposed Excavation of PCBs ≥ 1
- Proposed/Conceptual Area for PCB Consolidation & TSCA Cap
- 10' x 10' T&B Soil Sampling Grid
- Buildings
- Wetland Boundary
- Property Line

FIGURE 12:
PROPOSED EXCAVATION PLAN

241 Duchaine Blvd
New Bedford, MA

Tighe&Bond

July 2015

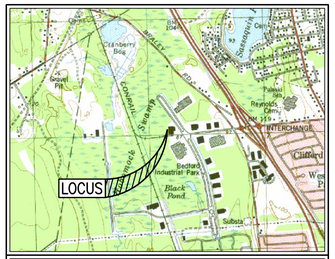
0 25 50
Feet

G:\GIS\MA\NewBedfordMA\avproj\DuchaineBlvd_Fig12.mxd

32-38391

Tighe&Bond

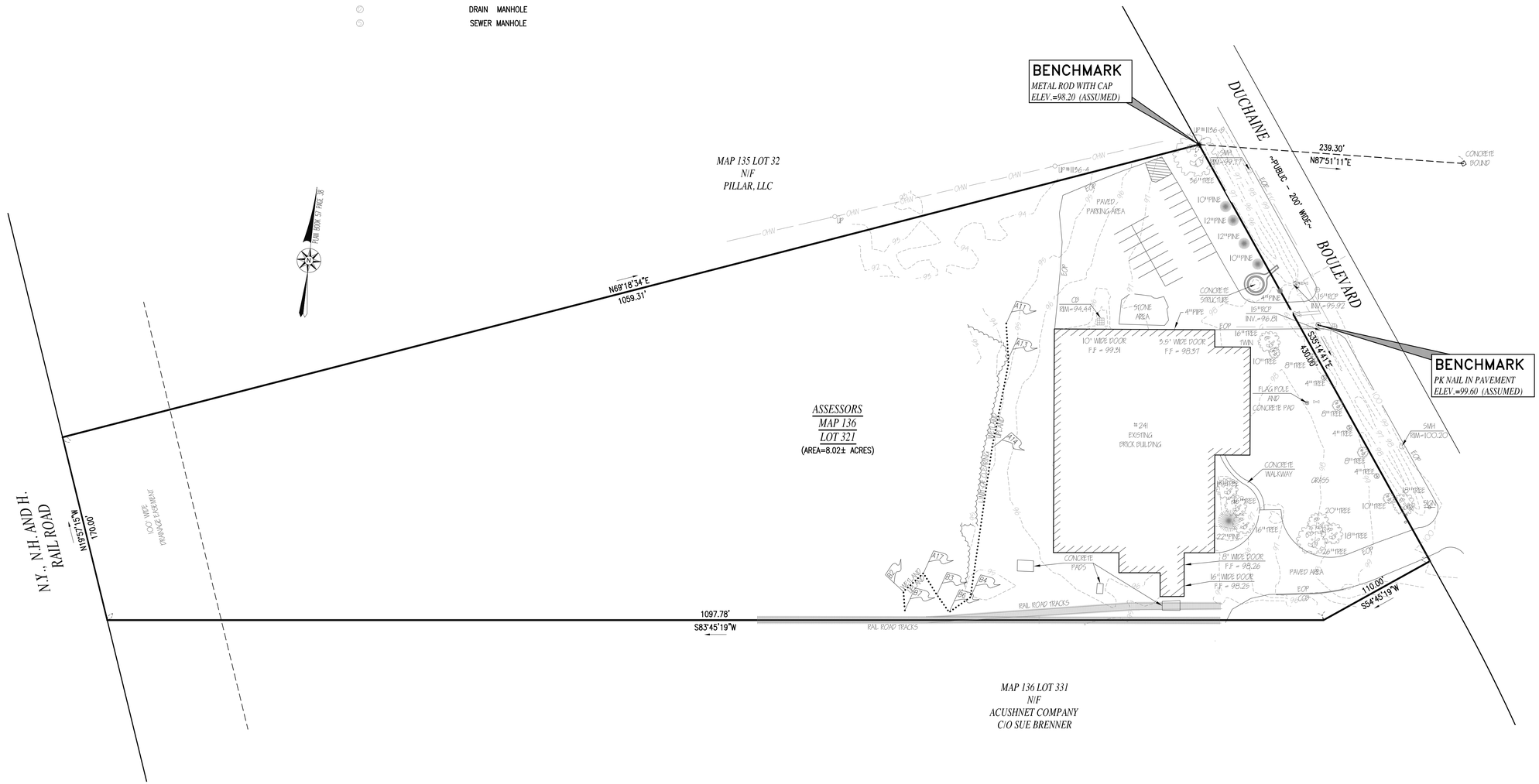
APPENDIX B



LOCUS MAP SCALE: 1"=2,000'±

LEGEND

EXISTING	DESCRIPTION
	PROPERTY LINE
101	CONTOUR LINE
EOP	EDGE OF PAVEMENT
CCB	CAPE COD BERM
W	WATER LINE
G	GAS LINE
ETC	ELECTRIC, TELEPHONE & CABLE
OHW	OVERHEAD WIRES
D	DRAIN LINE
	HYDRANT
	WATER GATE
	GAS GATE
	SIGN
	UTILITY POLE
	CATCH BASIN
	DRAIN MANHOLE
	SEWER MANHOLE



0' 50' 100' 150'
1" = 50'

NOTES:
1. TOPOGRAPHIC SURVEY PERFORMED BY CITY OF NEW BEDFORD DEPARTMENT OF PUBLIC WORKS AND THOMPSON FARLAND, INC.
2. WETLAND DELINEATED BY CITY OF NEW BEDFORD.

RECORD OWNER:
ASSESSORS MAP 136 LOT 321
CITY OF NEW BEDFORD
133 WILLIAM STREET
NEW BEDFORD, MA 02740
DEED BOOK 8209 PAGE 172
PLAN BOOK 57 PAGE 38

REVISIONS

COMMONWEALTH OF MASSACHUSETTS
BRIAN J. MURPHY
No. 38387
REGISTERED PROFESSIONAL LAND SURVEYOR

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PROFESSIONAL ENGINEERS // LAND SURVEYORS
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NEW BEDFORD | TAUNTON | CAMBRIDGE | MARLBOROUGH

DRAWN BY: EDD
DESIGNED BY: ***
CHECKED BY: BJM

PARTIAL TOPOGRAPHIC SURVEY PLAN
241 DUCHAINE BOULEVARD
ASSESSORS MAP 136 LOT 321
NEW BEDFORD, MASSACHUSETTS

PREPARED FOR: RAY HOLBERT - OFFICE OF ENVIRONMENTAL STEWARDSHIP, CITY OF NEW BEDFORD
133 WILLIAM STREET
NEW BEDFORD, MA 02740

JULY 22, 2014
SCALE: 1"=50'
JOB NO. 14-446(13-1125)
LATEST REVISION:

SHEET 1 OF 1

Tighe&Bond

APPENDIX C

Table 3-1 Summary of Phase II PCBs Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample ID	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
B-46	0-6"	0.33
C-42	0-6"	**1.2**
C-50	0-6"	0.12
D-44	0-6"	**1.6**
D-45	0-6"	0.790
D-46	12-24"	0.740
D-47	0-6"	**2.0**
E-40	0-6"	< 0.460
E-40	12-24"	< 0.400
E-41	0-6"	< 0.510
E-42	0-6"	< 0.380
E-43	0-6"	< 0.610
E-43	12-24"	< 0.700
E-44	0-6"	**4.7**
E-45	0-6"	**33**
E-46	0-6"	< 0.250
E-46	12-24"	**1.2**
E-47	0-6"	**7.0**
F-42	24-36"	< 1.8
F-44	24-36"	**9.8**
F-46	0-6"	**1.3**
F-47	0-6"	< 0.820
G-40	24-36"	< 0.380
G-41	24-36"	**25**
G-42	24-36"	< 0.380
G-43	24-36"	**4.3**
G-45	24-36"	< 2.2
G-46	0-6"	**3.8**
G-47	0-6"	0.660
G-47	12-24"	< 0.340
H-8	0-6"	< 0.400
H-8	36-48"	< 0.620
H-9	0-6"	< 0.410
H-10	0-6"	< 2.000
H-11	0-6"	< 0.460
H-11	36-48"	< 0.380
H-28	12-24"	0.710
H-30	12-24"	**18**
H-32	12-24"	0.640
H-34	12-24"	< 0.380
H-41	24-36"	< 0.370
H-42	24-36"	**57**
H-42	36-48"	**1.2**
H-43	24-36"	0.880
H-44	24-36"	0.700
H-46	0-6"	**3.2**
H-47	0-6"	< 0.460
I-8	0-6"	< 0.350
I-10	36-48"	< 0.870
I-29	12-24"	**1.1**
I-31	12-24"	**48**
I-33	12-24"	**1.8**
I-36	24-36"	< 0.380
I-38	24-36"	< 0.390
I-40	24-36"	< 0.390
I-41	24-36"	**3.6**
I-42	24-36"	< 0.370
I-43	24-36"	**7.1**
I-45	24-36"	**3.8**
I-46	0-6"	**2.5**
I-47	0-6"	0.410
J-8	0-6"	< 0.370
J-9	36-48"	< 0.360
J-28	12-24"	< 0.370
J-30	12-24"	**3.2**
J-32	12-24"	0.880
J-34	12-24"	< 0.380
J-36	36-48"	**36**
J-38	24-36"	**29**
J-39	24-36"	< 0.370
J-40	24-36"	**57**
J-40	36-48"	< 0.390
J-41	24-36"	0.580
J-42	24-36"	**28**
J-44	24-36"	< 1.8
J-46	0-6"	**3.8**
J-46	12-24"	**2.7**
J-47	0-6"	0.710
K-8	0-6"	< 0.380
K-8	12-24"	< 0.380
K-11	36-48'	< 0.380
K-29	12-24"	< 0.360
K-31	36-48"	< 0.360
K-33	36-48"	< 0.380
K-35	24-36"	**7.4**
K-37	24-36"	< 0.370
K-39	24-36"	< 0.370
K-40	24-36"	< 0.370
K-41	24-36"	**3.3**
K-43	24-36"	**8.2**
K-45	24-36"	**31**

Table 3-1 Summary of Phase II PCBs Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample ID	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
K-46	0-6"	**3.5**
K-47	0-6"	0.640
L-8	0-6"	< 0.370
L-10	36-48'	< 0.360
L-28	12-24"	< 0.370
L-30	12-24"	< 0.370
L-32	36-48"	**3.8**
L-34	24-36"	**16**
L-36	24-36"	< 0.370
L-38	24-36"	0.890
L-39	24-36"	< 0.390
L-40	24-36"	< 0.370
L-41	24-36"	**36**
L-42	24-36"	**1.5**
L-43	24-36"	< 0.380
L-44	24-36"	< 0.370
L-46	0-6"	**3.0**
L-47	0-6"	**4.3**
L-47	12-24"	0.560
L-50	0-6"	< 0.060
M-8	0-6"	< 0.370
M-8	12-24"	< 0.370
M-11	36-48'	< 0.370
M-13	36-48"	< 0.350
M-13	48-60"	< 0.350
M-25	12-24"	< 0.460
M-27	12-24"	< 0.370
M-29	12-24"	**2.0**
M-31	36-48"	0.490
M-33	24-36"	< 0.380
M-35	36-48"	**1.0**
M-37	36-48"	**3.8**
M-38	24-36"	< 0.370
M-39	24-36"	**18,000**
M-39	36-48"	**5.9**
M-40	36-48"	**11**
M-41	36-48"	**120**
M-41	48-60"	**230**
M-42	36-48"	< 0.380
M-43	36-48"	**52**
M-43	48-60"	**340**
M-44	36-48"	**3.8**
M-45	36-48"	< 0.370
M-46	0-6"	**9.0**
M-47	0-6"	**12**
N-8	0-6"	< 0.370
N-8	36-48"	< 0.380
N-10	36-48"	< 0.370
N-12	36-48"	< 0.360
N-14	36-48"	< 0.360
N-26	12-24"	**5.1**
N-28	12-24"	**7.7**
N-32	36-48"	< 0.370
N-34	24-36	0.530
N-36	72-84"	0.700
N-38	24-36"	< 0.360
N-39	24-36"	**4,500**
N-39	36-48"	< 0.370
N-40	24-36"	0.870
N-41	24-36"	0.410
N-42	36-48"	**1.8**
N-43	36-48"	**4.7**
N-44	36-48"	**7.2**
N-46	0-6"	**14**
N-47	0-6"	**3.9**
O-3	0-6"	< 0.360
O-3	12-24"	< 0.350
O-4	12-24"	< 0.350
O-5	12-24"	< 0.360
O-11	36-48"	< 0.350
O-13	36-48"	< 0.360
O-25	12-24"	< 0.380
O-27	12-24"	< 0.370
O-29	12-24"	< 0.380
O-33	24-36"	< 0.380
O-35	24-36"	< 0.390
O-37	72-84"	0.580
O-38	24-36"	< 0.370
O-39	24-36"	**130**
O-39	36-48"	< 0.410
O-40	24-36"	**1.8**
O-41	36-48"	< 0.380
O-43	36-48"	< 1.000
O-45	36-48"	< 1.100
O-46	0-6"	**1.9**
O-47	0-6"	**1.1**
P-10	36-48"	< 0.360
P-12	36-48"	< 0.350
P-34	24-36"	< 0.360
P-35	72-84"	< 0.350
P-36	72-84"	< 0.380

Table 3-1 Summary of Phase II PCBs Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample ID	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
P-37	72-84"	< 1.600
P-38	24-36"	< 0.350
P-39	24-36"	< 0.380
P-40	24-36"	< 0.410
P-41	36-48"	< 0.890
P-42	36-48"	< 0.350
P-43	36-48"	< 0.500
P-44	36-48"	0.500
P-45	36-48"	**23**
P-46	0-6"	**2.5**
P-46	12-24"	0.570
P-47	0-6"	0.480
Q-3	0-6"	< 0.470
Q-3	12-24"	< 0.360
Q-11	36-48"	< 0.350
R-6	12-24"	< 0.370
R-8	36-48"	< 0.370
R-10	36-48"	< 0.360
R-12	36-48"	**29**
R-15 (B-18)	0-12"	< 0.340
R-27 (B-11)	0-12"	< 0.360
R-31 (B-4)	0-12"	< 0.350
S-11	12-24"	< 0.360
S-23 (B-13)	0-12"	< 0.350
S-32	0-6"	< 0.350
S-34	0-6"	**1.8**
S-35	0-6"	0.500
T-8	12-24"	< 0.370
T-10	12-24"	< 0.350
T-10	24-36"	< 0.360
T-18 (B-15)	0-12"	< 0.360
T-30 (B-5)	0-12"	0.560
T-30 (B-5)	60-72"	< 0.400
T-31	0-6"	< 0.350
T-32 (B-1)	0-12"	**100**
T-32 (B-1)	24-36"	**24**
T-33	0-6"	0.930
T-34	0-6"	**2,600**
T-34	12-24"	**11,000**
T-34	24-36"	**2,200**
T-34	60-84"	**480**
T-35	0-6"	**36**
T-36	0-6"	**2.3**
U-11	36-48"	< 0.370
U-14 (B-16)	0-12"	< 0.340
U-29 (B-6)	0-12"	< 0.400
U-32	0-6"	< 0.350
U-34	0-6"	**1.7**
V-10	36-48"	< 0.360
V-18 (B-17)	0-12"	< 0.340
V-18 (B-17)	60-72"	< 0.360
V-32 (B-2)	0-12"	**2.5**
V-32 (B-2)	12-24"	0.540
V-32 (B-2)	24-36"	0.450
V-34 (SW-1)	60-120"	< 0.400
V-35 (SW-3)	60-120"	< 0.370
W-9	36-48"	< 0.360
W-11	0-6"	0.450
W-29 (B-7)	0-12"	< 0.370
W-34 (SW-2)	60-120"	< 0.390
W-35 (Base)	120-144"	**4.4**
W-36	60-120"	**1.9**
W-36	120-144"	0.680
X-10	0-6"	0.570
X-11	0-6"	**150**
X-11	12-24"	< 0.403
X-27 (B-10)	0-12"	< 0.350
X-32 (B-3)	0-12"	**1.5**
X-34 (SW-4)	60-120"	**8.8**
X-35	120-144"	0.500
Z-18 (B-14)	0-12"	< 0.350
Z-23 (B-12)	0-12"	< 0.340
Z-32	0-6"	< 0.340
CC-25 (B-8)	0-12'	< 0.350
CC-27 (B-9)	0-12"	< 0.340

Notes: PCBs = Polychlorinated Biphenyls
< xx indicates that PCBs were not detected above the indicated detection limit

Concentrations in bold = Exceedance of TSCA Unrestricted Standard of 1 mg/kg and MCP Method 1 soil standards

Concentrations with box/bold = Exceedance of MCP Method 3 UCL of 100 mg/kg

Table 3-2 Summary of Earlier Phase II Groundwater Results
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

		Method 1 Standards			Method 3	Sample Identification	MW-1	MW-2	MW-3	MW-4		MW-5		MW-6		MW-7	MW-8	MW-9
	Analytical Test	**GW-1**	**GW-2**	**GW-3**	**UCLs**	**Sample Date**	**2/4/09**	**5/16/08**	**5/16/08**	**5/16/08**	**2/4/09**	**5/16/08**	**2/4/09**	**5/16/08**	**2/4/09**	**2/4/09**	**2/4/09**	**2/4/09**
VOCs - ug/L	Toluene	1,000	50,000	40,000	100,000		--	--	< 1	13	--	< 1	--	< 1	--	--	--	--
	All Other VOCs	c/s	c/s	c/s	c/s		--	--	< c/s	< c/s	--	< c/s	--	< c/s	--	--	--	--
EPH - ug/L	C9-C18 Aliphatics	700	5,000	50,000	100,000		--	--	--	< 100	--	< 100	--	< 100	--	--	--	--
	C19-C36 Aliphatics	14,000	NA	50,000	100,000		--	--	--	< 100	--	< 100	--	< 100	--	--	--	--
	C11-C22 Aromatics	200	50,000	5,000	100,000		--	--	--	< 100	--	< 100	--	< 100	--	--	--	--
Target PAHs - ug/L	Acenaphthene	20	NA	6,000	100,000		--	--	--	< 10	--	< 10	--	< 10	--	--	--	--
	Acenaphthylene	30	10,000	40	100,000		--	--	--	< 0.3	--	< 0.3	--	< 0.3	--	--	--	--
	Anthracene	60	NA	30	600		--	--	--	< 10	--	< 10	--	< 10	--	--	--	--
	Benzo(a)anthracene	1	NA	1,000	10,000		--	--	--	< 0.06	--	< 0.06	--	< 0.06	--	--	--	--
	Benzo(a)pyrene	0.2	NA	500	5,000		--	--	--	< 0.2	--	< 0.2	--	< 0.2	--	--	--	--
	Benzo(b)fluoranthene	1	NA	400	4,000		--	--	--	< 0.08	--	< 0.08	--	< 0.08	--	--	--	--
	Benzo(ghi)perylene	50	NA	20	500		--	--	--	< 10	--	< 10	--	< 10	--	--	--	--
	Benzo(k)fluoranthene	1	NA	100	1,000		--	--	--	< 0.3	--	< 0.3	--	< 0.3	--	--	--	--
	Chrysene	2	NA	70	700		--	--	--	< 2	--	< 2	--	< 2	--	--	--	--
	Dibenzo(a,h)anthracene	0.5	NA	40	400		--	--	--	< 0.5	--	< 0.5	--	< 0.5	--	--	--	--
	Fluoranthene	90	NA	200	2,000		--	--	--	< 10	--	< 10	--	< 10	--	--	--	--
	Fluorene	30	NA	40	400		--	--	--	< 10	--	< 10	--	< 10	--	--	--	--
	Indeno(1,2,3-cd)Pyrene	0.5	NA	100	1,000		--	--	--	< 0.5	--	< 0.5	--	< 0.5	--	--	--	--
	2-Methylnaphthalene	10	2,000	20,000	100,000		--	--	--	< 10	--	< 10	--	< 10	--	--	--	--
	Naphthalene	140	700	20,000	100,000		--	--	--	< 10	--	< 10	--	< 10	--	--	--	--
	Phenanthrene	40	NA	10,000	100,000		--	--	--	0.36	--	< 0.3	--	< 0.3	--	--	--	--
	Pyrene	60	NA	20	600		--	--	--	< 10	--	< 10	--	< 10	--	--	--	--
Total PCBs - ug/L	Total PCBs	0.5	5	10	100		< 0.50	< 0.50	< 0.60	15	2.7	1.6	2.1	0.83	< 0.50	< 0.50	< 0.50	< 0.50

Notes:
EPH = Extractable Petroleum Hydrocarbons
PAHs = Polycylic Aromatic Hydrocarbons
< = Indicates the compound was not detected at the detection limit shown.
ug/L = micrograms per liter.
Samples were not field filtered before analysis.

Table 3-3 Summary of Phase II Water Results
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample ID	Sample Location	Total PCB Concentration (ug/l)
SW-1	Surface water sample, collected on northwest portion of site	< 0.50
SW-2	Surface water sample, collected on northwest portion of site	< 0.013
Water Pit	Collected from water pit in boiler room	0.55
Hydraulic Press Pit	Collected from hydraulic press pit in press room	< 0.50

Table 3-4 Summary of Phase II Concrete Dust Results

Former Polymerine, Inc.

241 Duchaine Boulevard

New Bedford, Massachusetts

Sample ID	Sample Location	Sample Depth (inches)	Wall Height (Feet)	Total PCB Concentration (mg/kg)
CS-1	Collected in tank room, adjacent to Resin Tank 551	0-0.5	-	**3.3**
CS-2	Collected in tank room adjacent to Resin Tank 507	0-0.5	-	**4.2**
CS-3	Collected to west of floor grate and south of concrete filled trench	0-0.5	-	**24**
		0.5-1	-	**15**
CS-4	Collected to east of floor grate and south of concrete filled trench	0-0.5	-	**8.7**
CS-5	Collected to east of floor grate and north of concrete filled trench	0-0.5	-	**14**
CS-6	Collected to west of roto-molding equipment (west unit)	0-0.5	-	**4.4**
CS-7	Collected to north of roto-molding equipment (west unit)	0-0.5	-	**5.0**
CS-8	Collected to east of roto-molding equipment (west unit)	0-0.5	-	**5.9**
		0.5-1	-	**2.9**
CS-9	Collected to west of roto-molding equipment (east unit)	0-0.5	-	**2.8**
CS-10	Collected to north of roto-molding equipment (east unit)	0-0.5	-	**9.2**
		0.5-1	-	**2.9**
CS-11	Collected to south of roto-molding equipment (east unit)	0-0.5	-	**4.3**
CS-12	Collected to east of roto-molding equipment (east unit)	0-0.5	-	**15**
CS-13	Collected east end of fork lift path in press room	0-0.5	-	**20**
		0.5-1	-	**8.6**
CS-14	Collected center of fork lift path in press room	0-0.5	-	**87**
CS-15	Collected west end of fork lift path in press room	0-0.5	-	**49**
CS-16	Collected east side of hydraulic press	0-0.5	-	**92**
CS-17	Collected north side of hydraulic press	0-0.5	-	**67**
CS-18	Collected west side of hydraulic press	0-0.5	-	**17**
		0.5-1	-	**9**
CS-19	Collected from blue painted section of western press room wall	-	4	**58**
CS-20	Collected from center of machine shop	0-0.5	-	**60**
		0.5-1	-	**20**
CS-21	Collected from gray painted, stained northern boiler room wall, west of loading dock bay doors	-	3	**58**
CS-22	Collected from gray painted, stained northern boiler room wall, east of loading dock bay doors	-	3	**100,000**
CS-23	Collected adjacent to southwest corner of former boiler	0-0.5	-	**790**
		0.5-1	-	**630**
CS-24	Collected adjacent to southeast corner of former boiler	0-0.5	-	**4,200**
CS-25	Collected from ~ 3-foot by 5-foot stained pad, south of former boiler	0-0.5	-	**51,000**
		0.5-1	-	**78,000**
CS-26	Collected on white painted, stained wall, adjacent to northeast corner of former boiler	-	4	**1,600**
CS-27	Collected from stained area located south of water pit	0-0.5	-	**240**
CS-28	Collected from ~ 3-foot by 5-foot stained pad located south of water pit	0-0.5	-	**270**
CS-29	Collected from eastern end of boiler room	0-0.5	-	**260**
CS-30	Collected from southern wall, located between CS-1 and CS-2	-	5	0.870
CS-31	Collected from unpainted wall located on southwestern corner of building	-	6	**4**
CS-32	Collected from white painted section of the western all	-	9	**16**
CS-33	Collected on concrete floor adjacent to CS-32	0-0.5	-	**3.2**
		0.5-1	-	< 0.330

Table 3-4 Summary of Phase II Concrete Dust Results

Former Polymerine, Inc.

241 Duchaine Boulevard

New Bedford, Massachusetts

CS-34	Collected from concrete floor in storage area	0-0.5	-	**18**
		0.5-1	-	**5.4**
CS-35	Collected from the center of the processing area	0-0.5	-	**3.5**
		0.5-1	-	< 0.330
CS-36	Collected from the southeastern wall of shipping area	-	5.5	**20**
CS-37	Collected from eastern wall in process area	-	5.5	**16**
CS-38	Collected from western wall in process area	-	8	**16**
CS-39	Collected from northwestern end of process area	0-0.5	-	0.910
		0.5-1	-	< 0.330
CS-40	Collected from north center of process area	0-0.5	-	**6.1**
		0.5-1	-	< 0.330
CS-41	Collected from northeastern end of process area	0-0.5	-	**3.9**
		0.5-1	-	< 0.330
CS-42	Collected from Aqua Point Storage Area	0-0.5	-	**9.5**
CS-44	Collected from north end of hallway, adjacent to the office area and cafeteria	0-0.5	-	**51**
		0.5-1	-	**2.0**
CS-45	Collected from north wall in process area	-	5	**1.6**
CS-46	Collected from southern wall in QA/QC Area	-	6	0.960
CS-47	Collected from floor in eastern end of QA/QC area	0-0.5	-	**3.0**
CS-48	Collected from floor in center of the QA/QC area	0-0.5	-	**2.5**
		0.5-1	-	< 0.330
CS-49	Collected from floor in western end of QA/QC area	0-0.5	-	**2.3**
		0.5-1	-	< 0.330
CS-50	Collected from southwestern wall of manufacturing area	-	5.5	**38**
CS-51	Collected from wall in center of QA/QC area	-	9	**32**
CS-52	Collected from wall in southeastern corner of manufacturing area	-	5.5	**44**
CS-53	Collected from northern center wall in manufacturing area	-	5	**29**
CS-54	Collected from southwestern wall of former hydaulic press room	-	6	**41**
CS-55	Collected from northeastern wall of former hydaulic press room	-	5.5	**21**
CS-56	Collected from north center wall of former hydaulic press room	-	5.5	**50**
CS-57	Collected from southern end of the shipping/receiving area	0-0.5	-	**1.6**

Notes: < xx indicates that PCBs were not detected above the indicated detection limit

Concentrations in bold = Exceedance of TSCA Unrestricted Standard of 1 mg/kg

Concentrations with box/bold = Exceedance of 50 mg/kg

Concentrations with box/bold/yellow shading = Exceedance of 500 mg/kg

Table 2-5 Summary of Earlier Phase II PCB Wipe Results

Former Polymerine, Inc.

241 Duchaine Boulevard

New Bedford, Massachusetts

Sample ID	Sample Location	Total PCB Concentration (ug/100 cm^2)
Wipe-1	Collected from southeast corner of hydraulic press	**79**
Wipe-2	Collected from northeast corner of hydraulic press	**310**
Wipe-3	Collected from southwest corner of hydraulic press	**810**
Wipe-4	Collected from northwest corner of hydraulic press	**630**
Wipe-5	Collected from center of hydraulic press	**3,100**

Notes: ug/100 cm^2 = micrograms per 100 square centimeters
Concentrations in bold *= Exceedance of TSCA Unrestricted Standard of 1 mg/kg*

Table 4-1 Supplemental PCBs Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell ID	Sample Depth (Inches BSG)	Total PCB Concentration (mg/kg)
1H36	0-12	**1.33**
1G29	0-12	0.656
1F32	0-12	**1.62**
1E38	0-12	0.294
1E40	0-12	**8.44**
1D35	0-12	**1.81**
1D41	0-12	**1.91**
1C29	0-12	**5.53**
1C45	0-12	**5.81**
1C50	0-12	0.155
1B38	0-12	**1.22**
1B39	0-12	**2.55**
1B39	12-24	<0.322
1B40	0-12	**3.03**
1A34	0-12	**26.4**
1A37[(1)]	0-6	< 0.311
1A39[(1)]	0-6	**2.66**
1A39	12-24	0.509
1A40	0-12	**12.2**
1A41	0-12	**1.17**
1A42[(1)]	0-6	0.49
1A43	0-12	0.594
1A44	0-12	<0.06
1A46	0-12	0.478
1A47	0-12	<0.099
1A48	0-12	0.428
1A49	0-12	<0.112
1A50[(1)]	0-6	0.314
1A52	0-12	0.152
A24	0-12	**10.7**
A37	0-12	**21.7**
A38	0-12	**14.4**
A39	12-24	**24.4**
A40	12-24	0.673
A41	12-24	0.69
A42	0-6	**3.44**
A42	12-24	0.139
A43	12-24	**1.45***
A44	0-12	**8.26**
A45	0-6	0.439
A46	0-12	0.386
A47	12-24	0.648
A48	12-24	0.213
A49	0-6	**1.747**
A49	12-24	0.136
A50	0-12	0.233
B37	0-12	**8.39**
B38	0-12	**2.33**
B38	12-24	**2.43**
B39	0-6	**2.16**
B39	12-24	**1.03**
B40	12-24	0.4
B41	12-24	**4.87**
B41	24-36	0.408
B42	12-24	0.88
B43	12-24	0.778
B44	0-12	**3.61**
B45	0-12	0.433
B47	12-24	0.159
B48	12-24	0.189
B49	12-24	<0.0837
B50	0-12	0.207
C27	0-12	**34**
C37	0-12	**1.84**
C38	0-12	**8.68**
C38	12-24	0.422
C40	12-24	**1.12**
C40	24-36	0.742
C41	0-6	**60.5**
C41	24-36[(2)]	**1.2**
C42	12-24	0.57
C42	24-36	0.194
C43	12-24	0.487

Table 4-1 Supplemental PCBs Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell ID	Sample Depth (Inches BSG)	Total PCB Concentration (mg/kg)
C44	0-6	**4.33**
C44	12-24	<0.299
C45	12-24	<0.376
C46	12-24	<0.346
C47	0-6	**1.1**
C47	12-24	0.494
C47	24-36	<0.295
C48	12-24	0.441*
C49	12-24	0.162
C51	0-6	< 0.397
D33	0-12	**14.5**
D37	0-12	**56.5**
D38	0-12	0.384
D38	12-24	<0.369
D39	12-24	0.134
D40	12-24	0.149
D40	24-36	0.796
D41	12-24	0.179
D41	24-36	0.452
D42	12-24	<0.0587
D42	24-36	<0.46
D43	12-24	**8.41**
D44	12-24	**2.48**
D45	12-24	**1.23**
D47	12-24	0.242
D48	12-24	0.569
D49	12-24	<0.0573
D50	0-12	<0.1
E38	0-12	**3.49**
E39	0-12	**2.11**
E40	24-36	0.185
E41	24-36	0.456
E42	24-36	**1.25**
E43	24-36	**2.14***
E44	12-24	**3.39**
E44	24-36	**15.5**
E45	24-36	**2.94**
E46	24-36	0.443
E47	12-24	0.229
E48	0-6	0.511
E49	0-12	0.135
E50	0-12	0.192
E52	0-12	0.206
F31	12-24	**2.34**
F40	24-36	0.354
F41	24-36	0.134
F44	36-48	**1.41**
F45	24-36	<0.0513
F46	24-36	<0.0521
G28	12-24	0.118
G29	12-24	<0.0592
G30	12-24	**12.5**
G30	24-36	0.187
G31	12-24	**4.19**
G31	24-36	<0.0595
G32	12-24	0.0906
G33	12-24	<0.0663
G34	12-24	0.201
G42	36-48	**1.56**
G43	36-48	**19**
G44	36-48	**8.65**
G46	24-36	0.713
G50	0-12	0.113
H8	12-24	<0.058
H8	24-36	<0.058
H9	12-24	0.829
H9	24-36	<0.0601
H10	12-24	<0.0593
H10	24-36	<0.0574
H11	12-24	<0.0577
H11	24-36	<0.0589
H29	24-36	0.529
H30	36-48	0.0723

Table 4-1 Supplemental PCBs Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell ID	Sample Depth (Inches BSG)	Total PCB Concentration (mg/kg)
H31	24-36	0.198
H32	24-36	0.2
H33	24-36	0.42
H40	24-36	<0.0551
H41	36-48	0.515
H43	36-48	**9.52**
H44	36-48	**1.29**
H45	24-36	**4.88**
H46	24-36	0.947
I8	12-24	0.0699
I8	24-36	0.0636
I11	12-24	<0.0563
I11	24-36	<0.0577
I28	12-24	**2.29**
I29	24-36	0.336
I30	24-36	**55.4**
I31	36-48	**3.85**
I32	24-36	0.178
I33	24-36	0.112
I34	24-36	**3.27**
I35	24-36	0.62
I36	36-48	**67.1**
I37	24-36[(2)]	0.153
I37	36-48	**1.8**
I39	24-36	0.059
I41	36-48	**23**
I42	36-48	**13.7**
I43	36-48	**4.01**
I44	36-48	**27.3**
I46	24-36	**2.2**
J8	12-24	<0.0567
J8	24-36	0.0846
J11	12-24	<0.0562
J11	24-36	<0.058
J29	24-36	**7.13**
J30	24-36	**27.9**
J31	24-36	**38.4**
J32	24-36	**14.1**
J33	24-36	**95.9**
J34	24-36	0.337
J35	36-48	**60**
J36	48-60	**5**
J37	36-48	**80.9**
J38	36-48	**84.8**
J39	36-48	**204**
J41	36-48	**136**
J42	36-48	**7.58**
J43	36-48	**4.55**
J44	36-48	0.243
J46	24-36	0.453
J48	0-12	**2.15**
J52	0-12	0.103
K9	24-36	**2.67**
K10	24-36	<0.056
K11	12-24	<0.055
K28	12-24	<0.0583
K30	12-24	<0.0554
K31	12-24	**7.32**
K35	36-48	**9.04**
K37	36-48	**93.5**
K38	36-48	**102**
K39	36-48	**2.84**
K40	36-48	**21.8**
K41	36-48	**4.11**
K41	48-60	**92.1**
K42	36-48	**3**
K42	48-60	0.971
K43	36-48	0.17
K43	48-60	0.927
K44	36-48	**4.29**
K45	36-48	**21.8**
K46	12-24	0.161
K46	24-36[(2)]	0.895

Table 4-1 Supplemental PCBs Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell ID	Sample Depth (Inches BSG)	Total PCB Concentration (mg/kg)
K47	12-24	0.268
K47	24-36	0.298
K48	0-12	1.11
K48	12-24	0.256
K49	0-6	< 0.310
K50	0-12	**1.01**
L8	12-24	**1**
L9	24-36	**433**
L10	24-36	<0.0574
L11	12-24	<0.055
L29	12-24	<0.0571
L31	36-48	**43.1**
L33	36-48	<0.057
L35	36-48	0.352
L39	48-60	**427**
L40	48-60	**7.57**
L41	48-60	**9.35**
L41	60-72	**3.66**
L42	48-60	**4.71**
L43	48-60	0.477
L43	60-72	**13.5**
L44	48-60	**4.83**
L45	36-48	**6.78**
L46	12-24	**5.12**
L46	24-36	**2.38**
L47	24-36	**2.07**
L48	0-6	**53.2**
L48	12-24	**1.13**
L48	24-36[(2)]	< 0.0723
L49	12-24	0.9
L49	24-36	0.827
L51	0-12	0.332
M9	12-24	**39**
M10	12-24	<0.0563
M11	12-24	<0.0536
M26	12-24	<0.0591
M28	24-36	<0.0581
M29	24-36	<0.0608
M30	12-24	<0.057
M32	36-48	<0.0587
M33	36-48	0.062
M34	36-48	**1.38**
M35	48-60	<0.0546
M37	48-60	<0.0574
M39	48-60	**1,830**
M39	60-72	**978**
M39	84-96	**102**
M40	48-60	**335**
M40	60-72	**293**
M41	60-72	0.905
M42	60-72[(2)]	0.661
M43	60-72[(2)]	0.126
M44	48-60	**1.76**
M44	60-72	<0.291
M46	12-24	**6.26**
M46	24-36	**3.66**
M47	12-24	**9.41**
M48	12-24	**2.83**
M48	24-36	**3.25**
M49	12-24	**5.78**
M49	24-36	**5.62**
M50	12-24	0.501
M51	0-12	<0.0898
N25	12-24	<0.0629
N26	24-36	<0.069
N27	24-36	<0.0592
N28	24-36	<0.0563
N29	24-36	<0.057
N30	24-36	<0.0567
N33	24-36	<0.0578
N35	24-36	<0.0547
N36	24-36	<0.0604
N37	24-36	<0.0571

Table 4-1 Supplemental PCBs Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell ID	Sample Depth (Inches BSG)	Total PCB Concentration (mg/kg)
N40	48-60	0.891
N41	48-60	<0.0596
N41	60-72	<0.301
N42	48-60	0.105
N43	48-60	0.273
N43	60-72	**33.5**
N44	48-60	0.0616
N45	36-48	0.204
N46	12-24	**16.9**
N46	24-36	0.108
N47	12-24	0.63
N48	12-24	0.659
N49	0-6	**13.4**
N49	12-24	0.637
N50	12-24	0.513
N51	0-6	< 0.349
N53	0-12	0.193
O4	0-12	<0.0607
O5	0-12	0.38
O6	0-12	<0.0612
O26	12-24	<0.0574*
O28	12-24	<0.0562*
O30	12-24	<0.0566*
O40	36-48	0.869
O42	36-48	<0.0533
O46	12-24	0.677*
O46	24-36	0.343
O46	36-48	**14.4**
O47	12-24	**1.01**
O48	0-6	**46.8**
O48	12-24	0.308
O49	12-24	0.812
O50	0-6	< 0.359
P4	12-24	<0.0552
P5	12-24	0.179
P6	0-12	<0.0569
P41	24-36	<0.0578
P42	24-36	<0.0584
P43	24-36	<0.0601
P46	24-36	<0.0591
P46	36-48	<0.056
P47	12-24	**111**
P48	0-12	**2.1**
P49	0-12	0.93
Q4	12-24	<0.0585
Q5	12-24	<0.0573
Q6	0-12	<0.0594
Q9	12-24	**4,640**
Q10	12-24	**745**
Q11	24-36	0.0939
Q12	24-36	<0.0552
Q12	36-48	0.169
Q13	24-36	<0.0517
Q43	0-12	<0.0559
Q44	0-12	0.0876
Q44	24-36	<0.0561
Q45	0-12	<0.0551
Q45	12-24	0.0792
Q45	36-48	<0.0713
Q46	0-12	**11.1**
Q46	24-36[(2)]	**25.1**
Q47	0-12	**3.57**
Q48	0-12	**6.95**
Q51	0-12	**1.562**
R4	0-12	0.0783
R5	0-12	<0.0581
R6	0-12	0.176
R9	12-24	**13,100**
R11	24-36	0.0719
R11	36-48	0.422
R12	24-36	<0.0531
R13	24-36	<0.0545
R13	36-48	0.318

Table 4-1 Supplemental PCBs Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell ID	Sample Depth (Inches BSG)	Total PCB Concentration (mg/kg)
R14	24-36	<0.056
R33	0-12	0.0619
R33	24-36	<0.0499
R34	0-12	0.114
R34	24-36	0.438
R49	0-6	< 0.327
S9	12-24	**152**
S11	24-36	0.933
S12	24-36	0.305
S12	36-48	<0.0539
S13	24-36	<0.0533
S13	36-48	<0.0544
S14	0-12	<0.0541
S14	24-36	<0.0552
S31	12-24	<0.0538
S31	24-36	<0.0526
S33	12-24	<0.0537
S33	36-48	**3.09**
S33	48-60	0.0924
S34	12-24	**8.09**
S34	24-36	**96.6**
S34	36-48	**75.2**
S34	48-60	**213**
S34	60-72	**50.4**
S35	12-24	**1.08**
S35	24-36	0.26
S35	36-48	**9.91**
S35	48-60	0.517
S35	60-72	<0.0593
S36	0-12	<0.0555
S37	0-12	0.262
S48	0-6	0.66
T9	24-36	**9.88**
T11	24-36	**8.66**
T12	24-36	0.0556
T13	24-36	<0.0527
T14	0-12	<0.0545
T14	24-36	<0.0598
T31	12-24	<0.0541
T31	24-36	<0.0518
T32	36-48	<0.0512
T33	36-48	<0.0542
T33	60-72	<0.058
T35	12-24	0.275
T35	24-36	<0.0628
T35	36-48	**9.11**
T35	48-60	0.555
T35	60-72	0.0778
T36	12-24	**1.74**
T36	36-48	0.0608
T37	0-12	<0.0562
T37	12-24	<0.0582
U11	24-36	0.0708
U12	24-36	0.0906
U13	24-36	0.392
U14	24-36	<0.0602
U31	12-24	<0.0526
U32	12-24	0.123
U32	24-36	<0.0537
U32	48-60	**317**
U34	12-24	**1.423**
U34	24-36	**1.34**
U34	36-48	0.102
U34	60-72	0.213
U35	12-24	<0.0545
U35	36-48	<0.0559
U35	60-72	<0.0608
U37	0-12	0.0832
U50	0-12	0.181
V9	36-48	**275**
V11	24-36	**2.75**
V12	0-12	**4.73**
V12	24-36	**3.69**

Table 4-1 Supplemental PCBs Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell ID	Sample Depth (Inches BSG)	Total PCB Concentration (mg/kg)
V13	24-36	0.157
V31	0-12	<0.0525
V33	12-24	<0.0547
V34	0-12	**2,390**
V34	12-24	**14.8**
V34	24-36	**43.1**
V35	0-12	**5.46**
V36	0-12	**2.77**
V36	12-24	0.979
V36	24-36	**2.22**
V36	60-72	**2.39**
V37	0-12	**1.29**
W9	24-36	<0.0525
W10	0-12	0.115
W10	12-24	**51.3**
W10	24-36	**1.13**
W10	36-48	0.628
W11	24-36	0.0705
W12	0-12	**4.88**
W12	12-24	0.932
W31	0-12	<0.054
W32	12-24	<0.0551
W34	0-12	0.854
W35	0-12	**22.4**
W35	12-24	**1.02**
W35	36-48	<0.0541
W36	0-12	**1.77**
W36	36-48	0.577
W37	60-72	**3.96**
X10	12-24	0.378
X12	0-12	**8.38**
X12	12-24	0.533
X13	0-12	0.814
X31	0-12	<0.0511
X32	12-24	<0.0541
X33	12-24	0.892
X35	0-12	**5.59**
X36	0-12	0.608
X36	12-24	0.714
X36	24-36	**3.91**
X36	60-72	<0.0574
Y10	0-12	<0.0582
Y11	0-12	0.383
Y12	0-12	0.554
Y31	0-12	<0.0526
Y32	0-12	**1.36**
Y33	0-12	**2.42**
Y34	0-12	**2.16**
Y35	0-12	**8.89**
Y36	0-12	**6.86**

Notes: (1) Samples were labeled with "AA" on the chain of custody were collected from sample grid cell 1A

(2) These samples had sample depths mis-labeled on the chain of custody or by laboratory in report, and the depth interval in this summary represents depth collected.

** indicates a 2nd sample was collected from the cell at similar location during the March 2014 program, and the result shown in table is the higher of the two results.*

< xx indicates that PCBs were not detected above the indicated detection limit

***Concentrations in bold** = Exceedance of TSCA Unrestricted Standard of 1 mg/kg and MCP Method 1 soil standards*

***Concentrations with box/bold =** Exceedance of MCP Method 3 UCL of 100 mg/kg*

Table 4-2 Supplemental Phase II Groundwater Results

Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

	Method 1 Standards		Method 3	Sample Identification	MW-4		MW-5			MW-8
Analytical Test	**GW-1**	**GW-3**	**UCLs**	**Sample Date**	4/24/13	7/09/14	4/24/13	5/30/13	7/09/14	7/09/14
PCBs										
Total PCBs[1] - ug/L	0.5	10	100		6.19	7.98	512	-	2.85	<0.10
Dissolved PCBs[2] - ug/L	0.5	10	100		-	0.25	-	<0.10	<0.09	<0.10

Notes:

< = Indicates the compound was not detected at the detection limit shown.

ug/L = micrograms per liter.

[1] Samples were not field filtered before analysis.

[2] Samples were field filtered before analysis.

Boxed value indicates exceedance of applicable Method 1 standard.

Table 4-3 Summary of PCBs in Other Building Materials
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample ID	Sample Location	Total PCB Concentration (mg/kg)
PCB-01	Expansion joint caulking (original inner layer) of the CMU walls along the western exterior portion of the building	5.45
PCB-02	Paint chip sample on the exterior of the CMU walls near former tank room on the southern portion of the building	5.33
PCB-03	Glazing compound collected between the walls and metal frame of the window system on east wall of the former office area	0.956
PCB-04	Caulking material from the interior of the building between the metal window frame and the brick on north entranceway to the former office area	149

Table 4-4 Summary of Duplicate Soil Results
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell ID	Sample Depth (Inches BSG)	Total PCB Concentration (mg/kg)	
		Result 1*	Result 2
A43	12-24	1.45	0.463
C48	12-24	0.441	<0.0614
E43	24-36	2.14	1.46
O26	12-24	<0.0574	<0.0524
O28	12-24	<0.0562	<0.0552
O30	12-24	<0.0566	<0.0561
O46	12-24	0.677	0.384

*Notes: * the higher result is shown in summary Table 3-1.*
< xx indicates that PCBs were not detected above the indicated detection limit

Table 4-5 Summary Overview of PCB Results for Soils

Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
1A34	0-12	**26.4**
1A37	0-6	< 0.311
1A39	12-24	0.509
1A39	0-6	**2.66**
1A40	0-12	**12.2**
1A41	0-12	**1.17**
1A42	0-6	0.49
1A43	0-12	0.594
1A44	0-12	<0.06
1A46	0-12	0.478
1A47	0-12	<0.099
1A48	0-12	0.428
1A49	0-12	<0.112
1A50	0-6	0.314
1A52	0-12	0.152
1B38	0-12	**1.22**
1B39	0-12	**2.55**
1B39	12-24	<0.322
1B40	0-12	**3.03**
1C29	0-12	**5.53**
1C45	0-12	**5.81**
1C50	0-12	0.155
1D35	0-12	**1.81**
1D41	0-12	**1.91**
1E38	0-12	0.294
1E40	0-12	**8.44**
1H36	0-12	**1.33**
1G29	0-12	0.656
1F32	0-12	**1.62**
A24	0-12	**10.7**
A37	0-12	**21.7**
A38	0-12	**14.4**
A39	12-24	**24.4**
A40	12-24	0.673
A41	12-24	0.69
A42	12-24	0.139
A42	0-6	**3.44**
A43	12-24	**1.45**
A44	0-12	**8.26**
A45	0-6	0.439
A46	0-12	0.386
A47	12-24	0.648
A48	12-24	0.213
A49	12-24	0.136
A49	0-6	**1.747**
A50	0-12	0.233
B37	0-12	**8.39**
B38	0-12	**2.33**
B38	12-24	**2.43**
B39	12-24	**1.03**
B39	0-6	**2.16**
B40	12-24	0.4
B41	24-36	0.408
B41	12-24	**4.87**
B42	12-24	0.88
B43	12-24	0.778

Table 4-5 Summary Overview of PCB Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
B44	0-12	**3.61**
B45	0-12	0.433
B46	0-6	0.33
B47	12-24	0.159
B48	12-24	0.189
B49	12-24	<0.0837
B50	0-12	0.207
C27	0-12	**34**
C37	0-12	**1.84**
C38	12-24	0.422
C38	0-12	**8.68**
C40	24-36	0.742
C40	12-24	**1.12**
C41	24-36	**1.2**
C41	0-6	**60.5**
C42	24-36	0.194
C42	12-24	0.57
C42	0-6	**1.2**
C43	12-24	0.487
C44	0-6	**4.33**
C44	12-24	<0.299
C45	12-24	<0.376
C46	12-24	<0.346
C47	0-6	**1.1**
C47	24-36	<0.295
C47	12-24	0.494
C48	12-24	0.441
C49	12-24	0.162
C50	0-6	0.12
C51	0-6	< 0.397
CC25	0-12	< 0.350
CC27	0-12	< 0.340
D33	0-12	**14.5**
D37	0-12	**56.5**
D38	0-12	0.384
D38	12-24	<0.369
D39	12-24	0.134
D40	12-24	0.149
D40	24-36	0.796
D41	12-24	0.179
D41	24-36	0.452
D42	12-24	<0.0587
D42	24-36	<0.46
D43	12-24	**8.41**
D44	0-6	**1.6**
D44	12-24	**2.48**
D45	0-6	0.790
D45	12-24	**1.23**
D46	12-24	0.740
D47	12-24	0.242
D47	0-6	**2.0**
D48	12-24	0.569
D49	12-24	<0.0573
D50	0-12	<0.1
E38	0-12	**3.49**
E39	0-12	**2.11**

Table 4-5 Summary Overview of PCB Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
E40	24-36	0.185
E40	12-24	< 0.400
E40	0-6	< 0.460
E41	24-36	0.456
E41	0-6	< 0.510
E42	24-36	**1.25**
E42	0-6	< 0.380
E43	24-36	**2.14**
E43	0-6	< 0.610
E43	12-24	< 0.700
E44	12-24	**3.39**
E44	0-6	**4.7**
E44	24-36	**15.5**
E45	24-36	**2.94**
E45	0-6	**33**
E46	24-36	0.443
E46	12-24	**1.2**
E46	0-6	< 0.250
E47	12-24	0.229
E47	0-6	**7.0**
E48	0-6	0.511
E49	0-12	0.135
E50	0-12	0.192
E52	0-12	0.206
F31	12-24	**2.34**
F40	24-36	0.354
F41	24-36	0.134
F42	24-36	< 1.8
F44	36-48	**1.41**
F44	24-36	**9.8**
F45	24-36	<0.0513
F46	0-6	**1.3**
F46	24-36	<0.0521
F47	0-6	< 0.820
G28	12-24	0.118
G29	12-24	<0.0592
G30	24-36	0.187
G30	12-24	**12.5**
G31	12-24	**4.19**
G31	24-36	<0.0595
G32	12-24	0.0906
G33	12-24	<0.0663
G34	12-24	0.201
G40	24-36	< 0.380
G41	24-36	**25**
G42	36-48	**1.56**
G42	24-36	< 0.380
G43	24-36	**4.3**
G43	36-48	**19**
G44	36-48	**8.65**
G45	24-36	< 2.2
G46	24-36	0.713
G46	0-6	**3.8**
G47	0-6	0.660
G47	12-24	< 0.340
G50	0-12	0.113

Table 4-5 Summary Overview of PCB Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
H08	24-36	0.0687
H08	0-6	< 0.400
H08	36-48	< 0.620
H08	12-24	<0.058
H09	12-24	0.829
H09	0-6	< 0.410
H09	24-36	<0.0601
H10	0-6	< 2.000
H10	24-36	<0.0574
H10	12-24	<0.0593
H11	36-48	< 0.380
H11	0-6	< 0.460
H11	12-24	<0.0577
H11	24-36	<0.0589
H28	12-24	0.710
H29	24-36	0.529
H30	36-48	0.0723
H30	12-24	**18**
H31	24-36	0.198
H32	24-36	0.2
H32	12-24	0.640
H33	24-36	0.42
H34	12-24	< 0.380
H40	24-36	<0.0551
H41	36-48	0.515
H41	24-36	< 0.370
H42	36-48	**1.2**
H42	24-36	**57**
H43	24-36	0.880
H43	36-48	**9.52**
H44	24-36	0.700
H44	36-48	**1.29**
H45	24-36	**4.88**
H46	24-36	0.947
H46	0-6	**3.2**
H47	0-6	< 0.460
I08	24-36	0.0636
I08	12-24	0.0699
I08	0-6	< 0.350
I10	36-48	< 0.870
I11	12-24	<0.0563
I11	24-36	<0.0577
I28	12-24	**2.29**
I29	24-36	0.336
I29	12-24	**1.1**
I30	24-36	**55.4**
I31	36-48	**3.85**
I31	12-24	**48**
I32	24-36	0.178
I33	24-36	0.112
I33	12-24	**1.8**
I34	24-36	**3.27**
I35	24-36	0.62
I36	36-48	**67.1**
I36	24-36	< 0.380
I37	24-36	0.153

Table 4-5 Summary Overview of PCB Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
I37	36-48	1.8
I38	24-36	< 0.390
I39	24-36	0.059
I40	24-36	< 0.390
I41	24-36	3.6
I41	36-48	23
I42	36-48	13.7
I42	24-36	< 0.370
I43	36-48	4.01
I43	24-36	7.1
I44	36-48	27.3
I45	24-36	3.8
I46	24-36	2.2
I46	0-6	2.5
I47	0-6	0.410
J08	24-36	0.0846
J08	0-6	< 0.370
J08	12-24	<0.0567
J09	36-48	< 0.360
J11	12-24	<0.0562
J11	24-36	<0.058
J28	12-24	< 0.370
J29	24-36	7.13
J30	12-24	3.2
J30	24-36	27.9
J31	24-36	38.4
J32	12-24	0.880
J32	24-36	14.1
J33	24-36	95.9
J34	24-36	0.337
J34	12-24	< 0.380
J35	36-48	60
J36	48-60	5
J36	36-48	36
J37	36-48	80.9
J38	24-36	29
J38	36-48	84.8
J39	36-48	204
J39	24-36	< 0.370
J40	24-36	57
J40	36-48	< 0.390
J41	24-36	0.580
J41	36-48	136
J42	36-48	7.58
J42	24-36	28
J43	36-48	4.55
J44	36-48	0.243
J44	24-36	< 1.8
J46	24-36	0.453
J46	12-24	2.7
J46	0-6	3.8
J47	0-6	0.710
J48	0-12	2.15
J52	0-12	0.103
K08	0-6	< 0.380
K08	12-24	< 0.380

Table 4-5 Summary Overview of PCB Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
K09	24-36	2.67
K10	24-36	<0.056
K11	36-48	< 0.380
K11	12-24	<0.055
K28	12-24	<0.0583
K29	12-24	< 0.360
K30	12-24	<0.0554
K31	12-24	7.32
K31	36-48	< 0.360
K33	36-48	< 0.380
K35	24-36	7.4
K35	36-48	9.04
K37	36-48	93.5
K37	24-36	< 0.370
K38	36-48	102
K39	36-48	2.84
K39	24-36	< 0.370
K40	36-48	21.8
K40	24-36	< 0.370
K41	24-36	3.3
K41	36-48	4.11
K41	48-60	92.1
K42	48-60	0.971
K42	36-48	3
K43	36-48	0.17
K43	48-60	0.927
K43	24-36	8.2
K44	36-48	4.29
K45	36-48	21.8
K45	24-36	31
K46	12-24	0.161
K46	24-36	0.895
K46	0-6	3.5
K47	12-24	0.268
K47	0-6	0.640
K47	24-36	0.298
K48	12-24	0.256
K48	0-12	1.11
K49	0-6	< 0.310
K50	0-12	1.01
L08	12-24	1
L08	0-6	< 0.370
L09	24-36	433
L10	36-48	< 0.360
L10	24-36	<0.0574
L11	12-24	<0.055
L28	12-24	< 0.370
L29	12-24	<0.0571
L30	12-24	< 0.370
L31	36-48	43.1
L32	36-48	3.8
L33	36-48	<0.057
L34	24-36	16

Table 4-5 Summary Overview of PCB Results for Soils
Former Polymerine, Inc.
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Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
L35	36-48	0.352
L36	24-36	< 0.370
L38	24-36	0.890
L39	48-60	**427**
L39	24-36	< 0.390
L40	48-60	**7.57**
L40	24-36	< 0.370
L41	60-72	**3.66**
L41	48-60	**9.35**
L41	24-36	**36**
L42	24-36	**1.5**
L42	48-60	**4.71**
L43	48-60	0.477
L43	60-72	**13.5**
L43	24-36	< 0.380
L44	48-60	**4.83**
L44	24-36	< 0.370
L45	36-48	**6.78**
L46	24-36	**2.38**
L46	0-6	**3.0**
L46	12-24	**5.12**
L47	12-24	0.560
L47	24-36	**2.07**
L47	0-6	**4.3**
L48	12-24	**1.13**
L48	0-6	**53.2**
L48	24-36	< 0.0723
L49	12-24	0.9
L49	24-36	0.827
L50	0-6	< 0.060
L51	0-12	0.332
M08	0-6	< 0.370
M08	12-24	< 0.370
M09	12-24	**39**
M10	12-24	<0.0563
M11	36-48	< 0.370
M11	12-24	<0.0536
M13	36-48	< 0.350
M13	48-60	< 0.350
M25	12-24	< 0.460
M26	12-24	<0.0591
M27	12-24	< 0.370
M28	24-36	<0.0581
M29	12-24	**2.0**
M29	24-36	<0.0608
M30	12-24	<0.057
M31	36-48	0.490
M32	36-48	<0.0587
M33	36-48	0.062
M33	24-36	< 0.380
M34	36-48	**1.38**
M35	36-48	**1.0**
M35	48-60	<0.0546

Table 4-5 Summary Overview of PCB Results for Soils
Former Polymerine, Inc.
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Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
M37	48-60	<0.0574
M37	36-48	3.8
M38	24-36	< 0.370
M39	84-96	**102**
M39	60-72	**978**
M39	48-60	**1,830**
M39	36-48	5.9
M39	24-36	**18,000**
M40	36-48	11
M40	60-72	**293**
M40	48-60	**335**
M41	60-72	0.905
M41	36-48	**120**
M41	48-60	**230**
M42	60-72	0.661
M42	36-48	< 0.380
M43	60-72	0.126
M43	36-48	52
M43	48-60	**340**
M44	48-60	1.76
M44	36-48	3.8
M44	60-72	<0.291
M45	36-48	< 0.370
M46	24-36	3.66
M46	12-24	6.26
M46	0-6	9.0
M47	12-24	9.41
M47	0-6	12
M48	12-24	2.83
M48	24-36	3.25
M49	24-36	5.62
M49	12-24	5.78
M50	12-24	0.501
M51	0-12	<0.0898
N08	0-6	< 0.370
N08	36-48	< 0.380
N10	36-48	< 0.370
N12	36-48	< 0.360
N14	36-48	< 0.360
N25	12-24	<0.0629
N26	12-24	5.1
N26	24-36	<0.069
N27	24-36	<0.0592
N28	12-24	7.7
N28	24-36	<0.0563
N29	24-36	<0.057
N30	24-36	<0.0567
N32	36-48	< 0.370
N33	24-36	<0.0578
N34	24-36	0.530
N35	24-36	<0.0547
N36	72-84	0.700
N36	24-36	<0.0604

Table 4-5 Summary Overview of PCB Results for Soils
Former Polymerine, Inc.
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Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
N37	24-36	<0.0571
N38	24-36	< 0.360
N39	24-36	**4,500**
N39	36-48	< 0.370
N40	24-36	0.870
N40	48-60	0.891
N41	24-36	0.410
N41	48-60	<0.0596
N41	60-72	<0.301
N42	48-60	0.105
N42	36-48	**1.8**
N43	48-60	0.273
N43	36-48	**4.7**
N43	60-72	**33.5**
N44	48-60	0.0616
N44	36-48	**7.2**
N45	36-48	0.204
N46	24-36	0.108
N46	0-6	**14**
N46	12-24	**16.9**
N47	12-24	0.63
N47	0-6	**3.9**
N48	12-24	0.659
N49	0-6	**13.4**
N49	12-24	0.637
N50	12-24	0.513
N51	0-6	< 0.349
N53	0-12	0.193
O03	12-24	< 0.350
O03	0-6	< 0.360
O04	12-24	< 0.350
O04	0-12	<0.0607
O05	0-12	0.38
O05	12-24	< 0.360
O06	0-12	<0.0612
O11	36-48	< 0.350
O13	36-48	< 0.360
O25	12-24	< 0.380
O26	12-24	<0.0574
O27	12-24	< 0.370
O28	12-24	<0.0562
O29	12-24	< 0.380
O30	12-24	<0.0566
O33	24-36	< 0.380
O35	24-36	< 0.390
O37	72-84	0.580
O38	24-36	< 0.370
O39	24-36	**130**
O39	36-48	< 0.410
O40	36-48	0.869
O40	24-36	**1.8**
O41	36-48	< 0.380
O42	36-48	<0.0533

Table 4-5 Summary Overview of PCB Results for Soils
Former Polymerine, Inc.
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Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
O43	36-48	< 1.000
O45	36-48	< 1.100
O46	24-36	0.343
O46	12-24	0.677
O46	0-6	**1.9**
O46	36-48	**14.4**
O47	12-24	**1.01**
O47	0-6	**1.1**
O48	12-24	0.308
O48	0-6	**46.8**
O49	12-24	0.812
O50	0-6	< 0.359
P04	12-24	<0.0552
P05	12-24	0.179
P06	0-12	<0.0569
P10	36-48	< 0.360
P12	36-48	< 0.350
P34	24-36	< 0.360
P35	72-84	< 0.350
P36	72-84	< 0.380
P37	72-84	< 1.600
P38	24-36	< 0.350
P39	24-36	< 0.380
P40	24-36	< 0.410
P41	36-48	< 0.890
P41	24-36	<0.0578
P42	36-48	< 0.350
P42	24-36	<0.0584
P43	36-48	< 0.500
P43	24-36	<0.0601
P44	36-48	0.500
P45	36-48	**23**
P46	12-24	0.570
P46	0-6	**2.5**
P46	36-48	<0.056
P46	24-36	<0.0591
P47	0-6	0.480
P47	12-24	**111**
P48	0-12	**2.1**
P49	0-12	0.93
Q03	12-24	< 0.360
Q03	0-6	< 0.470
Q04	12-24	<0.0585
Q05	12-24	<0.0573
Q06	0-12	<0.0594
Q09	12-24	**4,640**
Q10	12-24	**745**
Q11	24-36	0.0939
Q11	36-48	< 0.350
Q12	36-48	0.169
Q12	24-36	<0.0552
Q13	24-36	<0.0517
Q43	0-12	<0.0559

Table 4-5 Summary Overview of PCB Results for Soils
Former Polymerine, Inc.
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Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
Q44	0-12	0.0876
Q44	24-36	<0.0561
Q45	12-24	0.0792
Q45	0-12	<0.0551
Q45	36-48	<0.0713
Q46	0-12	**11.1**
Q46	24-36	**25.1**
Q47	0-12	**3.57**
Q48	0-12	**6.95**
Q51	0-12	**1.562**
R04	0-12	0.0783
R05	0-12	<0.0581
R06	0-12	0.176
R06	12-24	< 0.370
R08	36-48	< 0.370
R09	12-24	**13,100**
R10	36-48	< 0.360
R11	24-36	0.0719
R11	36-48	0.422
R12	36-48	**29**
R12	24-36	<0.0531
R13	36-48	0.318
R13	24-36	<0.0545
R14	24-36	<0.056
R15	0-12	< 0.340
R27	0-12	< 0.360
R31	0-12	< 0.350
R33	0-12	0.0619
R33	24-36	<0.0499
R34	0-12	0.114
R34	24-36	0.438
R49	0-6	< 0.327
S09	12-24	**152**
S11	24-36	0.933
S11	12-24	< 0.360
S12	24-36	0.305
S12	36-48	<0.0539
S13	24-36	<0.0533
S13	36-48	<0.0544
S14	0-12	<0.0541
S14	24-36	<0.0552
S23	0-12	< 0.350
S31	24-36	<0.0526
S31	12-24	<0.0538
S32	0-6	< 0.350
S33	48-60	0.0924
S33	36-48	**3.09**
S33	12-24	<0.0537
S34	0-6	**1.8**
S34	12-24	**8.09**
S34	60-72	**50.4**
S34	36-48	**75.2**
S34	24-36	**96.6**

Table 4-5 Summary Overview of PCB Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
S34	48-60	**213**
S35	24-36	0.26
S35	0-6	0.500
S35	48-60	0.517
S35	12-24	**1.08**
S35	36-48	**9.91**
S35	60-72	<0.0593
S36	0-12	<0.0555
S37	0-12	0.262
S48	0-6	0.66
T08	12-24	< 0.370
T09	24-36	**9.88**
T10	12-24	< 0.350
T10	24-36	< 0.360
T11	24-36	**8.66**
T12	24-36	0.0556
T13	24-36	<0.0527
T14	0-12	<0.0545
T14	24-36	<0.0598
T18	0-12	< 0.360
T30	0-12	0.560
T30	60-72	< 0.400
T31	0-6	< 0.350
T31	24-36	<0.0518
T31	12-24	<0.0541
T32	24-36	**24**
T32	0-12	**100**
T32	36-48	<0.0512
T33	0-6	0.930
T33	36-48	<0.0542
T33	60-72	<0.058
T34	60-84	**480**
T34	24-36	**2,200**
T34	0-6	**2,600**
T34	12-24	**11,000**
T35	60-72	0.0778
T35	12-24	0.275
T35	48-60	0.555
T35	36-48	**9.11**
T35	0-6	**36**
T35	24-36	<0.0628
T36	36-48	0.0608
T36	12-24	**1.74**
T36	0-6	**2.3**
T37	0-12	<0.0562
T37	12-24	<0.0582
U11	24-36	0.0708
U11	36-48	< 0.370
U12	24-36	0.0906
U13	24-36	0.392
U14	0-12	< 0.340
U14	24-36	<0.0602
U29	0-12	< 0.400

Table 4-5 Summary Overview of PCB Results for Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
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Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
U31	12-24	<0.0526
U32	12-24	0.123
U32	48-60	**317**
U32	0-6	< 0.350
U32	24-36	<0.0537
U34	36-48	0.102
U34	60-72	0.213
U34	24-36	**1.34**
U34	12-24	**1.423**
U34	0-6	**1.7**
U35	12-24	<0.0545
U35	36-48	<0.0559
U35	60-72	<0.0608
U37	0-12	0.0832
U50	0-12	0.181
V09	36-48	**275**
V10	36-48	< 0.360
V11	24-36	**2.75**
V12	24-36	**3.69**
V12	0-12	**4.73**
V13	24-36	0.157
V18	60-72	< 0.360
V18	0-12	< 0.340
V31	0-12	<0.0525
V32	24-36	0.450
V32	12-24	0.540
V32	0-12	**2.5**
V33	12-24	<0.0547
V34	12-24	**14.8**
V34	24-36	**43.1**
V34	0-12	**2,390**
V34	60-120	< 0.400
V35	0-12	**5.46**
V35	60-120	< 0.370
V36	12-24	0.979
V36	24-36	**2.22**
V36	60-72	**2.39**
V36	0-12	**2.77**
V37	0-12	**1.29**
W09	36-48	< 0.360
W09	24-36	<0.0525
W10	0-12	0.115
W10	36-48	0.628
W10	24-36	**1.13**
W10	12-24	**51.3**
W11	24-36	0.0705
W11	0-6	0.450
W12	12-24	0.932
W12	0-12	**4.88**
W29	0-12	< 0.370
W31	0-12	<0.054
W32	12-24	<0.0551
W34	0-12	0.854

Table 4-5 Summary Overview of PCB Results for Soils

Former Polymerine, Inc.
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New Bedford, Massachusetts

Sample Cell	Sample Depth (Inches BGS)	Total PCB Concentration (mg/kg)
W34	60-120	< 0.390
W35	12-24	1.02
W35	0-12	22.4
W35	36-48	<0.0541
W35	120-144	4.4
W36	36-48	0.577
W36	120-144	0.680
W36	0-12	1.77
W36	60-120	1.9
W37	60-72	3.96
X10	12-24	0.378
X10	0-6	0.570
X11	0-6	**150**
X11	12-24	< 0.403
X12	12-24	0.533
X12	0-12	8.38
X13	0-12	0.814
X27	0-12	< 0.350
X31	0-12	<0.0511
X32	0-12	1.5
X32	12-24	<0.0541
X33	12-24	0.892
X34	60-120	8.8
X35	120-144	0.500
X35	0-12	5.59
X36	0-12	0.608
X36	12-24	0.714
X36	24-36	3.91
X36	60-72	<0.0574
Y10	0-12	<0.0582
Y11	0-12	0.383
Y12	0-12	0.554
Y31	0-12	<0.0526
Y32	0-12	1.36
Y33	0-12	2.42
Y34	0-12	2.16
Y35	0-12	8.89
Y36	0-12	6.86
Z18	0-12	< 0.350
Z23	0-12	< 0.340
Z32	0-6	< 0.340

Notes: < xx indicates that PCBs were not detected above the indicated detection limit

PCB Concentration < 1 mg/kg

PCB Concentrations between 1 and <25 mg/kg

PCB Concentrations between 25 and <50 mg/kg

PCB Concentrations between 50 and <100 mg/kg

PCB Concentrations >100 mg/kg

Table 4-6
Overview of PCB Delineation and Impacts in Soils
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Sample Concentrations Comparison		
Concentrations (in mg/kg)	Total Number of Samples	Percentages
Non-detect	272	36.5%
Between detection and <1	200	26.8%
Between 1 and <25	203	27.2%
Between 25 and <50	**21**	**2.8%**
Between 50 and <100	**18**	**2.4%**
Between 100 and <500	**20**	**2.7%**
500 or greater	**11**	**1.5%**
Totals:	745	100%

Sample Depths Comparison with Concentrations									
Depth intervals (in inches)	Total Number of Samples	Percentages	Distribution of Samples for Concentration Ranges						
			Non-detect	Detection and <1	≥1 and <25	≥25 and <50	≥50 and <100	≥100 and <500	≥500
0-12"	208	28%	65	53	78	5	3	2	2
12-24"	172	23%	66	58	39	2	1	2	4
24-36"	184	25%	76	53	36	9	5	2	3
36-48"	117	16%	47	17	37	4	7	5	0
48-60"	28	4%	4	10	6	0	1	6	1
60-72"[1]	36	5%	14	9	7	1	1	3	1
Totals:	745	100%	272	200	203	21	18	20	11

[1] A total of 15 samples were collected from depth intervals greater than 72 inches BSG

TABLE 5-1

Summary of Opinion of Probable Costs for RAAs
Former Polymerine, Inc.
241 Duchaine Boulevard
New Bedford, Massachusetts

Tasks		RAAs:	Excavation and Off-Site Disposal of Soils with PCBs >1	Excavation and Off-Site Disposal of Soils with PCBs >100	Excavation and Off-Site Disposal of Soils with PCBs >500
1)	**Building Demolition**				
	a)	asbestos and oil/hazardous materials abatment	$50,000	$50,000	$50,000
	b)	removal/disposal of PCB bulk product waste	$100,000	$100,000	$100,000
	c)	removal/segregation of PCB contaminated walls and slab	$100,000	$100,000	$100,000
	d)	Removal and triple washing of PCB-impacted equipment	$15,000	$15,000	$15,000
	e)	Pump out water from interior pits, on-site treatment, and on-site discharge	$30,000	$30,000	$30,000
	f)	Remaining building demolition and non-contimanted debris disposal	$160,000	$160,000	$160,000
	g)	PCB-impacted concrete (>50 ppm) disposal	$100,000	$100,000	$100,000
	h)	PCB-impacted concrete (<50 ppm) disposal	$160,000	-	-
	i)	PCB concrete (<50 ppm) unpainted/uncoated slab and pits: process for reuse on-site beneath cap	-	$7,500	$7,500
2)	**Contaminated Soil Excavation (and Consolidation)**				
	a)	Preparation (erosion controls, clearing, etc.)	$50,000	$50,000	$50,000
	b)	Groundwater management (on-site pumping, collection in frac-tank, filtering and re-infiltration)	$75,000	$50,000	$50,000
	c)	Excavation of clean overburden soil (in previous EPA-removal areas)	$20,000	$20,000	$20,000
	d)	Excavation and disposal of soils w/PCBs >1 and <50 ppm	$700,000	-	-
	e)	Excavation and disposal of soils w/PCBs >50 ppm	$900,000	$600,000	$210,000
	f)	Consolidation of remaining soils with PCBs>1[(1)]	-	$110,000	$125,000
	g)	Backfill (upland) with clean fill	$65,000	$25,000	$15,000
	h)	Wetland restoration	$75,000	$75,000	$75,000
3)	**Paving approximately 50,000 sf area with TSCA cap**				
	a)	TSCA cap (12-inches gravel, 6-inches pavement, etc.)	-	$250,000	$250,000
4)	**MCP Method 3 Ecological Risk Charcterization**				
	a)	Site-specific Method 3 risk characterization performed by ecological risk-specialist	$55,000	$55,000	$55,000
		Project sub-total:	$2,655,000	$1,797,500	$1,412,500
		+15% Contingency:	$398,250	$269,625	$211,875
		ESTIMATED TOTALS:	**$3,053,250**	**$2,067,125**	**$1,624,375**

NOTES: Opinion of probable cost estimates do not include engineeering consulting services for permitting, sampling, laboratory analysis, reporting, etc.

(1) assumes that the organic wetland soils can be consolidated under the TSCA cap. If they are determined to be unsuitable for compaction under the cap, then those contaminated soils would be disposed off-site at an additonal cost.

Tighe&Bond

APPENDIX D

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1304570

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 3:46 pm, May 03, 2013

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibratins, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304570

SAMPLE RECEIPT

The following samples were received on April 26, 2013 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	SampleName	Matrix	Analysis
1304570-01	A-49	Soil	8082A
1304570-02	A-45	Soil	8082A
1304570-03	A-42	Soil	8082A
1304570-04	B-39	Soil	8082A
1304570-05	C-51	Soil	8082A
1304570-06	C-47	Soil	8082A
1304570-07	C-44	Soil	8082A
1304570-08	C-41	Soil	8082A
1304570-09	E-48	Soil	8082A
1304570-10	L-48	Soil	8082A
1304570-11	N-49	Soil	8082A
1304570-12	O-48	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304570

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1304570-08 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1304570-10 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1248

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304570

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304570

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1304570-01 through 1304570-12**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes ( ) No (X)*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: May 03, 2013
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-49
Date Sampled: 04/24/13 09:10
Percent Solids: 15
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1304570
ESS Laboratory Sample ID: 1304570-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/26/13 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

			MA - S1GW1				
Analyte	**Results (MRL)**	**Method**	**Limit**	**DF**	**Analyzed**	**Sequence**	**Batch**
Aroclor 1016	ND (0.326)	8082A	2	1	05/01/13 12:45		CE30205
Aroclor 1221	ND (0.326)	8082A	2	1	05/01/13 12:45		CE30205
Aroclor 1232	ND (0.326)	8082A	2	1	05/01/13 12:45		CE30205
Aroclor 1242	ND (0.326)	8082A	2	1	05/01/13 12:45		CE30205
Aroclor 1248	**0.517** (0.326)	8082A	2	1	05/01/13 12:45		CE30205
Aroclor 1254	**1.23** (0.326)	8082A	2	1	05/01/13 12:45		CE30205
Aroclor 1260	ND (0.326)	8082A	2	1	05/01/13 12:45		CE30205
Aroclor 1262	ND (0.326)	8082A	2	1	05/01/13 12:45		CE30205
Aroclor 1268	ND (0.326)	8082A	2	1	05/01/13 12:45		CE30205

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-45
Date Sampled: 04/24/13 09:15
Percent Solids: 15
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1304570
ESS Laboratory Sample ID: 1304570-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/26/13 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

MA - S1GW1

Analyte	Results (MRL)	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.319)	8082A	2	1	05/01/13 13:04		CE30205
Aroclor 1221	ND (0.319)	8082A	2	1	05/01/13 13:04		CE30205
Aroclor 1232	ND (0.319)	8082A	2	1	05/01/13 13:04		CE30205
Aroclor 1242	ND (0.319)	8082A	2	1	05/01/13 13:04		CE30205
Aroclor 1248	**0.439** (0.319)	8082A	2	1	05/01/13 13:04		CE30205
Aroclor 1254	ND (0.319)	8082A	2	1	05/01/13 13:04		CE30205
Aroclor 1260	ND (0.319)	8082A	2	1	05/01/13 13:04		CE30205
Aroclor 1262	ND (0.319)	8082A	2	1	05/01/13 13:04		CE30205
Aroclor 1268	ND (0.319)	8082A	2	1	05/01/13 13:04		CE30205

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*50 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-42
Date Sampled: 04/24/13 09:20
Percent Solids: 22
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1304570
ESS Laboratory Sample ID: 1304570-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/26/13 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

MA - S1GW1

Analyte	Results (MRL)	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.229)	8082A	2	1	05/01/13 13:23		CE30205
Aroclor 1221	ND (0.229)	8082A	2	1	05/01/13 13:23		CE30205
Aroclor 1232	ND (0.229)	8082A	2	1	05/01/13 13:23		CE30205
Aroclor 1242	ND (0.229)	8082A	2	1	05/01/13 13:23		CE30205
Aroclor 1248	**1.48** (0.229)	8082A	2	1	05/01/13 13:23		CE30205
Aroclor 1254	**1.96** (0.229)	8082A	2	1	05/01/13 13:23		CE30205
Aroclor 1260	ND (0.229)	8082A	2	1	05/01/13 13:23		CE30205
Aroclor 1262	ND (0.229)	8082A	2	1	05/01/13 13:23		CE30205
Aroclor 1268	ND (0.229)	8082A	2	1	05/01/13 13:23		CE30205

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*51 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-39
Date Sampled: 04/24/13 09:25
Percent Solids: 56
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1304570
ESS Laboratory Sample ID: 1304570-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/26/13 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

			MA - S1GW1				
Analyte	**Results (MRL)**	**Method**	**Limit**	**DF**	**Analyzed**	**Sequence**	**Batch**
Aroclor 1016	ND (0.0885)	8082A	2	1	05/01/13 13:42		CE30205
Aroclor 1221	ND (0.0885)	8082A	2	1	05/01/13 13:42		CE30205
Aroclor 1232	ND (0.0885)	8082A	2	1	05/01/13 13:42		CE30205
Aroclor 1242	ND (0.0885)	8082A	2	1	05/01/13 13:42		CE30205
Aroclor 1248	**1.07** (0.0885)	8082A	2	1	05/01/13 13:42		CE30205
Aroclor 1254	**1.09** (0.0885)	8082A	2	1	05/01/13 13:42		CE30205
Aroclor 1260	ND (0.0885)	8082A	2	1	05/01/13 13:42		CE30205
Aroclor 1262	ND (0.0885)	8082A	2	1	05/01/13 13:42		CE30205
Aroclor 1268	ND (0.0885)	8082A	2	1	05/01/13 13:42		CE30205

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*104 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-51
Date Sampled: 04/24/13 09:30
Percent Solids: 12
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1304570
ESS Laboratory Sample ID: 1304570-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/26/13 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

MA - S1GW1

Analyte	Results (MRL)	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.397)	8082A	2	1	05/01/13 14:20		CE30205
Aroclor 1221	ND (0.397)	8082A	2	1	05/01/13 14:20		CE30205
Aroclor 1232	ND (0.397)	8082A	2	1	05/01/13 14:20		CE30205
Aroclor 1242	ND (0.397)	8082A	2	1	05/01/13 14:20		CE30205
Aroclor 1248	ND (0.397)	8082A	2	1	05/01/13 14:20		CE30205
Aroclor 1254	ND (0.397)	8082A	2	1	05/01/13 14:20		CE30205
Aroclor 1260	ND (0.397)	8082A	2	1	05/01/13 14:20		CE30205
Aroclor 1262	ND (0.397)	8082A	2	1	05/01/13 14:20		CE30205
Aroclor 1268	ND (0.397)	8082A	2	1	05/01/13 14:20		CE30205

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*73 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-47
Date Sampled: 04/24/13 09:35
Percent Solids: 14
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1304570
ESS Laboratory Sample ID: 1304570-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/26/13 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

MA - S1GW1

Analyte	Results (MRL)	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.343)	8082A	2	1	05/01/13 14:39		CE30205
Aroclor 1221	ND (0.343)	8082A	2	1	05/01/13 14:39		CE30205
Aroclor 1232	ND (0.343)	8082A	2	1	05/01/13 14:39		CE30205
Aroclor 1242	ND (0.343)	8082A	2	1	05/01/13 14:39		CE30205
Aroclor 1248	**0.473** (0.343)	8082A	2	1	05/01/13 14:39		CE30205
Aroclor 1254	**0.627** (0.343)	8082A	2	1	05/01/13 14:39		CE30205
Aroclor 1260	ND (0.343)	8082A	2	1	05/01/13 14:39		CE30205
Aroclor 1262	ND (0.343)	8082A	2	1	05/01/13 14:39		CE30205
Aroclor 1268	ND (0.343)	8082A	2	1	05/01/13 14:39		CE30205

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-44
Date Sampled: 04/24/13 09:40
Percent Solids: 14
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1304570
ESS Laboratory Sample ID: 1304570-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/26/13 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

MA - S1GW1

Analyte	Results (MRL)	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.342)	8082A	2	1	05/01/13 14:57		CE30205
Aroclor 1221	ND (0.342)	8082A	2	1	05/01/13 14:57		CE30205
Aroclor 1232	ND (0.342)	8082A	2	1	05/01/13 14:57		CE30205
Aroclor 1242	ND (0.342)	8082A	2	1	05/01/13 14:57		CE30205
Aroclor 1248	**2.00** (0.342)	8082A	2	1	05/01/13 14:57		CE30205
Aroclor 1254	**2.33** (0.342)	8082A	2	1	05/01/13 14:57		CE30205
Aroclor 1260	ND (0.342)	8082A	2	1	05/01/13 14:57		CE30205
Aroclor 1262	ND (0.342)	8082A	2	1	05/01/13 14:57		CE30205
Aroclor 1268	ND (0.342)	8082A	2	1	05/01/13 14:57		CE30205

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*48 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-41
Date Sampled: 04/24/13 09:45
Percent Solids: 27
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1304570
ESS Laboratory Sample ID: 1304570-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/26/13 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

			MA - S1GW1				
Analyte	**Results (MRL)**	**Method**	**Limit**	**DF**	**Analyzed**	**Sequence**	**Batch**
Aroclor 1016	ND (9.10)	8082A	2	50	05/01/13 15:35		CE30205
Aroclor 1221	ND (9.10)	8082A	2	50	05/01/13 15:35		CE30205
Aroclor 1232	ND (9.10)	8082A	2	50	05/01/13 15:35		CE30205
Aroclor 1242	ND (9.10)	8082A	2	50	05/01/13 15:35		CE30205
Aroclor 1248	**60.5** (9.10)	8082A	2	50	05/01/13 15:35		CE30205
Aroclor 1254	ND (9.10)	8082A	2	50	05/01/13 15:35		CE30205
Aroclor 1260	ND (9.10)	8082A	2	50	05/01/13 15:35		CE30205
Aroclor 1262	ND (9.10)	8082A	2	50	05/01/13 15:35		CE30205
Aroclor 1268	ND (9.10)	8082A	2	50	05/01/13 15:35		CE30205

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-48
Date Sampled: 04/24/13 09:50
Percent Solids: 17
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1304570
ESS Laboratory Sample ID: 1304570-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

MA - S1GW1

Analyte	Results (MRL)	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.298)	8082A	2	1	04/30/13 18:47		CD32923
Aroclor 1221	ND (0.298)	8082A	2	1	04/30/13 18:47		CD32923
Aroclor 1232	ND (0.298)	8082A	2	1	04/30/13 18:47		CD32923
Aroclor 1242	ND (0.298)	8082A	2	1	04/30/13 18:47		CD32923
Aroclor 1248	ND (0.298)	8082A	2	1	04/30/13 18:47		CD32923
Aroclor 1254	**0.511** (0.298)	8082A	2	1	04/30/13 18:47		CD32923
Aroclor 1260	ND (0.298)	8082A	2	1	04/30/13 18:47		CD32923
Aroclor 1262	ND (0.298)	8082A	2	1	04/30/13 18:47		CD32923
Aroclor 1268	ND (0.298)	8082A	2	1	04/30/13 18:47		CD32923

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-48
Date Sampled: 04/24/13 09:55
Percent Solids: 16
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1304570
ESS Laboratory Sample ID: 1304570-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

			MA - S1GW1				
Analyte	**Results (MRL)**	**Method**	**Limit**	**DF**	**Analyzed**	**Sequence**	**Batch**
Aroclor 1016	ND (0.302)	8082A	2	1	04/30/13 19:06		CD32923
Aroclor 1221	ND (0.302)	8082A	2	1	04/30/13 19:06		CD32923
Aroclor 1232	ND (0.302)	8082A	2	1	04/30/13 19:06		CD32923
Aroclor 1242	ND (0.302)	8082A	2	1	04/30/13 19:06		CD32923
Aroclor 1248	**P 17.7** (3.02)	8082A	2	10	05/01/13 15:54		CD32923
Aroclor 1254	**35.5** (3.02)	8082A	2	10	05/01/13 15:54		CD32923
Aroclor 1260	ND (0.302)	8082A	2	1	04/30/13 19:06		CD32923
Aroclor 1262	ND (0.302)	8082A	2	1	04/30/13 19:06		CD32923
Aroclor 1268	ND (0.302)	8082A	2	1	04/30/13 19:06		CD32923

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*56 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-49
Date Sampled: 04/24/13 10:00
Percent Solids: 16
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1304570
ESS Laboratory Sample ID: 1304570-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

MA - S1GW1

Analyte	Results (MRL)	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.298)	8082A	2	1	04/30/13 19:25		CD32923
Aroclor 1221	ND (0.298)	8082A	2	1	04/30/13 19:25		CD32923
Aroclor 1232	ND (0.298)	8082A	2	1	04/30/13 19:25		CD32923
Aroclor 1242	ND (0.298)	8082A	2	1	04/30/13 19:25		CD32923
Aroclor 1248	**1.60** (0.298)	8082A	2	1	04/30/13 19:25		CD32923
Aroclor 1254	**11.8** (2.98)	8082A	2	10	05/01/13 16:13		CD32923
Aroclor 1260	ND (0.298)	8082A	2	1	04/30/13 19:25		CD32923
Aroclor 1262	ND (0.298)	8082A	2	1	04/30/13 19:25		CD32923
Aroclor 1268	ND (0.298)	8082A	2	1	04/30/13 19:25		CD32923

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-48
Date Sampled: 04/24/13 10:05
Percent Solids: 18
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1304570
ESS Laboratory Sample ID: 1304570-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

MA - S1GW1

Analyte	Results (MRL)	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.282)	8082A	2	1	04/30/13 19:44		CD32923
Aroclor 1221	ND (0.282)	8082A	2	1	04/30/13 19:44		CD32923
Aroclor 1232	ND (0.282)	8082A	2	1	04/30/13 19:44		CD32923
Aroclor 1242	ND (0.282)	8082A	2	1	04/30/13 19:44		CD32923
Aroclor 1248	**16.9** (2.82)	8082A	2	10	05/01/13 16:32		CD32923
Aroclor 1254	**29.9** (2.82)	8082A	2	10	05/01/13 16:32		CD32923
Aroclor 1260	ND (0.282)	8082A	2	1	04/30/13 19:44		CD32923
Aroclor 1262	ND (0.282)	8082A	2	1	04/30/13 19:44		CD32923
Aroclor 1268	ND (0.282)	8082A	2	1	04/30/13 19:44		CD32923

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*53 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*60 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304570

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD32923 - 3540										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304570

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD32923 - 3540										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304570

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD32923 - 3540										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
LCS										
Aroclor 1016	0.495	0.0500	mg/kg wet	0.5000		99	40-140			
Aroclor 1260	0.456	0.0500	mg/kg wet	0.5000		91	40-140			
Surrogate: Decachlorobiphenyl	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0246*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
LCS Dup										
Aroclor 1016	0.514	0.0500	mg/kg wet	0.5000		103	40-140	4	30	
Aroclor 1260	0.469	0.0500	mg/kg wet	0.5000		94	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0241*		mg/kg wet	*0.02500*		*97*	*30-150*			
Batch CE30205 - 3540										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304570

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CE30205 - 3540										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304570

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CE30205 - 3540										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304570

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CE30205 - 3540										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
LCS										
Aroclor 1016	0.537	0.0500	mg/kg wet	0.5000		107	40-140			
Aroclor 1260	0.482	0.0500	mg/kg wet	0.5000		96	40-140			
Surrogate: Decachlorobiphenyl	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
LCS Dup										
Aroclor 1016	0.522	0.0500	mg/kg wet	0.5000		104	40-140	3	30	
Aroclor 1260	0.473	0.0500	mg/kg wet	0.5000		95	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1304570

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
P	Percent difference between primary and confirmation results exceeds 40% (P).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304570

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/labs/waterlabs-instate.php

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dep/blwq/topic/vessel/lab_list.pdf

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/labcert/labcert.aspx

New Hampshire (NELAP accredited) Potable and Non PotableWater, Solid and Hazardous Waste: 2424
http://www4.egov.nh.gov/des/nhelap/namesearch.asp

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/dep/DEP_OPRA/

United States Department of Agriculture Soil Permit: S-54210

Maryland Potable Water: 301
http://www.mde.state.md.us/assets/document/WSP_labs-2009apr20.pdf

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 13040570
Date Project Due: 5/3/13
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **3.2**
   Iced With: **Icepacks**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes** | **No**
17. Were samples received intact? **Yes** | **No**
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____
18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP

Completed By: MGK Date/Time: 4/26/13
Reviewed By: JAT Date/Time: 4/24/13

TestAmerica Westfield
Westfield Executive Park 53 Southampton Road
Westfield, MA 01085
Phone (413) 572-4000 Fax (413) 572-3707

Chain of Custody Record

1304570

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information			
Client Contact: Michael Martin	Sampler: Michael Martin	Lab PM:	Carrier Tracking No(s):
Company: Tighe & Bond	Phone:	E-Mail:	
Address: 4 Barlows Landing Rd, Unit 15	Due Date Requested:		
City: Pocasset, MA 02559	TAT Requested (days): 5-day		
State, Zip:			
Phone: 508-564-7285 ext 105	Quote #:		
Email: Memartin@tighebond.com	PO #:		
Project Name/number: N-1011	WO #:		
Site: Former Polyply New Bedford	SSOW#:		

COC No: 015470
Page: 1 of 2
Job #:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, H - Ascorbic Acid, I - Ice, J - DI Water, M - Hexane, N - None, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, Z - other (specify)

Regulatory programs:
MCP [X] GW1 SI [X]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [ ]

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Sampler's Initials	Field Filtered Sample?	Perform MS/MSD?	PCBs	Total Number of containers	Special Instructions/Note:
				Preservation Code:		X	X	X			
01	A-49	4/24/2013	0910	Grab	Soil	MM	N	N	X		Soxhlet Extraction
02	A-45	↓	0915	↓	↓	↓	↓	↓	↓		↓
03	A-42	↓	0920	↓	↓	↓	↓	↓	↓		↓
04	B-39	↓	0925	↓	↓	↓	↓	↓	↓		↓
05	C-51	↓	0930	↓	↓	↓	↓	↓	↓		↓
06	C-47	↓	0935	↓	↓	↓	↓	↓	↓		↓
07	C-44	↓	0940	↓	↓	↓	↓	↓	↓		↓
08	C-41	↓	0945	↓	↓	↓	↓	↓	↓		↓
09	E-48	↓	0950	↓	↓	↓	↓	↓	↓		↓
10	L-48	↓	0955	↓	↓	↓	↓	↓	↓		↓

Possible Hazard Identification
[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	4/25/2013/1500	T&B	[signature] 4/25/13		
[signature]	4/26/13		Manali Kamen	4/26/13 1530	

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 3.2

TAL-8245-360 0310

TestAmerica Westfield
Westfield Executive Park 53 Southampton Road
Westfield, MA 01085
Phone (413) 572-4000 Fax (413) 572-3707

Chain of Custody Record

1304570

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information

Client Contact: Michael Martin
Company: Tighe & Bond
Address: 4 Barlows Landing Rd, Unit 15
City: Pocasset, MA 02559
State, Zip:
Phone: 508-564-7285 ext 105
Email: memartin@tighebond.com
Project Name/number: N-1011
Site: Former Polyply New Bedford

Sampler: Michael Martin
Phone:
Lab PM:
E-Mail:
Carrier Tracking No(s):
COC No: 015471
Page:
Job #:

Due Date Requested:
TAT Requested (days): 5-day
Quote #:
PO #:
WO #:
SSOW#:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, H - Ascorbic Acid, I - Ice, J - DI Water, M - Hexane, N - None, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, Z - other (specify)

Regulatory programs:
MCP [X] GW1 (S1) [X]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [ ]

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Sampler's Initials	Field Filtered Sample?	Perform MS/MSD?	PCBs	Total Number of containers	Special Instructions/Note:
				Preservation Code:							
11	N-49	4/24/2013	1000	Grab	Soil	MM	N	N	X	1	Soxhlet Extraction
12	O-48		1005							1	
	MW-4				GW					2	
	MW-5									2	

Possible Hazard Identification
[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
[ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	4/25/2013 1500	T&B	[signature]	4/25/13	
[signature]	4/26/13		Manal Keenan	4/26/13 1530	

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 3.2

TAL-8245-360 0310

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1304569

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 1:13 pm, May 03, 2013

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibratins, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304569

SAMPLE RECEIPT

The following samples were received on April 26, 2013 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	SampleName	Matrix	Analysis
1304569-01	MW-4	Ground Water	8082A
1304569-02	MW-5	Ground Water	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304569

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1304569-01 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Tetrachloro-m-xylene (216% @ 30-150%)

1304569-02 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304569

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304569

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1304569-01 through 1304569-02**

Matrices: (X) Ground Water/Surface Water ( ) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: May 03, 2013
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: MW-4
Date Sampled: 04/24/13 12:00
Percent Solids: N/A
Initial Volume: 1000
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 1304569
ESS Laboratory Sample ID: 1304569-01
Sample Matrix: Ground Water
Units: ug/L
Analyst: TAJ
Prepared: 4/29/13 14:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

			MA - S1GW1				
Analyte	**Results (MRL)**	**Method**	**Limit**	**DF**	**Analyzed**	**Sequence**	**Batch**
Aroclor 1016	ND (0.10)	8082A		1	04/30/13 12:26		CD32928
Aroclor 1221	ND (0.10)	8082A		1	04/30/13 12:26		CD32928
Aroclor 1232	**6.19** (0.50)	8082A		5	04/30/13 12:07		CD32928
Aroclor 1242	ND (0.10)	8082A		1	04/30/13 12:26		CD32928
Aroclor 1248	ND (0.10)	8082A		1	04/30/13 12:26		CD32928
Aroclor 1254	ND (0.10)	8082A		1	04/30/13 12:26		CD32928
Aroclor 1260	ND (0.10)	8082A		1	04/30/13 12:26		CD32928
Aroclor 1262	ND (0.10)	8082A		1	04/30/13 12:26		CD32928
Aroclor 1268	ND (0.10)	8082A		1	04/30/13 12:26		CD32928

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*216 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: MW-5
Date Sampled: 04/24/13 12:40
Percent Solids: N/A
Initial Volume: 1000
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 1304569
ESS Laboratory Sample ID: 1304569-02
Sample Matrix: Ground Water
Units: ug/L
Analyst: TAJ
Prepared: 4/29/13 14:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

			MA - S1GW1				
Analyte	**Results (MRL)**	**Method**	**Limit**	**DF**	**Analyzed**	**Sequence**	**Batch**
Aroclor 1016	ND (50.0)	8082A		500	04/30/13 13:04		CD32928
Aroclor 1221	ND (50.0)	8082A		500	04/30/13 13:04		CD32928
Aroclor 1232	ND (50.0)	8082A		500	04/30/13 13:04		CD32928
Aroclor 1242	ND (50.0)	8082A		500	04/30/13 13:04		CD32928
Aroclor 1248	**188** (50.0)	8082A		500	04/30/13 13:04		CD32928
Aroclor 1254	**324** (50.0)	8082A		500	04/30/13 13:04		CD32928
Aroclor 1260	ND (50.0)	8082A		500	04/30/13 13:04		CD32928
Aroclor 1262	ND (50.0)	8082A		500	04/30/13 13:04		CD32928
Aroclor 1268	ND (50.0)	8082A		500	04/30/13 13:04		CD32928

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304569

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD32928 - 3510C										
Blank										
Aroclor 1016	ND	0.10	ug/L							
Aroclor 1016 (1)	ND	0.10	ug/L							
Aroclor 1016 (1) [2C]	ND	0.10	ug/L							
Aroclor 1016 (2)	ND	0.10	ug/L							
Aroclor 1016 (2) [2C]	ND	0.10	ug/L							
Aroclor 1016 (3)	ND	0.10	ug/L							
Aroclor 1016 (3) [2C]	ND	0.10	ug/L							
Aroclor 1016 (4)	ND	0.10	ug/L							
Aroclor 1016 (4) [2C]	ND	0.10	ug/L							
Aroclor 1016 (5)	ND	0.10	ug/L							
Aroclor 1016 (5) [2C]	ND	0.10	ug/L							
Aroclor 1221	ND	0.10	ug/L							
Aroclor 1221 (1)	ND	0.10	ug/L							
Aroclor 1221 (1) [2C]	ND	0.10	ug/L							
Aroclor 1221 (2)	ND	0.10	ug/L							
Aroclor 1221 (2) [2C]	ND	0.10	ug/L							
Aroclor 1221 (3)	ND	0.10	ug/L							
Aroclor 1221 (3) [2C]	ND	0.10	ug/L							
Aroclor 1221 (4)	ND	0.10	ug/L							
Aroclor 1221 (4) [2C]	ND	0.10	ug/L							
Aroclor 1221 (5)	ND	0.10	ug/L							
Aroclor 1221 (5) [2C]	ND	0.10	ug/L							
Aroclor 1232	ND	0.10	ug/L							
Aroclor 1232 (1)	ND	0.10	ug/L							
Aroclor 1232 (1) [2C]	ND	0.10	ug/L							
Aroclor 1232 (2)	ND	0.10	ug/L							
Aroclor 1232 (2) [2C]	ND	0.10	ug/L							
Aroclor 1232 (3)	ND	0.10	ug/L							
Aroclor 1232 (3) [2C]	ND	0.10	ug/L							
Aroclor 1232 (4)	ND	0.10	ug/L							
Aroclor 1232 (4) [2C]	ND	0.10	ug/L							
Aroclor 1232 (5)	ND	0.10	ug/L							
Aroclor 1232 (5) [2C]	ND	0.10	ug/L							
Aroclor 1242	ND	0.10	ug/L							
Aroclor 1242 (1)	ND	0.10	ug/L							
Aroclor 1242 (1) [2C]	ND	0.10	ug/L							
Aroclor 1242 (2)	ND	0.10	ug/L							
Aroclor 1242 (2) [2C]	ND	0.10	ug/L							
Aroclor 1242 (3)	ND	0.10	ug/L							
Aroclor 1242 (3) [2C]	ND	0.10	ug/L							
Aroclor 1242 (4)	ND	0.10	ug/L							
Aroclor 1242 (4) [2C]	ND	0.10	ug/L							
Aroclor 1242 (5)	ND	0.10	ug/L							
Aroclor 1242 (5) [2C]	ND	0.10	ug/L							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304569

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD32928 - 3510C										
Aroclor 1248	ND	0.10	ug/L							
Aroclor 1248 (1)	ND	0.10	ug/L							
Aroclor 1248 (1) [2C]	ND	0.10	ug/L							
Aroclor 1248 (2)	ND	0.10	ug/L							
Aroclor 1248 (2) [2C]	ND	0.10	ug/L							
Aroclor 1248 (3)	ND	0.10	ug/L							
Aroclor 1248 (3) [2C]	ND	0.10	ug/L							
Aroclor 1248 (4)	ND	0.10	ug/L							
Aroclor 1248 (4) [2C]	ND	0.10	ug/L							
Aroclor 1248 (5)	ND	0.10	ug/L							
Aroclor 1248 (5) [2C]	ND	0.10	ug/L							
Aroclor 1254	ND	0.10	ug/L							
Aroclor 1254 (1)	ND	0.10	ug/L							
Aroclor 1254 (1) [2C]	ND	0.10	ug/L							
Aroclor 1254 (2)	ND	0.10	ug/L							
Aroclor 1254 (2) [2C]	ND	0.10	ug/L							
Aroclor 1254 (3)	ND	0.10	ug/L							
Aroclor 1254 (3) [2C]	ND	0.10	ug/L							
Aroclor 1254 (4)	ND	0.10	ug/L							
Aroclor 1254 (4) [2C]	ND	0.10	ug/L							
Aroclor 1254 (5)	ND	0.10	ug/L							
Aroclor 1254 (5) [2C]	ND	0.10	ug/L							
Aroclor 1260	ND	0.10	ug/L							
Aroclor 1260 (1)	ND	0.10	ug/L							
Aroclor 1260 (1) [2C]	ND	0.10	ug/L							
Aroclor 1260 (2)	ND	0.10	ug/L							
Aroclor 1260 (2) [2C]	ND	0.10	ug/L							
Aroclor 1260 (3)	ND	0.10	ug/L							
Aroclor 1260 (3) [2C]	ND	0.10	ug/L							
Aroclor 1260 (4)	ND	0.10	ug/L							
Aroclor 1260 (4) [2C]	ND	0.10	ug/L							
Aroclor 1260 (5)	ND	0.10	ug/L							
Aroclor 1260 (5) [2C]	ND	0.10	ug/L							
Aroclor 1262	ND	0.10	ug/L							
Aroclor 1262 (1)	ND	0.10	ug/L							
Aroclor 1262 (1) [2C]	ND	0.10	ug/L							
Aroclor 1262 (2)	ND	0.10	ug/L							
Aroclor 1262 (2) [2C]	ND	0.10	ug/L							
Aroclor 1262 (3)	ND	0.10	ug/L							
Aroclor 1262 (3) [2C]	ND	0.10	ug/L							
Aroclor 1262 (4)	ND	0.10	ug/L							
Aroclor 1262 (4) [2C]	ND	0.10	ug/L							
Aroclor 1262 (5)	ND	0.10	ug/L							
Aroclor 1262 (5) [2C]	ND	0.10	ug/L							
Aroclor 1268	ND	0.10	ug/L							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304569

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD32928 - 3510C										
Aroclor 1268 (1)	ND	0.10	ug/L							
Aroclor 1268 (1) [2C]	ND	0.10	ug/L							
Aroclor 1268 (2)	ND	0.10	ug/L							
Aroclor 1268 (2) [2C]	ND	0.10	ug/L							
Aroclor 1268 (3)	ND	0.10	ug/L							
Aroclor 1268 (3) [2C]	ND	0.10	ug/L							
Aroclor 1268 (4)	ND	0.10	ug/L							
Aroclor 1268 (4) [2C]	ND	0.10	ug/L							
Aroclor 1268 (5)	ND	0.10	ug/L							
Aroclor 1268 (5) [2C]	ND	0.10	ug/L							
Surrogate: Decachlorobiphenyl	*0.0304*		ug/L	*0.05000*		*61*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0437*		ug/L	*0.05000*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0346*		ug/L	*0.05000*		*69*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0409*		ug/L	*0.05000*		*82*	*30-150*			
LCS										
Aroclor 1016	1.08	0.10	ug/L	1.000		108	40-140			
Aroclor 1260	0.92	0.10	ug/L	1.000		92	40-140			
Surrogate: Decachlorobiphenyl	*0.0457*		ug/L	*0.05000*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0420*		ug/L	*0.05000*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0409*		ug/L	*0.05000*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0467*		ug/L	*0.05000*		*93*	*30-150*			
LCS Dup										
Aroclor 1016	1.03	0.10	ug/L	1.000		103	40-140	5	20	
Aroclor 1260	0.92	0.10	ug/L	1.000		92	40-140	0.1	20	
Surrogate: Decachlorobiphenyl	*0.0452*		ug/L	*0.05000*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0389*		ug/L	*0.05000*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0419*		ug/L	*0.05000*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0476*		ug/L	*0.05000*		*95*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford ESS Laboratory Work Order: 1304569

Notes and Definitions

U	Analyte included in the analysis, but not detected
SM	Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1304569

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/labs/waterlabs-instate.php

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dep/blwq/topic/vessel/lab_list.pdf

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/labcert/labcert.aspx

New Hampshire (NELAP accredited) Potable and Non PotableWater, Solid and Hazardous Waste: 2424
http://www4.egov.nh.gov/des/nhelap/namesearch.asp

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/dep/DEP_OPRA/

United States Department of Agriculture Soil Permit: S-54210

Maryland Potable Water: 301
http://www.mde.state.md.us/assets/document/WSP_labs-2009apr20.pdf

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 13040569
Date Project Due: 5/3/13
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **3.2**
   Iced With: **Icepacks**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes | No**
17. Were samples received intact? **Yes | No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	1 L Plastic	2	NP
2	Yes	1 L Plastic	2	NP

Completed By: MCK Date/Time: 4/26/13
Reviewed By: NAR Date/Time: 4/26/13

TestAmerica Westfield
Westfield Executive Park 53 Southampton Road
Westfield, MA 01085
Phone (413) 572-4000 Fax (413) 572-3707

Chain of Custody Record

1304569

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Michael Martin	Lab PM:	Carrier Tracking No(s):	COC No: 015471
Client Contact: Michael Martin	Phone:	E-Mail:		Page:
Company: Tighe & Bond				Job #:
Address: 4 Barlows Landing Rd, Unit 15	Due Date Requested:			
City: Pocasset, MA 02559	TAT Requested (days): 5 day			
State, Zip:				
Phone: 508-564-7285 ext 105	Quote #:			
Email: mmartin@tighebond.com	PO #:			
Project Name/number: N-1011	WO #:			
Site: Former Polyply New Bedford	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Sampler's Initials	Field Filtered Sample?	Perform MS/MSD?	PCB	Total Number of containers	Special Instructions/Note:
				Preservation Code:						
1 N-49	4/24/13	1000	Grab	Soil	MM	N	N	X	1	Soxhlet Extraction
1 O-48	↓	1000	↓	↓	↓	↓	↓	↓	1	↓
01 MW-4	↓	1200	↓	GW	↓	↓	↓	↓	2	↓
02 MW-5	↓	12:40	↓	↓	↓	↓	↓	↓	2	↓

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; H - Ascorbic Acid; I - Ice; J - DI Water; M - Hexane; N - None; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; Z - other (specify)

Regulatory programs:
MCP [X] GW1 S1 [X]; RCP [ ] CT RSR [ ]; DEP Form [ ] EDD Required [ ]

Possible Hazard Identification
[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
[ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Relinquished by:	Date/Time: 4/25/2013 / 1500	Company: TBO	Received by: 4/25/13	Date/Time:	Company
Relinquished by:	Date/Time: 4/26/13	Company	Received by: Paul Keenan 4/26/13	Date/Time: 1530	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.2

TAL-8245-360 0310

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1305614

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 4:59 pm, Jun 07, 2013

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibratins, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305614

SAMPLE RECEIPT

The following samples were received on May 31, 2013 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	SampleName	Matrix	Analysis
1305614-01	N-51 0-6in	Soil	8082A
1305614-02	O-50 0-6in	Soil	8082A
1305614-03	L-48 12-48in	Soil	8082A
1305614-04	K-49 0-6in	Soil	8082A
1305614-05	C-41 12-48in	Soil	8082A
1305614-06	AA-50 0-6in	Soil	8082A
1305614-07	AA-42 0-6in	Soil	8082A
1305614-08	AA-39 0-6in	Soil	8082A
1305614-09	AA-37 0-6in	Soil	8082A
1305614-10	S-48 0-6in	Soil	8082A
1305614-11	R-49 0-6in	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305614

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305614

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305614

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1305614-01 through 1305614-11**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes (X) No ( )*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: June 07, 2013
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-51 0-6in
Date Sampled: 05/30/13 09:30
Percent Solids: 15
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305614
ESS Laboratory Sample ID: 1305614-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 6/3/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.349)		8082A		1	06/06/13 0:03		CF30705
Aroclor 1221	ND (0.349)		8082A		1	06/06/13 0:03		CF30705
Aroclor 1232	ND (0.349)		8082A		1	06/06/13 0:03		CF30705
Aroclor 1242	ND (0.349)		8082A		1	06/06/13 0:03		CF30705
Aroclor 1248	ND (0.349)		8082A		1	06/06/13 0:03		CF30705
Aroclor 1254	ND (0.349)		8082A		1	06/06/13 0:03		CF30705
Aroclor 1260	ND (0.349)		8082A		1	06/06/13 0:03		CF30705
Aroclor 1262	ND (0.349)		8082A		1	06/06/13 0:03		CF30705
Aroclor 1268	ND (0.349)		8082A		1	06/06/13 0:03		CF30705

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-50 0-6in
Date Sampled: 05/30/13 09:35
Percent Solids: 14
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305614
ESS Laboratory Sample ID: 1305614-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 6/3/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.359)		8082A		1	06/06/13 0:21		CF30705
Aroclor 1221	ND (0.359)		8082A		1	06/06/13 0:21		CF30705
Aroclor 1232	ND (0.359)		8082A		1	06/06/13 0:21		CF30705
Aroclor 1242	ND (0.359)		8082A		1	06/06/13 0:21		CF30705
Aroclor 1248	ND (0.359)		8082A		1	06/06/13 0:21		CF30705
Aroclor 1254	ND (0.359)		8082A		1	06/06/13 0:21		CF30705
Aroclor 1260	ND (0.359)		8082A		1	06/06/13 0:21		CF30705
Aroclor 1262	ND (0.359)		8082A		1	06/06/13 0:21		CF30705
Aroclor 1268	ND (0.359)		8082A		1	06/06/13 0:21		CF30705

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-48 12-48in
Date Sampled: 05/30/13 09:40
Percent Solids: 67
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305614
ESS Laboratory Sample ID: 1305614-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 6/3/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0723)		8082A		1	06/05/13 1:33		CF30304
Aroclor 1221	ND (0.0723)		8082A		1	06/05/13 1:33		CF30304
Aroclor 1232	ND (0.0723)		8082A		1	06/05/13 1:33		CF30304
Aroclor 1242	ND (0.0723)		8082A		1	06/05/13 1:33		CF30304
Aroclor 1248	ND (0.0723)		8082A		1	06/05/13 1:33		CF30304
Aroclor 1254	ND (0.0723)		8082A		1	06/05/13 1:33		CF30304
Aroclor 1260	ND (0.0723)		8082A		1	06/05/13 1:33		CF30304
Aroclor 1262	ND (0.0723)		8082A		1	06/05/13 1:33		CF30304
Aroclor 1268	ND (0.0723)		8082A		1	06/05/13 1:33		CF30304

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*73 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-49 0-6in
Date Sampled: 05/30/13 09:45
Percent Solids: 17
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305614
ESS Laboratory Sample ID: 1305614-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 6/3/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.310)		8082A		1	06/06/13 0:40		CF30705
Aroclor 1221	ND (0.310)		8082A		1	06/06/13 0:40		CF30705
Aroclor 1232	ND (0.310)		8082A		1	06/06/13 0:40		CF30705
Aroclor 1242	ND (0.310)		8082A		1	06/06/13 0:40		CF30705
Aroclor 1248	ND (0.310)		8082A		1	06/06/13 0:40		CF30705
Aroclor 1254	ND (0.310)		8082A		1	06/06/13 0:40		CF30705
Aroclor 1260	ND (0.310)		8082A		1	06/06/13 0:40		CF30705
Aroclor 1262	ND (0.310)		8082A		1	06/06/13 0:40		CF30705
Aroclor 1268	ND (0.310)		8082A		1	06/06/13 0:40		CF30705

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-41 12-48in
Date Sampled: 05/30/13 09:50
Percent Solids: 36
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305614
ESS Laboratory Sample ID: 1305614-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 6/3/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.137)		8082A		1	06/05/13 4:04		CF30304
Aroclor 1221	ND (0.137)		8082A		1	06/05/13 4:04		CF30304
Aroclor 1232	ND (0.137)		8082A		1	06/05/13 4:04		CF30304
Aroclor 1242	ND (0.137)		8082A		1	06/05/13 4:04		CF30304
Aroclor 1248	**1.20** (0.137)		8082A		1	06/05/13 4:04		CF30304
Aroclor 1254	ND (0.137)		8082A		1	06/05/13 4:04		CF30304
Aroclor 1260	ND (0.137)		8082A		1	06/05/13 4:04		CF30304
Aroclor 1262	ND (0.137)		8082A		1	06/05/13 4:04		CF30304
Aroclor 1268	ND (0.137)		8082A		1	06/05/13 4:04		CF30304

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: AA-50 0-6in
Date Sampled: 05/30/13 09:55
Percent Solids: 17
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305614
ESS Laboratory Sample ID: 1305614-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 6/3/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.306)		8082A		1	06/05/13 4:23		CF30304
Aroclor 1221	ND (0.306)		8082A		1	06/05/13 4:23		CF30304
Aroclor 1232	ND (0.306)		8082A		1	06/05/13 4:23		CF30304
Aroclor 1242	ND (0.306)		8082A		1	06/05/13 4:23		CF30304
Aroclor 1248	ND (0.306)		8082A		1	06/05/13 4:23		CF30304
Aroclor 1254	**0.314** (0.306)		8082A		1	06/05/13 4:23		CF30304
Aroclor 1260	ND (0.306)		8082A		1	06/05/13 4:23		CF30304
Aroclor 1262	ND (0.306)		8082A		1	06/05/13 4:23		CF30304
Aroclor 1268	ND (0.306)		8082A		1	06/05/13 4:23		CF30304

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: AA-42 0-6in
Date Sampled: 05/30/13 10:00
Percent Solids: 17
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305614
ESS Laboratory Sample ID: 1305614-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 6/3/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.294)		8082A		1	06/05/13 4:41		CF30304
Aroclor 1221	ND (0.294)		8082A		1	06/05/13 4:41		CF30304
Aroclor 1232	ND (0.294)		8082A		1	06/05/13 4:41		CF30304
Aroclor 1242	ND (0.294)		8082A		1	06/05/13 4:41		CF30304
Aroclor 1248	**0.490** (0.294)		8082A		1	06/05/13 4:41		CF30304
Aroclor 1254	ND (0.294)		8082A		1	06/05/13 4:41		CF30304
Aroclor 1260	ND (0.294)		8082A		1	06/05/13 4:41		CF30304
Aroclor 1262	ND (0.294)		8082A		1	06/05/13 4:41		CF30304
Aroclor 1268	ND (0.294)		8082A		1	06/05/13 4:41		CF30304

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*58 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: AA-39 0-6in
Date Sampled: 05/30/13 10:05
Percent Solids: 17
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305614
ESS Laboratory Sample ID: 1305614-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 6/5/13 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.300)		8082A		1	06/06/13 11:31		CF30507
Aroclor 1221	ND (0.300)		8082A		1	06/06/13 11:31		CF30507
Aroclor 1232	ND (0.300)		8082A		1	06/06/13 11:31		CF30507
Aroclor 1242	ND (0.300)		8082A		1	06/06/13 11:31		CF30507
Aroclor 1248	**2.66** (0.300)		8082A		1	06/06/13 11:31		CF30507
Aroclor 1254	ND (0.300)		8082A		1	06/06/13 11:31		CF30507
Aroclor 1260	ND (0.300)		8082A		1	06/06/13 11:31		CF30507
Aroclor 1262	ND (0.300)		8082A		1	06/06/13 11:31		CF30507
Aroclor 1268	ND (0.300)		8082A		1	06/06/13 11:31		CF30507

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: AA-37 0-6in
Date Sampled: 05/30/13 10:10
Percent Solids: 16
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305614
ESS Laboratory Sample ID: 1305614-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 6/3/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.311)		8082A		1	06/05/13 14:02		CF30304
Aroclor 1221	ND (0.311)		8082A		1	06/05/13 14:02		CF30304
Aroclor 1232	ND (0.311)		8082A		1	06/05/13 14:02		CF30304
Aroclor 1242	ND (0.311)		8082A		1	06/05/13 14:02		CF30304
Aroclor 1248	ND (0.311)		8082A		1	06/05/13 14:02		CF30304
Aroclor 1254	ND (0.311)		8082A		1	06/05/13 14:02		CF30304
Aroclor 1260	ND (0.311)		8082A		1	06/05/13 14:02		CF30304
Aroclor 1262	ND (0.311)		8082A		1	06/05/13 14:02		CF30304
Aroclor 1268	ND (0.311)		8082A		1	06/05/13 14:02		CF30304

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*52 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*49 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-48 0-6in
Date Sampled: 05/30/13 10:15
Percent Solids: 85
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305614
ESS Laboratory Sample ID: 1305614-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 6/3/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0588)		8082A		1	06/05/13 14:20		CF30304
Aroclor 1221	ND (0.0588)		8082A		1	06/05/13 14:20		CF30304
Aroclor 1232	ND (0.0588)		8082A		1	06/05/13 14:20		CF30304
Aroclor 1242	ND (0.0588)		8082A		1	06/05/13 14:20		CF30304
Aroclor 1248	ND (0.0588)		8082A		1	06/05/13 14:20		CF30304
Aroclor 1254	**0.660** (0.0588)		8082A		1	06/05/13 14:20		CF30304
Aroclor 1260	ND (0.0588)		8082A		1	06/05/13 14:20		CF30304
Aroclor 1262	ND (0.0588)		8082A		1	06/05/13 14:20		CF30304
Aroclor 1268	ND (0.0588)		8082A		1	06/05/13 14:20		CF30304

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*57 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-49 0-6in
Date Sampled: 05/30/13 10:20
Percent Solids: 16
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305614
ESS Laboratory Sample ID: 1305614-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 6/3/13 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.327)		8082A		1	06/05/13 14:39		CF30304
Aroclor 1221	ND (0.327)		8082A		1	06/05/13 14:39		CF30304
Aroclor 1232	ND (0.327)		8082A		1	06/05/13 14:39		CF30304
Aroclor 1242	ND (0.327)		8082A		1	06/05/13 14:39		CF30304
Aroclor 1248	ND (0.327)		8082A		1	06/05/13 14:39		CF30304
Aroclor 1254	ND (0.327)		8082A		1	06/05/13 14:39		CF30304
Aroclor 1260	ND (0.327)		8082A		1	06/05/13 14:39		CF30304
Aroclor 1262	ND (0.327)		8082A		1	06/05/13 14:39		CF30304
Aroclor 1268	ND (0.327)		8082A		1	06/05/13 14:39		CF30304

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*59 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305614

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CF30304 - 3540										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305614

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CF30304 - 3540										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305614

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CF30304 - 3540										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0191*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
LCS										
Aroclor 1016	0.506	0.0500	mg/kg wet	0.5000		101	40-140			
Aroclor 1260	0.471	0.0500	mg/kg wet	0.5000		94	40-140			
Surrogate: Decachlorobiphenyl	*0.0180*		mg/kg wet	*0.02500*		*72*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0226*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS Dup										
Aroclor 1016	0.545	0.0500	mg/kg wet	0.5000		109	40-140	7	30	
Aroclor 1260	0.524	0.0500	mg/kg wet	0.5000		105	40-140	11	30	
Surrogate: Decachlorobiphenyl	*0.0199*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0241*		mg/kg wet	*0.02500*		*97*	*30-150*			
Batch CF30507 - 3540										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305614

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CF30507 - 3540										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305614

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CF30507 - 3540										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0171*		mg/kg wet	*0.02500*		*69*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0184*		mg/kg wet	*0.02500*		*73*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0180*		mg/kg wet	*0.02500*		*72*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305614

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CF30507 - 3540										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0191*		mg/kg wet	*0.02500*		*76*	*30-150*			
LCS										
Aroclor 1016	0.556	0.0500	mg/kg wet	0.5000		111	40-140			
Aroclor 1260	0.521	0.0500	mg/kg wet	0.5000		104	40-140			
Surrogate: Decachlorobiphenyl	*0.0187*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0199*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS Dup										
Aroclor 1016	0.517	0.0500	mg/kg wet	0.5000		103	40-140	7	30	
Aroclor 1260	0.513	0.0500	mg/kg wet	0.5000		103	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0179*		mg/kg wet	*0.02500*		*72*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0190*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0192*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0197*		mg/kg wet	*0.02500*		*79*	*30-150*			
Batch CF30705 - 3540										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305614

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CF30705 - 3540										
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305614

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CF30705 - 3540										
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0171*		mg/kg wet	*0.02500*		*69*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0194*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS										
Aroclor 1016	0.517	0.0500	mg/kg wet	0.5000		103	40-140			
Aroclor 1260	0.441	0.0500	mg/kg wet	0.5000		88	40-140			
Surrogate: Decachlorobiphenyl	*0.0172*		mg/kg wet	*0.02500*		*69*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0194*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS Dup										
Aroclor 1016	0.543	0.0500	mg/kg wet	0.5000		109	40-140	5	30	
Aroclor 1260	0.486	0.0500	mg/kg wet	0.5000		97	40-140	10	30	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1305614

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CF30705 - 3540										
Surrogate: Decachlorobiphenyl	*0.0181*		mg/kg wet	*0.02500*		*72*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford ESS Laboratory Work Order: 1305614

Notes and Definitions

U	Analyte included in the analysis, but not detected
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305614

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/labs/waterlabs-instate.php

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dep/blwq/topic/vessel/lab_list.pdf

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/labcert/labcert.aspx

New Hampshire (NELAP accredited) Potable and Non PotableWater, Solid and Hazardous Waste: 2424
http://www4.egov.nh.gov/des/nhelap/namesearch.asp

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/dep/DEP_OPRA/

United States Department of Agriculture Soil Permit: S-54210

Maryland Potable Water: 301
http://www.mde.state.md.us/assets/document/WSP_labs-2009apr20.pdf

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 13050614
Date Project Due: 6/7/13
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **1.8**
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.
2nd COC not relinquished nor received.

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	8 oz Soil Jar	1	NP
5	Yes	8 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	8 oz Soil Jar	1	NP
8	Yes	8 oz Soil Jar	1	NP
9	Yes	8 oz Soil Jar	1	NP
10	Yes	8 oz Soil Jar	1	NP
11	Yes	8 oz Soil Jar	1	NP

Completed By: LOC Date/Time: 5/31/13
Reviewed By: SW Date/Time: 6/2/13

stfield
Park 53 Southampton Road
ield, MA 01085
Phone (413) 572-4000 Fax (413) 572-3707

Boston Service Center
240 Bear Hill Rd. Suite 104
Waltham, MA 02451
Phone (781) 466-6900 Fax (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Michael Martin	Lab PM:	Carrier Tracking No(s):
Client Contact: Michael Martin	Phone:	E-Mail:	
Company: Tighe & Bond			
Address: 4 Barlows Landing Rd, Unit 15	Due Date Requested: 6/7/2013		
City: Pocasset, MA 02559	TAT Requested (days): 5-Day		
State, Zip:			
Phone: 508-564-7285 ext 105	Quote #:		
Email: memartin@tighebond.com	PO #:		
Project Name/number: N-1011	WO #:		
Site: Polyply	SSOW#:		

COC No: 22441
Page: 1 of 2
Job #:

Analysis Requested

1305614

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, H - Ascorbic Acid, I - Ice, J - DI Water, M - Hexane, N - None, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, Z - other (specify)

Regulatory programs:
MCP [X] GW1/S1 [X]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [ ]

TSCA - Extraction

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Sampler's Initials	Field Filtered Sample?	Perform MS/MSD?	PCBs	Total Number of containers	Special Instructions/Note:
				Preservation Code:		X	X	X			
01	N-51 (0-6")	5/30/13	0930	Grab	Soil	MM	N		X	1	
2	O-50 (0-6")	↓	0935	↓	↓	↓	↓		↓	↓	
3	L-48 (12-48")	↓	0940	↓	↓	↓	↓		↓	↓	
4	K-49 (0-6")	↓	0945	↓	↓	↓	↓		↓	↓	
5	C-41 (12-48")	↓	0950	↓	↓	↓	↓		↓	↓	
6	AA-50 (0-6")	↓	0955	↓	↓	↓	↓		↓	↓	
7	AA-42 (0-6")	↓	1000	↓	↓	↓	↓		↓	↓	
8	AA-39 (0-6")	↓	1005	↓	↓	↓	↓		↓	↓	
9	AA-37 (0-6")	↓	1010	↓	↓	↓	↓		↓	↓	
10	S-48 (0-6")	↓	1015	↓	↓	↓	↓		↓	0	

Possible Hazard Identification
[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
[ ] Return To Client [ ] Disposal By Lab [ ] Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	5/31/2013				
[signature]	5/31/13 11am				
[signature] 5/31/13	12:30pm		[signature]	5/31/13 2057	ESS

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.8 CA 5/31/13 (LD)
Ice 31 5/31/13 (LD)

TAL-8245-360 1111

...erica Westfield
...Executive Park 53 Southampton Road
...MA 01085
...) 572-4000 Fax (413) 572-3707

Boston Service Center
240 Bear Hill Rd. Suite 104
Waltham, MA 02451
Phone (781) 466-6900 Fax (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

...t Information	Sampler:	Lab PM:	Carrier Tracking No(s):	COC No: 22442
...t Contact: Michael Martin	Phone:	E-Mail:		Page: 2 of 2
Company: Tighe & Bond				Job #:
Address: 4 Barlows Landing Rd, Unit 15	Due Date Requested: 6/7/2013			
City: Pocasset, MA 02559	TAT Requested (days): 5 Day			
State, Zip:				
Phone: 508-564-7285 ext 105	Quote #:			
Email: memartin@tighebond.com	PO #:			
Project Name/number: Polyply	WO #:			
Site: N-1101	SSOW#:			

Analysis Requested

1305614

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, H - Ascorbic Acid, I - Ice, J - DI Water, M - Hexane, N - None, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, Z - other (specify)

Regulatory programs:
MCP [X] GW/S1 [X]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [ ]

ISCA - Extraction

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Sampler's Initials	Field Filtered Sample?	Perform MS/MSD?	PCBs	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	X			
11 R-49 (0-6") 5/30/13	~~1020~~	1020	Grab	Soil	MM			X	1	
~~MW-5~~	~~5/30/13~~	~~1100~~	~~↓~~	~~GW~~	~~↓~~			~~X~~	~~2~~	seperate workorder
	5/30/13	1145	↓	GW	↓			X	2	5/31/13 (2L)

Possible Hazard Identification
[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) cf COC

Special Instructions/QC Requirements:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
* See page 1 EO 6/6/13					
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 2057	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 5/31/13 ~~2057~~	Company ESS

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.8 VA 5/31/13 5/31/13 Ice (2L) (2L)

TAL-8245-360 1111

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1305615

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 1:57 pm, Jun 07, 2013

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibratins, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305615

SAMPLE RECEIPT

The following samples were received on May 31, 2013 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	SampleName	Matrix	Analysis
1305615-01	MW-5	Ground Water	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305615

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305615

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305615

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1305615-01**

Matrices: (X) Ground Water/Surface Water ( ) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes (X) No ( )*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: June 07, 2013
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: MW-5
Date Sampled: 05/30/13 11:00
Percent Solids: N/A
Initial Volume: 1000
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 1305615
ESS Laboratory Sample ID: 1305615-01
Sample Matrix: Ground Water
Units: ug/L
Analyst: TAJ
Prepared: 6/5/13 15:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.10)		8082A		1	06/06/13 4:26		CF30506
Aroclor 1221	ND (0.10)		8082A		1	06/06/13 4:26		CF30506
Aroclor 1232	ND (0.10)		8082A		1	06/06/13 4:26		CF30506
Aroclor 1242	ND (0.10)		8082A		1	06/06/13 4:26		CF30506
Aroclor 1248	ND (0.10)		8082A		1	06/06/13 4:26		CF30506
Aroclor 1254	ND (0.10)		8082A		1	06/06/13 4:26		CF30506
Aroclor 1260	ND (0.10)		8082A		1	06/06/13 4:26		CF30506
Aroclor 1262	ND (0.10)		8082A		1	06/06/13 4:26		CF30506
Aroclor 1268	ND (0.10)		8082A		1	06/06/13 4:26		CF30506

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305615

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CF30506 - 3510C										
Blank										
Aroclor 1016	ND	0.10	ug/L							
Aroclor 1016 (1)	ND	0.10	ug/L							
Aroclor 1016 (1) [2C]	ND	0.10	ug/L							
Aroclor 1016 (2)	ND	0.10	ug/L							
Aroclor 1016 (2) [2C]	ND	0.10	ug/L							
Aroclor 1016 (3)	ND	0.10	ug/L							
Aroclor 1016 (3) [2C]	ND	0.10	ug/L							
Aroclor 1016 (4)	ND	0.10	ug/L							
Aroclor 1016 (4) [2C]	ND	0.10	ug/L							
Aroclor 1016 (5)	ND	0.10	ug/L							
Aroclor 1016 (5) [2C]	ND	0.10	ug/L							
Aroclor 1221	ND	0.10	ug/L							
Aroclor 1221 (1)	ND	0.10	ug/L							
Aroclor 1221 (1) [2C]	ND	0.10	ug/L							
Aroclor 1221 (2)	ND	0.10	ug/L							
Aroclor 1221 (2) [2C]	ND	0.10	ug/L							
Aroclor 1221 (3)	ND	0.10	ug/L							
Aroclor 1221 (3) [2C]	ND	0.10	ug/L							
Aroclor 1221 (4)	ND	0.10	ug/L							
Aroclor 1221 (4) [2C]	ND	0.10	ug/L							
Aroclor 1221 (5)	ND	0.10	ug/L							
Aroclor 1221 (5) [2C]	ND	0.10	ug/L							
Aroclor 1232	ND	0.10	ug/L							
Aroclor 1232 (1)	ND	0.10	ug/L							
Aroclor 1232 (1) [2C]	ND	0.10	ug/L							
Aroclor 1232 (2)	ND	0.10	ug/L							
Aroclor 1232 (2) [2C]	ND	0.10	ug/L							
Aroclor 1232 (3)	ND	0.10	ug/L							
Aroclor 1232 (3) [2C]	ND	0.10	ug/L							
Aroclor 1232 (4)	ND	0.10	ug/L							
Aroclor 1232 (4) [2C]	ND	0.10	ug/L							
Aroclor 1232 (5)	ND	0.10	ug/L							
Aroclor 1232 (5) [2C]	ND	0.10	ug/L							
Aroclor 1242	ND	0.10	ug/L							
Aroclor 1242 (1)	ND	0.10	ug/L							
Aroclor 1242 (1) [2C]	ND	0.10	ug/L							
Aroclor 1242 (2)	ND	0.10	ug/L							
Aroclor 1242 (2) [2C]	ND	0.10	ug/L							
Aroclor 1242 (3)	ND	0.10	ug/L							
Aroclor 1242 (3) [2C]	ND	0.10	ug/L							
Aroclor 1242 (4)	ND	0.10	ug/L							
Aroclor 1242 (4) [2C]	ND	0.10	ug/L							
Aroclor 1242 (5)	ND	0.10	ug/L							
Aroclor 1242 (5) [2C]	ND	0.10	ug/L							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305615

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CF30506 - 3510C										
Aroclor 1248	ND	0.10	ug/L							
Aroclor 1248 (1)	ND	0.10	ug/L							
Aroclor 1248 (1) [2C]	ND	0.10	ug/L							
Aroclor 1248 (2)	ND	0.10	ug/L							
Aroclor 1248 (2) [2C]	ND	0.10	ug/L							
Aroclor 1248 (3)	ND	0.10	ug/L							
Aroclor 1248 (3) [2C]	ND	0.10	ug/L							
Aroclor 1248 (4)	ND	0.10	ug/L							
Aroclor 1248 (4) [2C]	ND	0.10	ug/L							
Aroclor 1248 (5)	ND	0.10	ug/L							
Aroclor 1248 (5) [2C]	ND	0.10	ug/L							
Aroclor 1254	ND	0.10	ug/L							
Aroclor 1254 (1)	ND	0.10	ug/L							
Aroclor 1254 (1) [2C]	ND	0.10	ug/L							
Aroclor 1254 (2)	ND	0.10	ug/L							
Aroclor 1254 (2) [2C]	ND	0.10	ug/L							
Aroclor 1254 (3)	ND	0.10	ug/L							
Aroclor 1254 (3) [2C]	ND	0.10	ug/L							
Aroclor 1254 (4)	ND	0.10	ug/L							
Aroclor 1254 (4) [2C]	ND	0.10	ug/L							
Aroclor 1254 (5)	ND	0.10	ug/L							
Aroclor 1254 (5) [2C]	ND	0.10	ug/L							
Aroclor 1260	ND	0.10	ug/L							
Aroclor 1260 (1)	ND	0.10	ug/L							
Aroclor 1260 (1) [2C]	ND	0.10	ug/L							
Aroclor 1260 (2)	ND	0.10	ug/L							
Aroclor 1260 (2) [2C]	ND	0.10	ug/L							
Aroclor 1260 (3)	ND	0.10	ug/L							
Aroclor 1260 (3) [2C]	ND	0.10	ug/L							
Aroclor 1260 (4)	ND	0.10	ug/L							
Aroclor 1260 (4) [2C]	ND	0.10	ug/L							
Aroclor 1260 (5)	ND	0.10	ug/L							
Aroclor 1260 (5) [2C]	ND	0.10	ug/L							
Aroclor 1262	ND	0.10	ug/L							
Aroclor 1262 (1)	ND	0.10	ug/L							
Aroclor 1262 (1) [2C]	ND	0.10	ug/L							
Aroclor 1262 (2)	ND	0.10	ug/L							
Aroclor 1262 (2) [2C]	ND	0.10	ug/L							
Aroclor 1262 (3)	ND	0.10	ug/L							
Aroclor 1262 (3) [2C]	ND	0.10	ug/L							
Aroclor 1262 (4)	ND	0.10	ug/L							
Aroclor 1262 (4) [2C]	ND	0.10	ug/L							
Aroclor 1262 (5)	ND	0.10	ug/L							
Aroclor 1262 (5) [2C]	ND	0.10	ug/L							
Aroclor 1268	ND	0.10	ug/L							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305615

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CF30506 - 3510C										
Aroclor 1268 (1)	ND	0.10	ug/L							
Aroclor 1268 (1) [2C]	ND	0.10	ug/L							
Aroclor 1268 (2)	ND	0.10	ug/L							
Aroclor 1268 (2) [2C]	ND	0.10	ug/L							
Aroclor 1268 (3)	ND	0.10	ug/L							
Aroclor 1268 (3) [2C]	ND	0.10	ug/L							
Aroclor 1268 (4)	ND	0.10	ug/L							
Aroclor 1268 (4) [2C]	ND	0.10	ug/L							
Aroclor 1268 (5)	ND	0.10	ug/L							
Aroclor 1268 (5) [2C]	ND	0.10	ug/L							
Surrogate: Decachlorobiphenyl	*0.0309*		ug/L	*0.05000*		*62*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0319*		ug/L	*0.05000*		*64*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0275*		ug/L	*0.05000*		*55*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0296*		ug/L	*0.05000*		*59*	*30-150*			
LCS										
Aroclor 1016	1.12	0.10	ug/L	1.000		112	40-140			
Aroclor 1260	1.05	0.10	ug/L	1.000		105	40-140			
Surrogate: Decachlorobiphenyl	*0.0338*		ug/L	*0.05000*		*68*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0353*		ug/L	*0.05000*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0360*		ug/L	*0.05000*		*72*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0372*		ug/L	*0.05000*		*74*	*30-150*			
LCS Dup										
Aroclor 1016	1.19	0.10	ug/L	1.000		119	40-140	6	20	
Aroclor 1260	1.09	0.10	ug/L	1.000		109	40-140	3	20	
Surrogate: Decachlorobiphenyl	*0.0339*		ug/L	*0.05000*		*68*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0345*		ug/L	*0.05000*		*69*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0374*		ug/L	*0.05000*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0382*		ug/L	*0.05000*		*76*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford ESS Laboratory Work Order: 1305615

Notes and Definitions

U	Analyte included in the analysis, but not detected
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305615

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/labs/waterlabs-instate.php

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dep/blwq/topic/vessel/lab_list.pdf

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/labcert/labcert.aspx

New Hampshire (NELAP accredited) Potable and Non PotableWater, Solid and Hazardous Waste: 2424
http://www4.egov.nh.gov/des/nhelap/namesearch.asp

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/dep/DEP_OPRA/

United States Department of Agriculture Soil Permit: S-54210

Maryland Potable Water: 301
http://www.mde.state.md.us/assets/document/WSP_labs-2009apr20.pdf

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Attachment B
SOP 10_0001

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 13050615
Date Project Due: 6/7/13
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: **1.8**
   Iced With: **Ice**
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample Yes
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? Yes|No
17. Were samples received intact? Yes|No
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____
18. Was there need to call project manager to discuss status? If yes, please explain.
    2nd sample not received.

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	1 L Glass	2	NP

Completed By: LDC Date/Time: 5/31/13
Reviewed By: SEP Date/Time: 6/2/13

ıerica Westfield
Executive Park 53 Southampton Road
MA 01085
) 572-4000 Fax (413) 572-3707

Boston Service Center
240 Bear Hill Rd. Suite 104
Waltham, MA 02451
Phone (781) 466-6900 Fax (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sampler:
Lab PM:
Carrier Tracking No(s):
COC No: 22442
Phone:
E-Mail:
Page: 2 of 2
Job #:

ıt Information

ıt Contact: Michael Martin
mpany: Tighe & Bond
dress: 4 Barlows Landing Rd, Unit 15
y: Pocasset, MA 02559
ate, Zip:
one: 508-564-7285 ext 105
nail: mmartin@tighebond.com
oject Name/number: Polyply
e: N-1101

Due Date Requested: 6/7/2013
TAT Requested (days): 5 Day
Quote #:
PO #:
WO #:
SSOW#:

Analysis Requested

1305615

- ISCA - Extraction

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, H - Ascorbic Acid, I - Ice, J - DI Water, M - Hexane, N - None, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, Z - other (specify)

Regulatory programs:
MCP [X] GW/SI [X]
RCP [ ] CT RSR [ ]
DEP Form [ ] EDD Required [ ]

ample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Sampler's Initials	Field Filtered Sample?	Perform MS/MSD?	PCB5	Total Number of containers	Special Instructions/Note:
Preservation Code:										
~~R-49 (0-6") 5/30/13~~	~~1030~~	~~1030~~	~~Grab~~	~~Soil~~	~~FM~~			~~X~~	~~1~~	~~separate W.O. 5/31/13~~
mw-5	5/30/13	1100	G	GW	G			X	2	
01	5/30/13	1145	G	GW	G			X	2	(1) Sample not received?? 5/31/13

5/31/13 5/31/13

ossible Hazard Identification
[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
[ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months

eliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

elinquished by	Date/Time	Company	Received by	Date/Time	Company
See page 1 of COC (1305614)					
elinquished by	Date/Time: 5/30/13	Company	Received by	Date/Time: 2057	Company
elinquished by	Date/Time	Company	Received by	Date/Time: 5/31/13 ~~2057~~	Company ESS

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.8 CA 5/31/13 Ice 5/31/13

TAL-8245-360 1111

CERTIFICATE OF ANALYSIS

Jon VanHazinga
Tighe & Bond
446 Main Street
Worcester, MA 01608

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1305054

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 2:18 pm, May 10, 2013

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibratins, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305054

SAMPLE RECEIPT

The following samples were received on May 03, 2013 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	SampleName	Matrix	Analysis
1305054-01	PCB-01	Soil	8082A
1305054-02	PCB-02	Soil	8082A
1305054-03	PCB-03	Soil	8082A
1305054-04	PCB-04	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305054

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1305054-01 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1248

1305054-04 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305054

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305054

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1305054-01 through 1305054-04**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes ( ) No (X)*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: May 10, 2013
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: PCB-01
Date Sampled: 05/01/13 09:10
Percent Solids: N/A
Initial Volume: 10.3
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305054
ESS Laboratory Sample ID: 1305054-01
Sample Matrix: Soil
Units: mg/kg wet
Analyst: ML
Prepared: 5/6/13 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0971)	8082A		1	05/08/13 7:47		CE30939
Aroclor 1221	ND (0.0971)	8082A		1	05/08/13 7:47		CE30939
Aroclor 1232	ND (0.0971)	8082A		1	05/08/13 7:47		CE30939
Aroclor 1242	ND (0.0971)	8082A		1	05/08/13 7:47		CE30939
Aroclor 1248	**P 3.65** (0.485)	8082A		5	05/08/13 23:27		CE30939
Aroclor 1254	**1.80** (0.0971)	8082A		1	05/08/13 7:47		CE30939
Aroclor 1260	ND (0.0971)	8082A		1	05/08/13 7:47		CE30939
Aroclor 1262	ND (0.0971)	8082A		1	05/08/13 7:47		CE30939
Aroclor 1268	ND (0.0971)	8082A		1	05/08/13 7:47		CE30939

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*36 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*37 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: PCB-02
Date Sampled: 05/01/13 10:05
Percent Solids: N/A
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305054
ESS Laboratory Sample ID: 1305054-02
Sample Matrix: Soil
Units: mg/kg wet
Analyst: ML
Prepared: 5/6/13 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0990)	8082A		1	05/08/13 1:28		CE30605
Aroclor 1221	ND (0.0990)	8082A		1	05/08/13 1:28		CE30605
Aroclor 1232	ND (0.0990)	8082A		1	05/08/13 1:28		CE30605
Aroclor 1242	ND (0.0990)	8082A		1	05/08/13 1:28		CE30605
Aroclor 1248	**2.80** (0.495)	8082A		5	05/08/13 22:49		CE30605
Aroclor 1254	**2.53** (0.495)	8082A		5	05/08/13 22:49		CE30605
Aroclor 1260	ND (0.0990)	8082A		1	05/08/13 1:28		CE30605
Aroclor 1262	ND (0.0990)	8082A		1	05/08/13 1:28		CE30605
Aroclor 1268	ND (0.0990)	8082A		1	05/08/13 1:28		CE30605

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: PCB-03
Date Sampled: 05/01/13 11:25
Percent Solids: N/A
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305054
ESS Laboratory Sample ID: 1305054-03
Sample Matrix: Soil
Units: mg/kg wet
Analyst: ML
Prepared: 5/6/13 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0990)	8082A		1	05/08/13 1:47		CE30605
Aroclor 1221	ND (0.0990)	8082A		1	05/08/13 1:47		CE30605
Aroclor 1232	ND (0.0990)	8082A		1	05/08/13 1:47		CE30605
Aroclor 1242	ND (0.0990)	8082A		1	05/08/13 1:47		CE30605
Aroclor 1248	**0.454** (0.0990)	8082A		1	05/08/13 1:47		CE30605
Aroclor 1254	**0.502** (0.0990)	8082A		1	05/08/13 1:47		CE30605
Aroclor 1260	ND (0.0990)	8082A		1	05/08/13 1:47		CE30605
Aroclor 1262	ND (0.0990)	8082A		1	05/08/13 1:47		CE30605
Aroclor 1268	ND (0.0990)	8082A		1	05/08/13 1:47		CE30605

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: PCB-04
Date Sampled: 05/01/13 13:50
Percent Solids: N/A
Initial Volume: 6.88
Final Volume: 10
Extraction Method: 3540

ESS Laboratory Work Order: 1305054
ESS Laboratory Sample ID: 1305054-04
Sample Matrix: Soil
Units: mg/kg wet
Analyst: TAJ
Prepared: 5/6/13 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (14.5)	8082A		100	05/08/13 23:08		CE30605
Aroclor 1221	ND (14.5)	8082A		100	05/08/13 23:08		CE30605
Aroclor 1232	ND (14.5)	8082A		100	05/08/13 23:08		CE30605
Aroclor 1242	ND (14.5)	8082A		100	05/08/13 23:08		CE30605
Aroclor 1248	**149** (14.5)	8082A		100	05/08/13 23:08		CE30605
Aroclor 1254	ND (14.5)	8082A		100	05/08/13 23:08		CE30605
Aroclor 1260	ND (14.5)	8082A		100	05/08/13 23:08		CE30605
Aroclor 1262	ND (14.5)	8082A		100	05/08/13 23:08		CE30605
Aroclor 1268	ND (14.5)	8082A		100	05/08/13 23:08		CE30605

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305054

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CE30605 - 3540										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305054

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CE30605 - 3540										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305054

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CE30605 - 3540										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0214*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0190*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
LCS										
Aroclor 1016	0.465	0.0500	mg/kg wet	0.5000		93	40-140			
Aroclor 1260	0.412	0.0500	mg/kg wet	0.5000		82	40-140			
Surrogate: Decachlorobiphenyl	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS Dup										
Aroclor 1016	0.465	0.0500	mg/kg wet	0.5000		93	40-140	0.04	30	
Aroclor 1260	0.418	0.0500	mg/kg wet	0.5000		84	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0257*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
Batch CE30939 - 3540										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305054

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CE30939 - 3540										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305054

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CE30939 - 3540										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0190*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0162*		mg/kg wet	*0.02500*		*65*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0129*		mg/kg wet	*0.02500*		*51*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305054

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CE30939 - 3540										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0147*		mg/kg wet	*0.02500*		*59*	*30-150*			
LCS										
Aroclor 1016	0.427	0.0500	mg/kg wet	0.5000		85	40-140			
Aroclor 1260	0.373	0.0500	mg/kg wet	0.5000		75	40-140			
Surrogate: Decachlorobiphenyl	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0187*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0175*		mg/kg wet	*0.02500*		*70*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0178*		mg/kg wet	*0.02500*		*71*	*30-150*			
LCS Dup										
Aroclor 1016	0.366	0.0500	mg/kg wet	0.5000		73	40-140	15	30	
Aroclor 1260	0.308	0.0500	mg/kg wet	0.5000		62	40-140	19	30	
Surrogate: Decachlorobiphenyl	*0.0185*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0155*		mg/kg wet	*0.02500*		*62*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0135*		mg/kg wet	*0.02500*		*54*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0145*		mg/kg wet	*0.02500*		*58*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1305054

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
P	Percent difference between primary and confirmation results exceeds 40% (P).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1305054

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/labs/waterlabs-instate.php

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dep/blwq/topic/vessel/lab_list.pdf

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/labcert/labcert.aspx

New Hampshire (NELAP accredited) Potable and Non PotableWater, Solid and Hazardous Waste: 2424
http://www4.egov.nh.gov/des/nhelap/namesearch.asp

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/dep/DEP_OPRA/

United States Department of Agriculture Soil Permit: S-54210

Maryland Potable Water: 301
http://www.mde.state.md.us/assets/document/WSP_labs-2009apr20.pdf

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 13050054
Date Project Due: 5/10/13
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **5.1**
   Iced With: **Icepacks**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP

Completed By: [illegible] Date/Time: 5/3/13
Reviewed By: EO Date/Time: 5/3/13

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Turn Time ☒ Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
MA-MCP Navy USACE Other TSCA

Reporting Limits: CLP

ESS LAB PROJECT ID: 1305054

Electronic Deliverable Yes ☒ No ____
Format: Excel __ Access __ PDF ☒ Other _____

Co. Name	Project #	Project Name (20 Char. or less)
TIGHE & BOND	N-1011	NEW BEDFORD

Contact Person	Address
JON VAN HAZINGA	446 MAIN ST

City	State	Zip	PO#
WORCESTER	MA	01608	

Telephone #	Fax #	Email Address
508.754.2201		javanhazinga@tighebond.com

Write Required Analysis: PCBS SOXL/3540C

ESS LAB Sample #	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers	PCBS SOXL/3540C
	5-1-2013	0910		X	SD	PCB-01	1	1	G	X
	5-1-2013	1005		X	SD	PCB-02	1	1	G	X
	5-1-2013	1125		X	SD	PCB-03	1	1	G	X
	5-1-2013	1350		X	SD	PCB-04	1	1	G	X

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No

Seals Intact ___ Yes ___ No NA: ✓

Cooler Temp: 5.1

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Preservation Code 1- NP, 2- HCl, 3- H_2SO_4, 4- HNO_3, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9- _____

Sampled by: JON VAN HAZINGA

Comments: SOXHLET EXTRACTION QUOTE: 1212004

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	5-3-13 1210	[signature]	5/3/13 1210	[signature] SR FedEx	5/3/13 1210	[signature] ESS	5/3/13 11:10
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	5/3/13 11:45	[signature]	5/3/13 11:45				

*By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

10/26/04 A

CERTIFICATE OF ANALYSIS

Paul Galotti
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1407179

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 1:25 pm, Jul 16, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407179

SAMPLE RECEIPT

The following samples were received on July 09, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1407179-01	MW-5 Dissolved	Ground Water	8082A
1407179-02	MW-4 Dissolved	Ground Water	8082A
1407179-03	MW-8 Dissolved	Ground Water	8082A
1407179-04	MW-5	Ground Water	8082A
1407179-05	MW-4	Ground Water	8082A
1407179-06	MW-8	Ground Water	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407179

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1407179-05 **Surrogate recovery(ies) above upper control limit (S+).**
Tetrachloro-m-xylene [2C] (168% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407179

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407179

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1407179-01 through 1407179-06**

Matrices: (X) Ground Water/Surface Water ( ) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: July 16, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: MW-5 Dissolved
Date Sampled: 07/09/14 11:00
Percent Solids: N/A
Initial Volume: 1070
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 1407179
ESS Laboratory Sample ID: 1407179-01
Sample Matrix: Ground Water
Units: ug/L
Analyst: JXS
Prepared: 7/9/14 16:33
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	07/09/14 19:50		CG40838
Aroclor 1221	ND (0.09)		8082A		1	07/09/14 19:50		CG40838
Aroclor 1232	ND (0.09)		8082A		1	07/09/14 19:50		CG40838
Aroclor 1242	ND (0.09)		8082A		1	07/09/14 19:50		CG40838
Aroclor 1248	ND (0.09)		8082A		1	07/09/14 19:50		CG40838
Aroclor 1254	ND (0.09)		8082A		1	07/09/14 19:50		CG40838
Aroclor 1260	ND (0.09)		8082A		1	07/09/14 19:50		CG40838
Aroclor 1262	ND (0.09)		8082A		1	07/09/14 19:50		CG40838
Aroclor 1268	ND (0.09)		8082A		1	07/09/14 19:50		CG40838

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*112 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*110 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: MW-4 Dissolved
Date Sampled: 07/09/14 12:00
Percent Solids: N/A
Initial Volume: 1070
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 1407179
ESS Laboratory Sample ID: 1407179-02
Sample Matrix: Ground Water
Units: ug/L
Analyst: TAJ
Prepared: 7/9/14 16:33
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	07/11/14 12:32		CG41426
Aroclor 1221	ND (0.09)		8082A		1	07/11/14 12:32		CG41426
Aroclor 1232	**0.25** (0.09)		8082A		1	07/11/14 12:32		CG41426
Aroclor 1242	ND (0.09)		8082A		1	07/11/14 12:32		CG41426
Aroclor 1248	ND (0.09)		8082A		1	07/11/14 12:32		CG41426
Aroclor 1254	ND (0.09)		8082A		1	07/11/14 12:32		CG41426
Aroclor 1260	ND (0.09)		8082A		1	07/11/14 12:32		CG41426
Aroclor 1262	ND (0.09)		8082A		1	07/11/14 12:32		CG41426
Aroclor 1268	ND (0.09)		8082A		1	07/11/14 12:32		CG41426

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*108 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: MW-8 Dissolved
Date Sampled: 07/09/14 13:00
Percent Solids: N/A
Initial Volume: 1000
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 1407179
ESS Laboratory Sample ID: 1407179-03
Sample Matrix: Ground Water
Units: ug/L
Analyst: JXS
Prepared: 7/9/14 16:33
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.10)		8082A		1	07/09/14 20:28		CG40838
Aroclor 1221	ND (0.10)		8082A		1	07/09/14 20:28		CG40838
Aroclor 1232	ND (0.10)		8082A		1	07/09/14 20:28		CG40838
Aroclor 1242	ND (0.10)		8082A		1	07/09/14 20:28		CG40838
Aroclor 1248	ND (0.10)		8082A		1	07/09/14 20:28		CG40838
Aroclor 1254	ND (0.10)		8082A		1	07/09/14 20:28		CG40838
Aroclor 1260	ND (0.10)		8082A		1	07/09/14 20:28		CG40838
Aroclor 1262	ND (0.10)		8082A		1	07/09/14 20:28		CG40838
Aroclor 1268	ND (0.10)		8082A		1	07/09/14 20:28		CG40838

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: MW-5
Date Sampled: 07/09/14 11:00
Percent Solids: N/A
Initial Volume: 1070
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 1407179
ESS Laboratory Sample ID: 1407179-04
Sample Matrix: Ground Water
Units: ug/L
Analyst: JXS
Prepared: 7/9/14 16:33
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	07/09/14 20:47		CG40838
Aroclor 1221	ND (0.09)		8082A		1	07/09/14 20:47		CG40838
Aroclor 1232	ND (0.09)		8082A		1	07/09/14 20:47		CG40838
Aroclor 1242	**1.57** (0.09)		8082A		1	07/09/14 20:47		CG40838
Aroclor 1248	ND (0.09)		8082A		1	07/09/14 20:47		CG40838
Aroclor 1254	**1.28** (0.09)		8082A		1	07/09/14 20:47		CG40838
Aroclor 1260	ND (0.09)		8082A		1	07/09/14 20:47		CG40838
Aroclor 1262	ND (0.09)		8082A		1	07/09/14 20:47		CG40838
Aroclor 1268	ND (0.09)		8082A		1	07/09/14 20:47		CG40838

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: MW-4
Date Sampled: 07/09/14 12:00
Percent Solids: N/A
Initial Volume: 1070
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 1407179
ESS Laboratory Sample ID: 1407179-05
Sample Matrix: Ground Water
Units: ug/L
Analyst: TAJ
Prepared: 7/9/14 16:33
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	07/11/14 12:51		CG41426
Aroclor 1221	ND (0.09)		8082A		1	07/11/14 12:51		CG41426
Aroclor 1232	**7.98** (0.93)		8082A		10	07/11/14 19:52		CG41426
Aroclor 1242	ND (0.09)		8082A		1	07/11/14 12:51		CG41426
Aroclor 1248	ND (0.09)		8082A		1	07/11/14 12:51		CG41426
Aroclor 1254	ND (0.09)		8082A		1	07/11/14 12:51		CG41426
Aroclor 1260	ND (0.09)		8082A		1	07/11/14 12:51		CG41426
Aroclor 1262	ND (0.09)		8082A		1	07/11/14 12:51		CG41426
Aroclor 1268	ND (0.09)		8082A		1	07/11/14 12:51		CG41426

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*168 %*	*S+*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: MW-8
Date Sampled: 07/09/14 13:00
Percent Solids: N/A
Initial Volume: 1000
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 1407179
ESS Laboratory Sample ID: 1407179-06
Sample Matrix: Ground Water
Units: ug/L
Analyst: JXS
Prepared: 7/9/14 16:33
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.10)		8082A		1	07/09/14 21:25		CG40838
Aroclor 1221	ND (0.10)		8082A		1	07/09/14 21:25		CG40838
Aroclor 1232	ND (0.10)		8082A		1	07/09/14 21:25		CG40838
Aroclor 1242	ND (0.10)		8082A		1	07/09/14 21:25		CG40838
Aroclor 1248	ND (0.10)		8082A		1	07/09/14 21:25		CG40838
Aroclor 1254	ND (0.10)		8082A		1	07/09/14 21:25		CG40838
Aroclor 1260	ND (0.10)		8082A		1	07/09/14 21:25		CG40838
Aroclor 1262	ND (0.10)		8082A		1	07/09/14 21:25		CG40838
Aroclor 1268	ND (0.10)		8082A		1	07/09/14 21:25		CG40838

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407179

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CG40838 - 3510C										
Blank										
Aroclor 1016	ND	0.10	ug/L							
Aroclor 1221	ND	0.10	ug/L							
Aroclor 1232	ND	0.10	ug/L							
Aroclor 1242	ND	0.10	ug/L							
Aroclor 1248	ND	0.10	ug/L							
Aroclor 1254	ND	0.10	ug/L							
Aroclor 1260	ND	0.10	ug/L							
Aroclor 1262	ND	0.10	ug/L							
Aroclor 1268	ND	0.10	ug/L							
Surrogate: Decachlorobiphenyl	*0.0496*		ug/L	*0.05000*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0516*		ug/L	*0.05000*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0336*		ug/L	*0.05000*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0307*		ug/L	*0.05000*		*61*	*30-150*			
LCS										
Aroclor 1016	0.96	0.10	ug/L	1.000		96	40-140			
Aroclor 1260	0.98	0.10	ug/L	1.000		98	40-140			
Surrogate: Decachlorobiphenyl	*0.0517*		ug/L	*0.05000*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0491*		ug/L	*0.05000*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0395*		ug/L	*0.05000*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0386*		ug/L	*0.05000*		*77*	*30-150*			
LCS Dup										
Aroclor 1016	1.05	0.10	ug/L	1.000		105	40-140	9	20	
Aroclor 1260	1.08	0.10	ug/L	1.000		108	40-140	10	20	
Surrogate: Decachlorobiphenyl	*0.0530*		ug/L	*0.05000*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0540*		ug/L	*0.05000*		*108*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0422*		ug/L	*0.05000*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0412*		ug/L	*0.05000*		*82*	*30-150*			
Batch CG41426 - 3510C										
Blank										
Aroclor 1016	ND	0.10	ug/L							
Aroclor 1221	ND	0.10	ug/L							
Aroclor 1232	ND	0.10	ug/L							
Aroclor 1242	ND	0.10	ug/L							
Aroclor 1248	ND	0.10	ug/L							
Aroclor 1254	ND	0.10	ug/L							
Aroclor 1260	ND	0.10	ug/L							
Aroclor 1262	ND	0.10	ug/L							
Aroclor 1268	ND	0.10	ug/L							
Surrogate: Decachlorobiphenyl	*0.0616*		ug/L	*0.05000*		*123*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0561*		ug/L	*0.05000*		*112*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407179

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CG41426 - 3510C										
Surrogate: Tetrachloro-m-xylene	*0.0423*		ug/L	*0.05000*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0380*		ug/L	*0.05000*		*76*	*30-150*			
LCS										
Aroclor 1016	1.04	0.10	ug/L	1.000		104	40-140			
Aroclor 1260	1.11	0.10	ug/L	1.000		111	40-140			
Surrogate: Decachlorobiphenyl	*0.0544*		ug/L	*0.05000*		*109*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0502*		ug/L	*0.05000*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0431*		ug/L	*0.05000*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0408*		ug/L	*0.05000*		*82*	*30-150*			
LCS Dup										
Aroclor 1016	1.07	0.10	ug/L	1.000		107	40-140	3	20	
Aroclor 1260	1.15	0.10	ug/L	1.000		115	40-140	3	20	
Surrogate: Decachlorobiphenyl	*0.0554*		ug/L	*0.05000*		*111*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0489*		ug/L	*0.05000*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0418*		ug/L	*0.05000*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0404*		ug/L	*0.05000*		*81*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1407179

Notes and Definitions

U	Analyte included in the analysis, but not detected
S+	Surrogate recovery(ies) above upper control limit (S+).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407179

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14070179
Date Project Due: 7/16/2014
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: **5.8**
   Iced With: **Ice**
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample Yes
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____
18. Was there need to call project manager to discuss status? If yes, please explain.

Samples 4,5,6 are total PCB's and 1,2,3 are dissolved

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	1 L Glass	1	NP
2	Yes	1 L Glass	1	NP
3	Yes	1 L Glass	1	NP
4	Yes	1 L Glass	1	NP
5	Yes	1 L Glass	1	NP
6	Yes	1 L Glass	1	NP

Completed By: [illegible] Date/Time: 7/9/14 1628
Reviewed By: MGC Date/Time: 7/9/14 1628

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 1 of 1

Turn Time ✓ Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
MA RI CT NH NJ NY ME Other _____

Is this project for any of the following:
MA-MCP Navy USACE Other _____

Reporting Limits: MA MCP TSCA Project

ESS LAB PROJECT ID: 1407179

Electronic Deliverable Yes ✓ No ___
Format: Excel ✓ Access ___ PDF ✓ Other _____

Co. Name: Tighe & Bond	Project #: N-1011	Project Name (20 Char. or less): Former Polyply Site	
Contact Person: Todd Kirton, Paul Galotti	Address: 486 Main Street		
City: Worcester	State: MA	Zip: 01610	PO#:
Telephone #: 508-360-1627	Fax #: 508-795-1084	Email Address: TDkirton@Tighebond.com	

Write Required Analysis

ESS LAB Sample #	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers	Total PCBs	Dissolved PCBs
14	7/9/14	11:00 am			GW	MW-5	1	2	G	✓	✓
25	7/9/14	12:00 pm			GW	MW-4	1	2	G	✓	✓
36	7/9/14	1:00 pm			GW	MW-8	1	2	G	✓	✓

NONE TO FOLLOW

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No

Seals Intact ___ Yes ___ No NA: ___

Cooler Temp: 0.5 Ice 7/9/14

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Preservation Code 1- NP, 2- HCl, 3- H_2SO_4, 4- HNO_3, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9- _____

Sampled by: PBG1

Comments: 1 filtered sample (dissolved PCBs) / 1 non-filtered sample each

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	7/9/14 1350	[signature]	7/9/14 1350	[signature]	7/9/14 1550	[signature]	7/9/14 1600
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

*By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

10/26/04 A

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1407178

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 3:46 pm, Jul 18, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407178

SAMPLE RECEIPT

The following samples were received on July 09, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

The "as received" %solids were reported separately for each sample. The "air dried" %solids were used to calculate the PCB aroclor concentrations in the samples.

Lab Number	Sample Name	Matrix	Analysis
1407178-01	U50 0-1ft	Soil	2540G, 8082A
1407178-02	Q51 0-1ft	Soil	2540G, 8082A
1407178-03	N53 0-1ft	Soil	2540G, 8082A
1407178-04	J52 0-1ft	Soil	2540G, 8082A
1407178-05	G50 0-1ft	Soil	2540G, 8082A
1407178-06	E52 0-1ft	Soil	2540G, 8082A
1407178-07	1A 52 0-1ft	Soil	2540G, 8082A
1407178-08	1C 50 0-1ft	Soil	2540G, 8082A
1407178-09	1C 45 0-1ft	Soil	2540G, 8082A
1407178-10	1D 41 0-1ft	Soil	2540G, 8082A
1407178-11	1E 38	Soil	2540G, 8082A
1407178-12	1D 35	Soil	2540G, 8082A
1407178-13	1A 34	Soil	2540G, 8082A
1407178-14	D33	Soil	2540G, 8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407178

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1407178-13 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1407178-14 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407178

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407178

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1407178-01 through 1407178-14**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: July 18, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U50 0-1ft
Date Sampled: 07/09/14 09:00
Percent Solids: 70
Initial Volume: 22.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 7/14/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0635)		8082A		1	07/16/14 8:02		CG41408
Aroclor 1221	ND (0.0635)		8082A		1	07/16/14 8:02		CG41408
Aroclor 1232	ND (0.0635)		8082A		1	07/16/14 8:02		CG41408
Aroclor 1242	ND (0.0635)		8082A		1	07/16/14 8:02		CG41408
Aroclor 1248	**0.181** (0.0635)		8082A		1	07/16/14 8:02		CG41408
Aroclor 1254	ND (0.0635)		8082A		1	07/16/14 8:02		CG41408
Aroclor 1260	ND (0.0635)		8082A		1	07/16/14 8:02		CG41408
Aroclor 1262	ND (0.0635)		8082A		1	07/16/14 8:02		CG41408
Aroclor 1268	ND (0.0635)		8082A		1	07/16/14 8:02		CG41408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*37 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U50 0-1ft
Date Sampled: 07/09/14 09:00
Percent Solids: 70

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-01
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**17** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q51 0-1ft
Date Sampled: 07/09/14 09:10
Percent Solids: 65
Initial Volume: 25
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 7/14/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0616)		8082A		1	07/16/14 8:21		CG41408
Aroclor 1221	ND (0.0616)		8082A		1	07/16/14 8:21		CG41408
Aroclor 1232	ND (0.0616)		8082A		1	07/16/14 8:21		CG41408
Aroclor 1242	ND (0.0616)		8082A		1	07/16/14 8:21		CG41408
Aroclor 1248	**0.625** (0.0616)		8082A		1	07/16/14 8:21		CG41408
Aroclor 1254	**0.937** (0.0616)		8082A		1	07/16/14 8:21		CG41408
Aroclor 1260	ND (0.0616)		8082A		1	07/16/14 8:21		CG41408
Aroclor 1262	ND (0.0616)		8082A		1	07/16/14 8:21		CG41408
Aroclor 1268	ND (0.0616)		8082A		1	07/16/14 8:21		CG41408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q51 0-1ft
Date Sampled: 07/09/14 09:10
Percent Solids: 65

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-02
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**18** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N53 0-1ft
Date Sampled: 07/09/14 09:18
Percent Solids: 39
Initial Volume: 25.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 7/14/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0987)		8082A		1	07/16/14 8:40		CG41408
Aroclor 1221	ND (0.0987)		8082A		1	07/16/14 8:40		CG41408
Aroclor 1232	ND (0.0987)		8082A		1	07/16/14 8:40		CG41408
Aroclor 1242	ND (0.0987)		8082A		1	07/16/14 8:40		CG41408
Aroclor 1248	ND (0.0987)		8082A		1	07/16/14 8:40		CG41408
Aroclor 1254	**0.193** (0.0987)		8082A		1	07/16/14 8:40		CG41408
Aroclor 1260	ND (0.0987)		8082A		1	07/16/14 8:40		CG41408
Aroclor 1262	ND (0.0987)		8082A		1	07/16/14 8:40		CG41408
Aroclor 1268	ND (0.0987)		8082A		1	07/16/14 8:40		CG41408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*127 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*108 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N53 0-1ft
Date Sampled: 07/09/14 09:18
Percent Solids: 39

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-03
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**13** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J52 0-1ft
Date Sampled: 07/09/14 09:28
Percent Solids: 49
Initial Volume: 25.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 7/14/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0793)		8082A		1	07/16/14 8:59		CG41408
Aroclor 1221	ND (0.0793)		8082A		1	07/16/14 8:59		CG41408
Aroclor 1232	ND (0.0793)		8082A		1	07/16/14 8:59		CG41408
Aroclor 1242	ND (0.0793)		8082A		1	07/16/14 8:59		CG41408
Aroclor 1248	ND (0.0793)		8082A		1	07/16/14 8:59		CG41408
Aroclor 1254	**0.103** (0.0793)		8082A		1	07/16/14 8:59		CG41408
Aroclor 1260	ND (0.0793)		8082A		1	07/16/14 8:59		CG41408
Aroclor 1262	ND (0.0793)		8082A		1	07/16/14 8:59		CG41408
Aroclor 1268	ND (0.0793)		8082A		1	07/16/14 8:59		CG41408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*49 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J52 0-1ft
Date Sampled: 07/09/14 09:28
Percent Solids: 49

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-04
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**17** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G50 0-1ft
Date Sampled: 07/09/14 09:38
Percent Solids: 55
Initial Volume: 25.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 7/17/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0718)		8082A		1	07/18/14 11:24		CG41703
Aroclor 1221	ND (0.0718)		8082A		1	07/18/14 11:24		CG41703
Aroclor 1232	ND (0.0718)		8082A		1	07/18/14 11:24		CG41703
Aroclor 1242	ND (0.0718)		8082A		1	07/18/14 11:24		CG41703
Aroclor 1248	ND (0.0718)		8082A		1	07/18/14 11:24		CG41703
Aroclor 1254	**0.113** (0.0718)		8082A		1	07/18/14 11:24		CG41703
Aroclor 1260	ND (0.0718)		8082A		1	07/18/14 11:24		CG41703
Aroclor 1262	ND (0.0718)		8082A		1	07/18/14 11:24		CG41703
Aroclor 1268	ND (0.0718)		8082A		1	07/18/14 11:24		CG41703

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G50 0-1ft
Date Sampled: 07/09/14 09:38
Percent Solids: 55

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-05
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**17** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E52 0-1ft
Date Sampled: 07/09/14 09:45
Percent Solids: 58
Initial Volume: 25.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 7/14/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0679)		8082A		1	07/16/14 9:37		CG41408
Aroclor 1221	ND (0.0679)		8082A		1	07/16/14 9:37		CG41408
Aroclor 1232	ND (0.0679)		8082A		1	07/16/14 9:37		CG41408
Aroclor 1242	ND (0.0679)		8082A		1	07/16/14 9:37		CG41408
Aroclor 1248	ND (0.0679)		8082A		1	07/16/14 9:37		CG41408
Aroclor 1254	**0.206** (0.0679)		8082A		1	07/16/14 9:37		CG41408
Aroclor 1260	ND (0.0679)		8082A		1	07/16/14 9:37		CG41408
Aroclor 1262	ND (0.0679)		8082A		1	07/16/14 9:37		CG41408
Aroclor 1268	ND (0.0679)		8082A		1	07/16/14 9:37		CG41408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E52 0-1ft
Date Sampled: 07/09/14 09:45
Percent Solids: 58

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-06
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**19** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1A 52 0-1ft
Date Sampled: 07/09/14 09:55
Percent Solids: 47
Initial Volume: 25.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 7/14/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0840)		8082A		1	07/16/14 9:56		CG41408
Aroclor 1221	ND (0.0840)		8082A		1	07/16/14 9:56		CG41408
Aroclor 1232	ND (0.0840)		8082A		1	07/16/14 9:56		CG41408
Aroclor 1242	ND (0.0840)		8082A		1	07/16/14 9:56		CG41408
Aroclor 1248	ND (0.0840)		8082A		1	07/16/14 9:56		CG41408
Aroclor 1254	**0.152** (0.0840)		8082A		1	07/16/14 9:56		CG41408
Aroclor 1260	ND (0.0840)		8082A		1	07/16/14 9:56		CG41408
Aroclor 1262	ND (0.0840)		8082A		1	07/16/14 9:56		CG41408
Aroclor 1268	ND (0.0840)		8082A		1	07/16/14 9:56		CG41408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*40 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1A 52 0-1ft
Date Sampled: 07/09/14 09:55
Percent Solids: 47

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-07
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**17** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1C 50 0-1ft
Date Sampled: 07/09/14 10:05
Percent Solids: 53
Initial Volume: 25.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 7/14/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0739)		8082A		1	07/16/14 10:15		CG41408
Aroclor 1221	ND (0.0739)		8082A		1	07/16/14 10:15		CG41408
Aroclor 1232	ND (0.0739)		8082A		1	07/16/14 10:15		CG41408
Aroclor 1242	ND (0.0739)		8082A		1	07/16/14 10:15		CG41408
Aroclor 1248	ND (0.0739)		8082A		1	07/16/14 10:15		CG41408
Aroclor 1254	**0.155** (0.0739)		8082A		1	07/16/14 10:15		CG41408
Aroclor 1260	ND (0.0739)		8082A		1	07/16/14 10:15		CG41408
Aroclor 1262	ND (0.0739)		8082A		1	07/16/14 10:15		CG41408
Aroclor 1268	ND (0.0739)		8082A		1	07/16/14 10:15		CG41408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*129 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*138 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1C 50 0-1ft
Date Sampled: 07/09/14 10:05
Percent Solids: 53

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-08
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**16** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1C 45 0-1ft
Date Sampled: 07/09/14 10:10
Percent Solids: 45
Initial Volume: 25.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 7/14/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0863)		8082A		1	07/16/14 10:34		CG41408
Aroclor 1221	ND (0.0863)		8082A		1	07/16/14 10:34		CG41408
Aroclor 1232	ND (0.0863)		8082A		1	07/16/14 10:34		CG41408
Aroclor 1242	ND (0.0863)		8082A		1	07/16/14 10:34		CG41408
Aroclor 1248	**5.81** (0.863)		8082A		10	07/16/14 19:34		CG41408
Aroclor 1254	ND (0.0863)		8082A		1	07/16/14 10:34		CG41408
Aroclor 1260	ND (0.0863)		8082A		1	07/16/14 10:34		CG41408
Aroclor 1262	ND (0.0863)		8082A		1	07/16/14 10:34		CG41408
Aroclor 1268	ND (0.0863)		8082A		1	07/16/14 10:34		CG41408

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*124 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1C 45 0-1ft
Date Sampled: 07/09/14 10:10
Percent Solids: 45

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-09
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**15** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1D 41 0-1ft
Date Sampled: 07/09/14 10:20
Percent Solids: 61
Initial Volume: 25.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 7/14/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0642)		8082A		1	07/16/14 10:53		CG41408
Aroclor 1221	ND (0.0642)		8082A		1	07/16/14 10:53		CG41408
Aroclor 1232	ND (0.0642)		8082A		1	07/16/14 10:53		CG41408
Aroclor 1242	ND (0.0642)		8082A		1	07/16/14 10:53		CG41408
Aroclor 1248	**1.91** (0.321)		8082A		5	07/16/14 19:53		CG41408
Aroclor 1254	ND (0.0642)		8082A		1	07/16/14 10:53		CG41408
Aroclor 1260	ND (0.0642)		8082A		1	07/16/14 10:53		CG41408
Aroclor 1262	ND (0.0642)		8082A		1	07/16/14 10:53		CG41408
Aroclor 1268	ND (0.0642)		8082A		1	07/16/14 10:53		CG41408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*60 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*36 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1D 41 0-1ft
Date Sampled: 07/09/14 10:20
Percent Solids: 61

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-10
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**19** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1E 38
Date Sampled: 07/09/14 10:27
Percent Solids: 49
Initial Volume: 25.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 7/14/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0808)		8082A		1	07/16/14 11:12		CG41408
Aroclor 1221	ND (0.0808)		8082A		1	07/16/14 11:12		CG41408
Aroclor 1232	ND (0.0808)		8082A		1	07/16/14 11:12		CG41408
Aroclor 1242	ND (0.0808)		8082A		1	07/16/14 11:12		CG41408
Aroclor 1248	**0.294** (0.0808)		8082A		1	07/16/14 11:12		CG41408
Aroclor 1254	ND (0.0808)		8082A		1	07/16/14 11:12		CG41408
Aroclor 1260	ND (0.0808)		8082A		1	07/16/14 11:12		CG41408
Aroclor 1262	ND (0.0808)		8082A		1	07/16/14 11:12		CG41408
Aroclor 1268	ND (0.0808)		8082A		1	07/16/14 11:12		CG41408

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*62 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*36 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1E 38
Date Sampled: 07/09/14 10:27
Percent Solids: 49

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-11
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**14** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1D 35
Date Sampled: 07/09/14 10:39
Percent Solids: 50
Initial Volume: 25.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 7/14/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0790)		8082A		1	07/16/14 11:31		CG41408
Aroclor 1221	ND (0.0790)		8082A		1	07/16/14 11:31		CG41408
Aroclor 1232	ND (0.0790)		8082A		1	07/16/14 11:31		CG41408
Aroclor 1242	ND (0.0790)		8082A		1	07/16/14 11:31		CG41408
Aroclor 1248	**1.81** (0.790)		8082A		10	07/16/14 20:12		CG41408
Aroclor 1254	ND (0.0790)		8082A		1	07/16/14 11:31		CG41408
Aroclor 1260	ND (0.0790)		8082A		1	07/16/14 11:31		CG41408
Aroclor 1262	ND (0.0790)		8082A		1	07/16/14 11:31		CG41408
Aroclor 1268	ND (0.0790)		8082A		1	07/16/14 11:31		CG41408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*47 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*39 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*34 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*30 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1D 35
Date Sampled: 07/09/14 10:39
Percent Solids: 50

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-12
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**17** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1A 34
Date Sampled: 07/09/14 10:49
Percent Solids: 52
Initial Volume: 25
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 7/14/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.93)		8082A		25	07/16/14 20:31		CG41408
Aroclor 1221	ND (1.93)		8082A		25	07/16/14 20:31		CG41408
Aroclor 1232	ND (1.93)		8082A		25	07/16/14 20:31		CG41408
Aroclor 1242	ND (1.93)		8082A		25	07/16/14 20:31		CG41408
Aroclor 1248	**26.4** (1.93)		8082A		25	07/16/14 20:31		CG41408
Aroclor 1254	ND (1.93)		8082A		25	07/16/14 20:31		CG41408
Aroclor 1260	ND (1.93)		8082A		25	07/16/14 20:31		CG41408
Aroclor 1262	ND (1.93)		8082A		25	07/16/14 20:31		CG41408
Aroclor 1268	ND (1.93)		8082A		25	07/16/14 20:31		CG41408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1A 34
Date Sampled: 07/09/14 10:49
Percent Solids: 52

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-13
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**17** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D33
Date Sampled: 07/09/14 10:57
Percent Solids: 61
Initial Volume: 25.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 7/14/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.30)		8082A		20	07/17/14 11:08		CG41408
Aroclor 1221	ND (1.30)		8082A		20	07/17/14 11:08		CG41408
Aroclor 1232	ND (1.30)		8082A		20	07/17/14 11:08		CG41408
Aroclor 1242	ND (1.30)		8082A		20	07/17/14 11:08		CG41408
Aroclor 1248	**14.5** (1.30)		8082A		20	07/17/14 11:08		CG41408
Aroclor 1254	ND (1.30)		8082A		20	07/17/14 11:08		CG41408
Aroclor 1260	ND (1.30)		8082A		20	07/17/14 11:08		CG41408
Aroclor 1262	ND (1.30)		8082A		20	07/17/14 11:08		CG41408
Aroclor 1268	ND (1.30)		8082A		20	07/17/14 11:08		CG41408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D33
Date Sampled: 07/09/14 10:57
Percent Solids: 61

ESS Laboratory Work Order: 1407178
ESS Laboratory Sample ID: 1407178-14
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**19** (N/A)		2540G		1	EEM	07/09/14 17:00	%	CG40924

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407178

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CG41408 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0276*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
LCS										
Aroclor 1016	0.492	0.0500	mg/kg wet	0.5000		98	40-140			
Aroclor 1260	0.513	0.0500	mg/kg wet	0.5000		103	40-140			
Surrogate: Decachlorobiphenyl	*0.0296*		mg/kg wet	*0.02500*		*118*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0241*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
LCS Dup										
Aroclor 1016	0.467	0.0500	mg/kg wet	0.5000		93	40-140	5	30	
Aroclor 1260	0.486	0.0500	mg/kg wet	0.5000		97	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0275*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0194*		mg/kg wet	*0.02500*		*78*	*30-150*			
Batch CG41703 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407178

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CG41703 - 3540C										
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS										
Aroclor 1016	0.502	0.0500	mg/kg wet	0.5000		100	40-140			
Aroclor 1260	0.482	0.0500	mg/kg wet	0.5000		96	40-140			
Surrogate: Decachlorobiphenyl	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			
LCS Dup										
Aroclor 1016	0.508	0.0500	mg/kg wet	0.5000		102	40-140	1	30	
Aroclor 1260	0.486	0.0500	mg/kg wet	0.5000		97	40-140	0.8	30	
Surrogate: Decachlorobiphenyl	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0226*		mg/kg wet	*0.02500*		*90*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1407178

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1407178

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14070178
Date Project Due: 7/16/2014
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: **5.8**
   Iced With: **Ice**
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample Yes
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? Yes|No
17. Were samples received intact? Yes|No
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

Who was called? _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	8 oz Soil Jar	1	NP
2	Yes	8 oz Soil Jar	1	NP
3	Yes	8 oz Soil Jar	1	NP
4	Yes	8 oz Soil Jar	1	NP
5	Yes	8 oz Soil Jar	1	NP
6	Yes	8 oz Soil Jar	1	NP
7	Yes	8 oz Soil Jar	1	NP
8	Yes	8 oz Soil Jar	1	NP
9	Yes	8 oz Soil Jar	1	NP
10	Yes	8 oz Soil Jar	1	NP
11	Yes	8 oz Soil Jar	1	NP
12	Yes	8 oz Soil Jar	1	NP
13	Yes	8 oz Soil Jar	1	NP
14	Yes	8 oz Soil Jar	1	NP

Completed By: [illegible] Date/Time: 7/9/14 1605
Reviewed By: MEK Date/Time: 7/9/14 1620

ESS Laboratory

Division of Thielsch Engineering, Inc.
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www.esslaboratory.com

CHAIN OF CUSTODY

Page 1 of 2

Turn Time ✓ Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____

State where samples were collected from:
MA RI CT NH NJ NY ME Other ____

Is this project for any of the following:
MA-MCP Navy USACE Other ____

Reporting Limits TSCA project MLP 5-5

ESS LAB PROJECT ID 1407118

Electronic Deliverable Yes ✓ No ____
Format: Excel ✓ Access ✓ PDF ✓ Other ____

Co. Name: Tighe & Bond	Project #: N-1011	Project Name (20 Char. or less): Former Polyply site
Contact Person: Todd Kirton, Paul Galotti	Address: 446 Main Street	
City: Worcester	State: MA	Zip: 01610
PO#:		
Telephone #: 508-360-1627	Fax #: 508-795-1087	Email Address: TDkirton@Tighebond.com

Write Required Analysis

ESS LAB Sample #	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers	Total PCB's	~~Dissolved PCB's~~
1	7/9/14	9:00am		✓	S	U50 (0-1')	1	1	G	X	
2	7/9/14	9:10am		✓	S	Q51 (0-1')	1	1	G	X	
3	7/9/14	9:18am		✓	S	N53 (0-1')	1	1	G	X	
4	7/9/14	9:28am		✓	S	J52 (0-1')	1	1	G	X	
5	7/9/14	9:38am		✓	S	G50 (0-1')	1	1	G	X	
6	7/9/14	9:45am		✓	S	E52 (0-1')	1	1	G	X	
7	7/9/14	9:55am		✓	S	1A52 (0-1')	1	1	G	X	
8	7/9/14	10:05am		✓	S	1C50 (0-1')	1	1	G	X	
9	7/9/14	10:10am		✓	S	1C45 (0-1')	1	1	G	X	
10	7/9/14	10:20am		✓	S	1D41 (0-1')	1	1	G	X	

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ___
Cooler Temp: 5.8 7/9/14 Ice
Internal Use Only [ ] Pickup [ ] Technicians ____

Preservation Code 1- NP, 2- HCl, 3- H_2SO_4, 4- HNO_3, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9- ____

Sampled by: PBG1

Comments: PCBs via soxhlet extraction DL 1ppm

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	7/9/14 1552	[signature]	7/9/14 1352	[signature]	7/9/14 1550	Marie [signature]	7/9/14 1606
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

*By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

10/26/04 A

2 of 2

ESS Laboratory

Division of Thielsch Engineering, Inc.

106 South Street, Hopkinton, MA 01748
Tel. (508) 435-9244 Fax (508) 435-9912
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1407178

Turn Time ✓ Standard Other_____

Regulatory State: MA RI CT NH NJ NY ME Other_____

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other_____

Reporting Limits - MLP, S-1
TSCA Project

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond	Project #: N-1011	Project Name: Former PolyPoly Site	
Contact Person: Todd Kirton, Paul Galetti	Proj. Location: New Bedford, MA		
Address: 446 Main Street	City, State: Worcester, MA	Zip: 01610	PO #:
Tel.: 508-360-1627	Fax:	email: TDkirton@Tighebond.com	

Analysis

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	Total PCBs	Total PCBs ppm
11	7/9/14	10:27am	G	S	1E38	1		AG		X	
12	7/9/14	10:39am	G	S	1D35	1		AG		X	
13	7/9/14	10:45am	G	S	1A34	1		AG		X	
14	7/9/14	10:[illegible]	G	S	D33	1		AG		X	

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA:____

Cooler Temperature: 5.8° 7/9/14 ice

Internal Use Only
[✓] Pickup
[ ] Technician____

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: PBG1

Comments:

PCBs via Soxhlet extraction
DL <1 ppm

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
[signature] 7/9/14 1352	[signature] 7/9/14 1352	[signature] 7/9/14 1550	[signature] 7/9/14 1650
Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges sampels were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

Report Method Blank & Laboratory Control Sample Results

1 (White) Lab Copy
2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Paul Galotti
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1408106

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 5:39 pm, Aug 18, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1408106

SAMPLE RECEIPT

The following samples were received on August 06, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1408106-01	1H36	Soil	8082A
1408106-02	1F32	Soil	8082A
1408106-03	1C29	Soil	8082A
1408106-04	C27	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1408106

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1408106-01 **Surrogate recovery(ies) below lower control limit (S-).**
Decachlorobiphenyl [2C] (27% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1408106

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1408106

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1408106-01 through 1408106-04**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: August 18, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1H36
Date Sampled: 08/06/14 11:00
Percent Solids: 21
Initial Volume: 21.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1408106
ESS Laboratory Sample ID: 1408106-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 8/12/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.221)		8082A		1	08/14/14 14:15		CH41438
Aroclor 1221	ND (0.221)		8082A		1	08/14/14 14:15		CH41438
Aroclor 1232	ND (0.221)		8082A		1	08/14/14 14:15		CH41438
Aroclor 1242	ND (0.221)		8082A		1	08/14/14 14:15		CH41438
Aroclor 1248	**1.33** (0.221)		8082A		1	08/14/14 14:15		CH41438
Aroclor 1254	ND (0.221)		8082A		1	08/14/14 14:15		CH41438
Aroclor 1260	ND (0.221)		8082A		1	08/14/14 14:15		CH41438
Aroclor 1262	ND (0.221)		8082A		1	08/14/14 14:15		CH41438
Aroclor 1268	ND (0.221)		8082A		1	08/14/14 14:15		CH41438

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*27 %*	*S-*	*30-150*
Surrogate: Tetrachloro-m-xylene	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*32 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1F32
Date Sampled: 08/06/14 11:15
Percent Solids: 17
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1408106
ESS Laboratory Sample ID: 1408106-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 8/15/14 11:15
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.296)		8082A		1	08/18/14 14:44		CH41504
Aroclor 1221	ND (0.296)		8082A		1	08/18/14 14:44		CH41504
Aroclor 1232	ND (0.296)		8082A		1	08/18/14 14:44		CH41504
Aroclor 1242	ND (0.296)		8082A		1	08/18/14 14:44		CH41504
Aroclor 1248	**1.62** (0.296)		8082A		1	08/18/14 14:44		CH41504
Aroclor 1254	ND (0.296)		8082A		1	08/18/14 14:44		CH41504
Aroclor 1260	ND (0.296)		8082A		1	08/18/14 14:44		CH41504
Aroclor 1262	ND (0.296)		8082A		1	08/18/14 14:44		CH41504
Aroclor 1268	ND (0.296)		8082A		1	08/18/14 14:44		CH41504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*43 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*48 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1C29
Date Sampled: 08/06/14 11:30
Percent Solids: 17
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1408106
ESS Laboratory Sample ID: 1408106-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 8/15/14 11:15
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.286)		8082A		1	08/18/14 15:03		CH41504
Aroclor 1221	ND (0.286)		8082A		1	08/18/14 15:03		CH41504
Aroclor 1232	ND (0.286)		8082A		1	08/18/14 15:03		CH41504
Aroclor 1242	ND (0.286)		8082A		1	08/18/14 15:03		CH41504
Aroclor 1248	**5.53** (0.286)		8082A		1	08/18/14 15:03		CH41504
Aroclor 1254	ND (0.286)		8082A		1	08/18/14 15:03		CH41504
Aroclor 1260	ND (0.286)		8082A		1	08/18/14 15:03		CH41504
Aroclor 1262	ND (0.286)		8082A		1	08/18/14 15:03		CH41504
Aroclor 1268	ND (0.286)		8082A		1	08/18/14 15:03		CH41504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C27
Date Sampled: 08/06/14 11:45
Percent Solids: 17
Initial Volume: 21.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1408106
ESS Laboratory Sample ID: 1408106-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 8/12/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.278)		8082A		1	08/13/14 19:55		CH41203
Aroclor 1221	ND (0.278)		8082A		1	08/13/14 19:55		CH41203
Aroclor 1232	ND (0.278)		8082A		1	08/13/14 19:55		CH41203
Aroclor 1242	ND (0.278)		8082A		1	08/13/14 19:55		CH41203
Aroclor 1248	**34.0** (2.78)		8082A		10	08/14/14 15:13		CH41203
Aroclor 1254	ND (0.278)		8082A		1	08/13/14 19:55		CH41203
Aroclor 1260	ND (0.278)		8082A		1	08/13/14 19:55		CH41203
Aroclor 1262	ND (0.278)		8082A		1	08/13/14 19:55		CH41203
Aroclor 1268	ND (0.278)		8082A		1	08/13/14 19:55		CH41203

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*51 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1408106

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CH41203 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0185*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0204*		mg/kg wet	*0.02500*		*82*	*30-150*			
LCS										
Aroclor 1016	0.505	0.0500	mg/kg wet	0.5000		101	40-140			
Aroclor 1260	0.494	0.0500	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0211*		mg/kg wet	*0.02500*		*85*	*30-150*			
LCS Dup										
Aroclor 1016	0.543	0.0500	mg/kg wet	0.5000		109	40-140	7	30	
Aroclor 1260	0.530	0.0500	mg/kg wet	0.5000		106	40-140	7	30	
Surrogate: Decachlorobiphenyl	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0224*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Batch CH41438 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1408106

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CH41438 - 3540C										
Surrogate: Tetrachloro-m-xylene	*0.0184*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0204*		mg/kg wet	*0.02500*		*82*	*30-150*			
LCS										
Aroclor 1016	0.509	0.0500	mg/kg wet	0.5000		102	40-140			
Aroclor 1260	0.494	0.0500	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0197*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0204*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
LCS Dup										
Aroclor 1016	0.548	0.0500	mg/kg wet	0.5000		110	40-140	8	30	
Aroclor 1260	0.521	0.0500	mg/kg wet	0.5000		104	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0219*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Batch CH41504 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0201*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
LCS										
Aroclor 1016	0.575	0.0500	mg/kg wet	0.5000		115	40-140			
Aroclor 1260	0.518	0.0500	mg/kg wet	0.5000		104	40-140			
Surrogate: Decachlorobiphenyl	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
LCS Dup										
Aroclor 1016	0.575	0.0500	mg/kg wet	0.5000		115	40-140	0.03	30	
Aroclor 1260	0.527	0.0500	mg/kg wet	0.5000		105	40-140	2	30	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1408106

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CH41504 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1408106

Notes and Definitions

U	Analyte included in the analysis, but not detected
S-	Surrogate recovery(ies) below lower control limit (S-).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1408106

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14080106
Date Project Due: ~~8/13/2014~~ 8/14/14 or 8/7/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: **2.0**
   Iced With: **Ice**
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample Yes
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? Yes|No
17. Were samples received intact? Yes|No
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____
18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	8 oz Soil Jar	1	NP
2	Yes	8 oz Soil Jar	1	NP
3	Yes	8 oz Soil Jar	1	NP
4	Yes	8 oz Soil Jar	1	NP

Completed By: Mari B Date/Time: 8/6/14 1431
Reviewed By: [signature] Date/Time: 8/7/14 0810

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Turn Time ___ Standard Other ___
If faster than 5 days, prior approval by laboratory is required # ___

State where samples were collected from:
MA RI CT NH NJ NY ME Other ___

Is this project for any of the following:
MA-MCP Navy USACE Other ___

Reporting Limits

ESS LAB PROJECT ID: 1408106

Electronic Deliverable Yes ✓ No ___
Format: Excel ✓ Access ✓ PDF ___ Other ___

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Former PolyPly - New Bedford

Contact Person	Address
Todd Kirton	150 S. Hampton Road

City	State	Zip	PO#
Westfield	MA	01085	

Telephone #	Fax #	Email Address
508-360-1627		

Write Required Analysis

ESS LAB Sample #	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers	PCBs
1	8/6/14	1100		✓		1H36		1	A	X
2	↓	1115		↓		1F32		1	↓	X
3		1130				1C29		1		X
4		1145				C27		1		X
		1200				1G29*		1		
		1215				A24*		1		
	↓	1230		↓		1E40*		1	↓	
								(7)		

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ___
Cooler Temp: 2.0 8/6/14

Internal Use Only
[ ] Pickup
[ ] Technicians ___

Preservation Code 1- NP, 2- HCl, 3- H_2SO_4, 4- HNO_3, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9- ___

Sampled by: PAUL GALOTTI - Cell 508-360-1627

Comments: * HOLD * call w/ questions, thanks!

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	8/6/14 1257	[signature]	8/6/14 1257	[signature]	8/6/14 1655	[signature]	8/6/14 1926
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

*By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

10/2

CERTIFICATE OF ANALYSIS

Paul Galotti
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1408408

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 5:30 pm, Sep 02, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1408408

SAMPLE RECEIPT

The following samples were received on August 19, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

These samples were originally received on hold on August 6, 2014.

Lab Number	Sample Name	Matrix	Analysis
1408408-01	1G29	Soil	2540G, 8082A
1408408-02	A24	Soil	2540G, 8082A
1408408-03	IE40	Soil	2540G, 8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1408408

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1408408-02 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Tetrachloro-m-xylene (25% @ 30-150%), Tetrachloro-m-xylene [2C] (29% @ 30-150%)

1408408-03 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Tetrachloro-m-xylene (27% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1408408

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1408408

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1408408-01 through 1408408-03**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: September 02, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1G29
Date Sampled: 08/06/14 12:00
Percent Solids: 25
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1408408
ESS Laboratory Sample ID: 1408408-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 8/27/14 16:48
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.131)		8082A		1	08/28/14 20:48		CH42704
Aroclor 1221	ND (0.131)		8082A		1	08/28/14 20:48		CH42704
Aroclor 1232	ND (0.131)		8082A		1	08/28/14 20:48		CH42704
Aroclor 1242	ND (0.131)		8082A		1	08/28/14 20:48		CH42704
Aroclor 1248	**0.656** (0.131)		8082A		1	08/28/14 20:48		CH42704
Aroclor 1254	ND (0.131)		8082A		1	08/28/14 20:48		CH42704
Aroclor 1260	ND (0.131)		8082A		1	08/28/14 20:48		CH42704
Aroclor 1262	ND (0.131)		8082A		1	08/28/14 20:48		CH42704
Aroclor 1268	ND (0.131)		8082A		1	08/28/14 20:48		CH42704

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*42 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*34 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*30 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*33 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: 1G29
Date Sampled: 08/06/14 12:00
Percent Solids: 25

ESS Laboratory Work Order: 1408408
ESS Laboratory Sample ID: 1408408-01
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**15** (N/A)		2540G		1	EEB	08/22/14 13:25	%	CH42225

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A24
Date Sampled: 08/06/14 12:15
Percent Solids: 35
Initial Volume: 28.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1408408
ESS Laboratory Sample ID: 1408408-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 8/27/14 16:48
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0996)		8082A		1	08/28/14 21:07		CH42704
Aroclor 1221	ND (0.0996)		8082A		1	08/28/14 21:07		CH42704
Aroclor 1232	ND (0.0996)		8082A		1	08/28/14 21:07		CH42704
Aroclor 1242	ND (0.0996)		8082A		1	08/28/14 21:07		CH42704
Aroclor 1248	**10.7** (0.996)		8082A		10	08/29/14 11:36		CH42704
Aroclor 1254	ND (0.0996)		8082A		1	08/28/14 21:07		CH42704
Aroclor 1260	ND (0.0996)		8082A		1	08/28/14 21:07		CH42704
Aroclor 1262	ND (0.0996)		8082A		1	08/28/14 21:07		CH42704
Aroclor 1268	ND (0.0996)		8082A		1	08/28/14 21:07		CH42704

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*39 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*25 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*29 %*	*SM*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A24
Date Sampled: 08/06/14 12:15
Percent Solids: 35

ESS Laboratory Work Order: 1408408
ESS Laboratory Sample ID: 1408408-02
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**18** (N/A)		2540G		1	EEB	08/22/14 13:25	%	CH42225

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IE40
Date Sampled: 08/06/14 12:30
Percent Solids: 39
Initial Volume: 39
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1408408
ESS Laboratory Sample ID: 1408408-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 8/27/14 16:48
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0651)		8082A		1	08/28/14 21:26		CH42704
Aroclor 1221	ND (0.0651)		8082A		1	08/28/14 21:26		CH42704
Aroclor 1232	ND (0.0651)		8082A		1	08/28/14 21:26		CH42704
Aroclor 1242	ND (0.0651)		8082A		1	08/28/14 21:26		CH42704
Aroclor 1248	**8.44** (0.651)		8082A		10	08/29/14 12:15		CH42704
Aroclor 1254	ND (0.0651)		8082A		1	08/28/14 21:26		CH42704
Aroclor 1260	ND (0.0651)		8082A		1	08/28/14 21:26		CH42704
Aroclor 1262	ND (0.0651)		8082A		1	08/28/14 21:26		CH42704
Aroclor 1268	ND (0.0651)		8082A		1	08/28/14 21:26		CH42704

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*36 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*27 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*31 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IE40
Date Sampled: 08/06/14 12:30
Percent Solids: 39

ESS Laboratory Work Order: 1408408
ESS Laboratory Sample ID: 1408408-03
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Percent Solid	**17** (N/A)		2540G		1	EEB	08/22/14 13:25	%	CH42225

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1408408

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CH42704 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0231*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
LCS										
Aroclor 1016	0.456	0.0500	mg/kg wet	0.5000		91	40-140			
Aroclor 1260	0.443	0.0500	mg/kg wet	0.5000		89	40-140			
Surrogate: Decachlorobiphenyl	*0.0226*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
LCS Dup										
Aroclor 1016	0.464	0.0500	mg/kg wet	0.5000		93	40-140	2	30	
Aroclor 1260	0.465	0.0500	mg/kg wet	0.5000		93	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1408408

Notes and Definitions

U	Analyte included in the analysis, but not detected
SM	Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1408408

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14080408
Date Project Due: 8/26/2014
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **2.0**
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.
Relog of 1408110-01, 02, 03 MK 8/20/14

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	8 oz Soil Jar	1	NP
2	Yes	8 oz Soil Jar	1	NP
3	Yes	8 oz Soil Jar	1	NP

Completed By: [signature] Date/Time: 8/19/14 1936
Reviewed By: [signature] Date/Time: 8/20/14 0757

1408408

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 1 of 1 NB 8/19/14

Turn Time ___ Standard Other ___
If faster than 5 days, prior approval by laboratory is required # ___
State where samples were collected from: MA RI CT NH NJ NY ME Other ___
Is this project for any of the following: MA-MCP Navy USACE Other ___

Reporting Limits

ESS LAB PROJECT ID: ~~1408410~~

Electronic Deliverable Yes ✓ No ___
Format: Excel ✓ Access ✓ PDF ___ Other ___

Co. Name: Tighe & Bond	Project #: N-1011	Project Name (20 Char. or less): Former PolyPly - New Bedford
Contact Person: Todd Kirton	Address: 130 S. Hampton Road	
City: Westfield	State: MA	Zip: 01085
PO#:		
Telephone #: 508-360-1627	Fax #:	Email Address:

Write Required Analysis

ESS LAB Sample #	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers	PCBs - EO 8/19/14	PCB**
	8/6/14	1100		✓		1H36		1	A	X	
		1115				1F32		1		X	
		1130				1C29		1		X	
		1145				C27		1		X	
1		1200				1G29* **		1			X
2		1215				A24* **		1			X
3		1230				1E40* **		1			X
								(7)			
						** Samples off					
						Hold - PCB Std				TAT ED 8/19/14	

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ___
Cooler Temp: 2.0 8/6/14

Internal Use Only
[ ] ~~Pickup~~
[ ] Technicians ___

Preservation Code 1- NP, 2- HCl, 3- H_2SO_4, 4- HNO_3, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9- ___

Sampled by: PAUL GALOTTI - Cell 508-360-1627

Comments: * HOLD * call w/ questions, thanks!

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	8/6/14 1257	[signature]	8/6/14 1257	[signature]	8/6/14 1655	[signature]	8/6/14 1926
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

*By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403289

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 3:17 pm, Mar 25, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403289

SAMPLE RECEIPT

The following samples were received on March 19, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403289-01	J-41 36-48	Soil	8082A
1403289-02	J-42 36-48	Soil	8082A
1403289-03	J-43 36-48	Soil	8082A
1403289-04	J-44 36-48	Soil	8082A
1403289-05	K-35 36-48	Soil	8082A
1403289-06	K-37 36-48	Soil	8082A
1403289-07	K-38 36-48	Soil	8082A
1403289-08	K-39 36-48	Soil	8082A
1403289-09	K-40 36-48	Soil	8082A
1403289-10	K-41 36-48	Soil	8082A
1403289-11	K-42 36-48	Soil	8082A
1403289-12	K-43 36-48	Soil	8082A
1403289-13	K-44 36-48	Soil	8082A
1403289-14	S-36 0-12	Soil	8082A
1403289-15	S-37 0-12	Soil	8082A
1403289-16	U-35 12-24	Soil	8082A
1403289-17	U-35 60-72	Soil	8082A
1403289-18	U-37 0-12	Soil	8082A
1403289-19	V-37 0-12	Soil	8082A
1403289-20	W-37 60-72	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403289

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403289-01 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403289-06 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403289-07 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403289-08 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Tetrachloro-m-xylene (221% @ 30-150%)

1403289-09 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403289-10 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Tetrachloro-m-xylene (160% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403289

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403289

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403289-01 through 1403289-20**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: March 25, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-41 36-48
Date Sampled: 03/18/14 14:00
Percent Solids: 75
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (13.7)		8082A		200	03/21/14 19:09		CC41909
Aroclor 1221	ND (13.7)		8082A		200	03/21/14 19:09		CC41909
Aroclor 1232	ND (13.7)		8082A		200	03/21/14 19:09		CC41909
Aroclor 1242	**136** (13.7)		8082A		200	03/21/14 19:09		CC41909
Aroclor 1248	ND (13.7)		8082A		200	03/21/14 19:09		CC41909
Aroclor 1254	ND (13.7)		8082A		200	03/21/14 19:09		CC41909
Aroclor 1260	ND (13.7)		8082A		200	03/21/14 19:09		CC41909
Aroclor 1262	ND (13.7)		8082A		200	03/21/14 19:09		CC41909
Aroclor 1268	ND (13.7)		8082A		200	03/21/14 19:09		CC41909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-42 36-48
Date Sampled: 03/18/14 13:55
Percent Solids: 26
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.193)		8082A		1	03/21/14 0:51		CC41909
Aroclor 1221	ND (0.193)		8082A		1	03/21/14 0:51		CC41909
Aroclor 1232	ND (0.193)		8082A		1	03/21/14 0:51		CC41909
Aroclor 1242	ND (0.193)		8082A		1	03/21/14 0:51		CC41909
Aroclor 1248	**7.58** (0.967)		8082A		5	03/21/14 19:28		CC41909
Aroclor 1254	ND (0.193)		8082A		1	03/21/14 0:51		CC41909
Aroclor 1260	ND (0.193)		8082A		1	03/21/14 0:51		CC41909
Aroclor 1262	ND (0.193)		8082A		1	03/21/14 0:51		CC41909
Aroclor 1268	ND (0.193)		8082A		1	03/21/14 0:51		CC41909

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-43 36-48
Date Sampled: 03/18/14 13:50
Percent Solids: 59
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0854)		8082A		1	03/21/14 1:10		CC41909
Aroclor 1221	ND (0.0854)		8082A		1	03/21/14 1:10		CC41909
Aroclor 1232	ND (0.0854)		8082A		1	03/21/14 1:10		CC41909
Aroclor 1242	ND (0.0854)		8082A		1	03/21/14 1:10		CC41909
Aroclor 1248	**4.55** (0.427)		8082A		5	03/21/14 19:47		CC41909
Aroclor 1254	ND (0.0854)		8082A		1	03/21/14 1:10		CC41909
Aroclor 1260	ND (0.0854)		8082A		1	03/21/14 1:10		CC41909
Aroclor 1262	ND (0.0854)		8082A		1	03/21/14 1:10		CC41909
Aroclor 1268	ND (0.0854)		8082A		1	03/21/14 1:10		CC41909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*113 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-44 36-48
Date Sampled: 03/18/14 13:45
Percent Solids: 18
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.147)		8082A		1	03/21/14 1:29		CC41909
Aroclor 1221	ND (0.147)		8082A		1	03/21/14 1:29		CC41909
Aroclor 1232	ND (0.147)		8082A		1	03/21/14 1:29		CC41909
Aroclor 1242	ND (0.147)		8082A		1	03/21/14 1:29		CC41909
Aroclor 1248	**0.243** (0.147)		8082A		1	03/21/14 1:29		CC41909
Aroclor 1254	ND (0.147)		8082A		1	03/21/14 1:29		CC41909
Aroclor 1260	ND (0.147)		8082A		1	03/21/14 1:29		CC41909
Aroclor 1262	ND (0.147)		8082A		1	03/21/14 1:29		CC41909
Aroclor 1268	ND (0.147)		8082A		1	03/21/14 1:29		CC41909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*111 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*44 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-35 36-48
Date Sampled: 03/18/14 10:25
Percent Solids: 34
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.145)		8082A		1	03/21/14 1:48		CC41909
Aroclor 1221	ND (0.145)		8082A		1	03/21/14 1:48		CC41909
Aroclor 1232	ND (0.145)		8082A		1	03/21/14 1:48		CC41909
Aroclor 1242	ND (0.145)		8082A		1	03/21/14 1:48		CC41909
Aroclor 1248	**9.04** (1.45)		8082A		10	03/21/14 20:05		CC41909
Aroclor 1254	ND (0.145)		8082A		1	03/21/14 1:48		CC41909
Aroclor 1260	ND (0.145)		8082A		1	03/21/14 1:48		CC41909
Aroclor 1262	ND (0.145)		8082A		1	03/21/14 1:48		CC41909
Aroclor 1268	ND (0.145)		8082A		1	03/21/14 1:48		CC41909

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*125 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-37 36-48
Date Sampled: 03/18/14 09:55
Percent Solids: 87
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (11.6)		8082A		200	03/21/14 20:24		CC41909
Aroclor 1221	ND (11.6)		8082A		200	03/21/14 20:24		CC41909
Aroclor 1232	ND (11.6)		8082A		200	03/21/14 20:24		CC41909
Aroclor 1242	**93.5** (11.6)		8082A		200	03/21/14 20:24		CC41909
Aroclor 1248	ND (11.6)		8082A		200	03/21/14 20:24		CC41909
Aroclor 1254	ND (11.6)		8082A		200	03/21/14 20:24		CC41909
Aroclor 1260	ND (11.6)		8082A		200	03/21/14 20:24		CC41909
Aroclor 1262	ND (11.6)		8082A		200	03/21/14 20:24		CC41909
Aroclor 1268	ND (11.6)		8082A		200	03/21/14 20:24		CC41909

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-38 36-48
Date Sampled: 03/18/14 10:00
Percent Solids: 84
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (6.09)		8082A		100	03/21/14 20:43		CC41909
Aroclor 1221	ND (6.09)		8082A		100	03/21/14 20:43		CC41909
Aroclor 1232	**102** (6.09)		8082A		100	03/21/14 20:43		CC41909
Aroclor 1242	ND (6.09)		8082A		100	03/21/14 20:43		CC41909
Aroclor 1248	ND (6.09)		8082A		100	03/21/14 20:43		CC41909
Aroclor 1254	ND (6.09)		8082A		100	03/21/14 20:43		CC41909
Aroclor 1260	ND (6.09)		8082A		100	03/21/14 20:43		CC41909
Aroclor 1262	ND (6.09)		8082A		100	03/21/14 20:43		CC41909
Aroclor 1268	ND (6.09)		8082A		100	03/21/14 20:43		CC41909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-39 36-48
Date Sampled: 03/18/14 10:05
Percent Solids: 87
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0587)		8082A		1	03/21/14 21:02		CC41909
Aroclor 1221	ND (0.0587)		8082A		1	03/21/14 21:02		CC41909
Aroclor 1232	**2.84** (0.587)		8082A		10	03/21/14 21:21		CC41909
Aroclor 1242	ND (0.0587)		8082A		1	03/21/14 21:02		CC41909
Aroclor 1248	ND (0.0587)		8082A		1	03/21/14 21:02		CC41909
Aroclor 1254	ND (0.0587)		8082A		1	03/21/14 21:02		CC41909
Aroclor 1260	ND (0.0587)		8082A		1	03/21/14 21:02		CC41909
Aroclor 1262	ND (0.0587)		8082A		1	03/21/14 21:02		CC41909
Aroclor 1268	ND (0.0587)		8082A		1	03/21/14 21:02		CC41909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*221 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-40 36-48
Date Sampled: 03/18/14 11:00
Percent Solids: 83
Initial Volume: 19.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (3.12)		8082A		50	03/21/14 21:40		CC41909
Aroclor 1221	ND (3.12)		8082A		50	03/21/14 21:40		CC41909
Aroclor 1232	ND (3.12)		8082A		50	03/21/14 21:40		CC41909
Aroclor 1242	**21.8** (3.12)		8082A		50	03/21/14 21:40		CC41909
Aroclor 1248	ND (3.12)		8082A		50	03/21/14 21:40		CC41909
Aroclor 1254	ND (3.12)		8082A		50	03/21/14 21:40		CC41909
Aroclor 1260	ND (3.12)		8082A		50	03/21/14 21:40		CC41909
Aroclor 1262	ND (3.12)		8082A		50	03/21/14 21:40		CC41909
Aroclor 1268	ND (3.12)		8082A		50	03/21/14 21:40		CC41909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-41 36-48
Date Sampled: 03/18/14 11:05
Percent Solids: 82
Initial Volume: 19.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0634)		8082A		1	03/20/14 21:39		CC41909
Aroclor 1221	ND (0.0634)		8082A		1	03/20/14 21:39		CC41909
Aroclor 1232	ND (0.0634)		8082A		1	03/20/14 21:39		CC41909
Aroclor 1242	**4.11** (0.317)		8082A		5	03/21/14 13:39		CC41909
Aroclor 1248	ND (0.0634)		8082A		1	03/20/14 21:39		CC41909
Aroclor 1254	ND (0.0634)		8082A		1	03/20/14 21:39		CC41909
Aroclor 1260	ND (0.0634)		8082A		1	03/20/14 21:39		CC41909
Aroclor 1262	ND (0.0634)		8082A		1	03/20/14 21:39		CC41909
Aroclor 1268	ND (0.0634)		8082A		1	03/20/14 21:39		CC41909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*160 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-42 36-48
Date Sampled: 03/18/14 13:00
Percent Solids: 86
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0566)		8082A		1	03/20/14 21:58		CC41909
Aroclor 1221	ND (0.0566)		8082A		1	03/20/14 21:58		CC41909
Aroclor 1232	ND (0.0566)		8082A		1	03/20/14 21:58		CC41909
Aroclor 1242	**3.00** (0.283)		8082A		5	03/21/14 13:59		CC41909
Aroclor 1248	ND (0.0566)		8082A		1	03/20/14 21:58		CC41909
Aroclor 1254	ND (0.0566)		8082A		1	03/20/14 21:58		CC41909
Aroclor 1260	ND (0.0566)		8082A		1	03/20/14 21:58		CC41909
Aroclor 1262	ND (0.0566)		8082A		1	03/20/14 21:58		CC41909
Aroclor 1268	ND (0.0566)		8082A		1	03/20/14 21:58		CC41909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*125 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-43 36-48
Date Sampled: 03/18/14 13:15
Percent Solids: 83
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0590)		8082A		1	03/20/14 22:17		CC41909
Aroclor 1221	ND (0.0590)		8082A		1	03/20/14 22:17		CC41909
Aroclor 1232	ND (0.0590)		8082A		1	03/20/14 22:17		CC41909
Aroclor 1242	**0.170** (0.0590)		8082A		1	03/20/14 22:17		CC41909
Aroclor 1248	ND (0.0590)		8082A		1	03/20/14 22:17		CC41909
Aroclor 1254	ND (0.0590)		8082A		1	03/20/14 22:17		CC41909
Aroclor 1260	ND (0.0590)		8082A		1	03/20/14 22:17		CC41909
Aroclor 1262	ND (0.0590)		8082A		1	03/20/14 22:17		CC41909
Aroclor 1268	ND (0.0590)		8082A		1	03/20/14 22:17		CC41909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*104 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-44 36-48
Date Sampled: 03/18/14 13:30
Percent Solids: 48
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.106)		8082A		1	03/20/14 22:36		CC41909
Aroclor 1221	ND (0.106)		8082A		1	03/20/14 22:36		CC41909
Aroclor 1232	ND (0.106)		8082A		1	03/20/14 22:36		CC41909
Aroclor 1242	ND (0.106)		8082A		1	03/20/14 22:36		CC41909
Aroclor 1248	**4.29** (0.529)		8082A		5	03/21/14 14:18		CC41909
Aroclor 1254	ND (0.106)		8082A		1	03/20/14 22:36		CC41909
Aroclor 1260	ND (0.106)		8082A		1	03/20/14 22:36		CC41909
Aroclor 1262	ND (0.106)		8082A		1	03/20/14 22:36		CC41909
Aroclor 1268	ND (0.106)		8082A		1	03/20/14 22:36		CC41909

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*58 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-36 0-12
Date Sampled: 03/18/14 10:35
Percent Solids: 92
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0555)		8082A		1	03/20/14 22:54		CC41909
Aroclor 1221	ND (0.0555)		8082A		1	03/20/14 22:54		CC41909
Aroclor 1232	ND (0.0555)		8082A		1	03/20/14 22:54		CC41909
Aroclor 1242	ND (0.0555)		8082A		1	03/20/14 22:54		CC41909
Aroclor 1248	ND (0.0555)		8082A		1	03/20/14 22:54		CC41909
Aroclor 1254	ND (0.0555)		8082A		1	03/20/14 22:54		CC41909
Aroclor 1260	ND (0.0555)		8082A		1	03/20/14 22:54		CC41909
Aroclor 1262	ND (0.0555)		8082A		1	03/20/14 22:54		CC41909
Aroclor 1268	ND (0.0555)		8082A		1	03/20/14 22:54		CC41909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-37 0-12
Date Sampled: 03/18/14 10:35
Percent Solids: 75
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0693)		8082A		1	03/20/14 23:13		CC41909
Aroclor 1221	ND (0.0693)		8082A		1	03/20/14 23:13		CC41909
Aroclor 1232	ND (0.0693)		8082A		1	03/20/14 23:13		CC41909
Aroclor 1242	ND (0.0693)		8082A		1	03/20/14 23:13		CC41909
Aroclor 1248	**0.262** (0.0693)		8082A		1	03/20/14 23:13		CC41909
Aroclor 1254	ND (0.0693)		8082A		1	03/20/14 23:13		CC41909
Aroclor 1260	ND (0.0693)		8082A		1	03/20/14 23:13		CC41909
Aroclor 1262	ND (0.0693)		8082A		1	03/20/14 23:13		CC41909
Aroclor 1268	ND (0.0693)		8082A		1	03/20/14 23:13		CC41909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*59 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-35 12-24
Date Sampled: 03/18/14 13:30
Percent Solids: 94
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0545)		8082A		1	03/20/14 23:32		CC41909
Aroclor 1221	ND (0.0545)		8082A		1	03/20/14 23:32		CC41909
Aroclor 1232	ND (0.0545)		8082A		1	03/20/14 23:32		CC41909
Aroclor 1242	ND (0.0545)		8082A		1	03/20/14 23:32		CC41909
Aroclor 1248	ND (0.0545)		8082A		1	03/20/14 23:32		CC41909
Aroclor 1254	ND (0.0545)		8082A		1	03/20/14 23:32		CC41909
Aroclor 1260	ND (0.0545)		8082A		1	03/20/14 23:32		CC41909
Aroclor 1262	ND (0.0545)		8082A		1	03/20/14 23:32		CC41909
Aroclor 1268	ND (0.0545)		8082A		1	03/20/14 23:32		CC41909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-35 60-72
Date Sampled: 03/18/14 13:45
Percent Solids: 87
Initial Volume: 19
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0608)		8082A		1	03/20/14 23:51		CC41909
Aroclor 1221	ND (0.0608)		8082A		1	03/20/14 23:51		CC41909
Aroclor 1232	ND (0.0608)		8082A		1	03/20/14 23:51		CC41909
Aroclor 1242	ND (0.0608)		8082A		1	03/20/14 23:51		CC41909
Aroclor 1248	ND (0.0608)		8082A		1	03/20/14 23:51		CC41909
Aroclor 1254	ND (0.0608)		8082A		1	03/20/14 23:51		CC41909
Aroclor 1260	ND (0.0608)		8082A		1	03/20/14 23:51		CC41909
Aroclor 1262	ND (0.0608)		8082A		1	03/20/14 23:51		CC41909
Aroclor 1268	ND (0.0608)		8082A		1	03/20/14 23:51		CC41909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-37 0-12
Date Sampled: 03/18/14 10:45
Percent Solids: 95
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0535)		8082A		1	03/20/14 13:47		CC41911
Aroclor 1221	ND (0.0535)		8082A		1	03/20/14 13:47		CC41911
Aroclor 1232	ND (0.0535)		8082A		1	03/20/14 13:47		CC41911
Aroclor 1242	ND (0.0535)		8082A		1	03/20/14 13:47		CC41911
Aroclor 1248	**0.0832** (0.0535)		8082A		1	03/20/14 13:47		CC41911
Aroclor 1254	ND (0.0535)		8082A		1	03/20/14 13:47		CC41911
Aroclor 1260	ND (0.0535)		8082A		1	03/20/14 13:47		CC41911
Aroclor 1262	ND (0.0535)		8082A		1	03/20/14 13:47		CC41911
Aroclor 1268	ND (0.0535)		8082A		1	03/20/14 13:47		CC41911

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-37 0-12
Date Sampled: 03/18/14 12:00
Percent Solids: 94
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0543)		8082A		1	03/20/14 14:06		CC41911
Aroclor 1221	ND (0.0543)		8082A		1	03/20/14 14:06		CC41911
Aroclor 1232	ND (0.0543)		8082A		1	03/20/14 14:06		CC41911
Aroclor 1242	ND (0.0543)		8082A		1	03/20/14 14:06		CC41911
Aroclor 1248	**1.29** (0.271)		8082A		5	03/21/14 5:54		CC41911
Aroclor 1254	ND (0.0543)		8082A		1	03/20/14 14:06		CC41911
Aroclor 1260	ND (0.0543)		8082A		1	03/20/14 14:06		CC41911
Aroclor 1262	ND (0.0543)		8082A		1	03/20/14 14:06		CC41911
Aroclor 1268	ND (0.0543)		8082A		1	03/20/14 14:06		CC41911

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*91 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-37 60-72
Date Sampled: 03/18/14 12:20
Percent Solids: 91
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403289
ESS Laboratory Sample ID: 1403289-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0569)		8082A		1	03/20/14 14:25		CC41911
Aroclor 1221	ND (0.0569)		8082A		1	03/20/14 14:25		CC41911
Aroclor 1232	ND (0.0569)		8082A		1	03/20/14 14:25		CC41911
Aroclor 1242	ND (0.0569)		8082A		1	03/20/14 14:25		CC41911
Aroclor 1248	**3.96** (0.569)		8082A		10	03/20/14 14:25		CC41911
Aroclor 1254	ND (0.0569)		8082A		1	03/20/14 14:25		CC41911
Aroclor 1260	ND (0.0569)		8082A		1	03/20/14 14:25		CC41911
Aroclor 1262	ND (0.0569)		8082A		1	03/20/14 14:25		CC41911
Aroclor 1268	ND (0.0569)		8082A		1	03/20/14 14:25		CC41911

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*113 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403289

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41909 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41909 - 3540C										
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41909 - 3540C										
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0167*		mg/kg wet	*0.02500*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0175*		mg/kg wet	*0.02500*		*70*	*30-150*			
LCS										
Aroclor 1016	0.500	0.0500	mg/kg wet	0.5000		100	40-140			
Aroclor 1260	0.501	0.0500	mg/kg wet	0.5000		100	40-140			
Surrogate: Decachlorobiphenyl	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
LCS Dup										
Aroclor 1016	0.489	0.0500	mg/kg wet	0.5000		98	40-140	2	30	
Aroclor 1260	0.506	0.0500	mg/kg wet	0.5000		101	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0204*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0192*		mg/kg wet	*0.02500*		*77*	*30-150*			
Batch CC41911 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403289

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41911 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403289

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41911 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0224*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0272*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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ESS Laboratory Work Order: 1403289

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41911 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS										
Aroclor 1016	0.478	0.0500	mg/kg wet	0.5000		96	40-140			
Aroclor 1260	0.483	0.0500	mg/kg wet	0.5000		97	40-140			
Surrogate: Decachlorobiphenyl	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0209*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
LCS Dup										
Aroclor 1016	0.469	0.0500	mg/kg wet	0.5000		94	40-140	2	30	
Aroclor 1260	0.491	0.0500	mg/kg wet	0.5000		98	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0197*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0191*		mg/kg wet	*0.02500*		*76*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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Notes and Definitions

U	Analyte included in the analysis, but not detected
SM	Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403289

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030289
Date Project Due: 3/26/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **1.0**
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: [signature] Date/Time: 3/19/14 1044
Reviewed By: [signature] Date/Time: 3/19/14 1107

05 3/19/14

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403289

Turn Time _____ Standard Other _____

Reporting Limits - TSCA < 1 ppm

Regulatory State (MA) RI CT NH NJ NY ME Other TSCA

Is this project for any of the following:(please circle)
(MA-MCP) Navy USACE CT DEP Other TSCA

Electonic Deliverables Excel Access PDF

Co. Name Tighe & Bond
Project # N-1011
Project Name
Contact Person Michael Martin
Address 4 Barlows Landing Rd, Unit 15
City New Bedford
State MA
Zip 02559
PO #
Tel.
Fax.
email: tdkirton/memartin@tighebond

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
1	3/18/14	1400	G	Soil	J-41 (36-48)	1	1	G	4oz	x
2		1355			J-42 (36-48)					
3		1350			J-43 (36-48)					
4		1345			J-44 (36-48)					
5		1025			K-35 (36-48)					
6		0955			K-37 (36-48)					
7		1000			K-38 (36-48)					
8		1005			K-39 (36-48)					
9		1100			K-40 (36-48)					
10		1105			K-41 (36-48)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.0 Ice Kit

Internal Use Only
[✓] Pickup
[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by : H. W. Lamb

Comments:

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/18/14 0:38	3/19 09:38	3/19/14 10:29	3/19/14 1033
Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

See Page 1 for Info 2 of 2 as 3/19/14

ESS Laboratory

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Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403289

Turn Time X Standard Other F

Regulatory State: MA RI CT NH NJ NY ME Other TSCA

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other TSCA

Reporting Limits - _____

Electonic Deliverables Excel Access PDF

Co. Name Tighe & Bond

Project # N-1011

Project Name Poly Ply New Bedford

Contact Person Mike Martin/Todd Kirton

Address

City

State

Zip

PO #

Tel.

Fax.

email:

Analysis: PCB's

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCB's
11		1300	3/18/14	Soil	K-42 (36-48)	None	1	G	4	X
12		1315			K-43 (36-48)					
13		1330			K-44 (36-48)					
14		1035			S-36 (0-12)					
15		1035			S-37 (0-12)					
16		1330			U-35 (12-24)					
17		1345			U-35 (60-72)					
18		1045			U-37 (0-12)					
19		1200			V-37 (0-12)					
20		1220			W-37 (60-72)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1-0 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: Hall, Lamb

Comments:

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/19/14 0930	3/19/14 09:38	3/19/14 10:20	3/19/14 1033
Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403290

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 3:25 pm, Mar 25, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403290

SAMPLE RECEIPT

The following samples were received on March 19, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403290-01	X-35 0-12	Soil	8082A
1403290-02	X-36 0-12	Soil	8082A
1403290-03	X-36 60-72	Soil	8082A
1403290-04	Y-35 0-12	Soil	8082A
1403290-05	Y-36 0-12	Soil	8082A
1403290-06	Q-43 0-12	Soil	8082A
1403290-07	Q-44 0-12	Soil	8082A
1403290-08	Q-45 0-12	Soil	8082A
1403290-09	N-25 12-24	Soil	8082A
1403290-10	N-26 24-36	Soil	8082A
1403290-11	N-27 24-36	Soil	8082A
1403290-12	N-28 24-36	Soil	8082A
1403290-13	N-29 24-36	Soil	8082A
1403290-14	N-33 24-36	Soil	8082A
1403290-15	P-41 24-36	Soil	8082A
1403290-16	P-42 24-36	Soil	8082A
1403290-17	P-43 24-36	Soil	8082A
1403290-18	N-30 24-36	Soil	8082A
1403290-19	O-26 12-24	Soil	8082A
1403290-20	O-28 12-24	Soil	8082A
1403290-21	O-30 12-24	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403290

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403290

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403290

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403290-01 through 1403290-21**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes (X) No ( )*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: March 25, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: X-35 0-12
Date Sampled: 03/18/14 13:10
Percent Solids: 84
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0603)		8082A		1	03/20/14 21:41		CC41911
Aroclor 1221	ND (0.0603)		8082A		1	03/20/14 21:41		CC41911
Aroclor 1232	ND (0.0603)		8082A		1	03/20/14 21:41		CC41911
Aroclor 1242	ND (0.0603)		8082A		1	03/20/14 21:41		CC41911
Aroclor 1248	**5.59** (0.603)		8082A		10	03/21/14 13:11		CC41911
Aroclor 1254	ND (0.0603)		8082A		1	03/20/14 21:41		CC41911
Aroclor 1260	ND (0.0603)		8082A		1	03/20/14 21:41		CC41911
Aroclor 1262	ND (0.0603)		8082A		1	03/20/14 21:41		CC41911
Aroclor 1268	ND (0.0603)		8082A		1	03/20/14 21:41		CC41911

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: X-36 0-12
Date Sampled: 03/18/14 12:25
Percent Solids: 93
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0554)		8082A		1	03/20/14 13:09		CC41912
Aroclor 1221	ND (0.0554)		8082A		1	03/20/14 13:09		CC41912
Aroclor 1232	ND (0.0554)		8082A		1	03/20/14 13:09		CC41912
Aroclor 1242	ND (0.0554)		8082A		1	03/20/14 13:09		CC41912
Aroclor 1248	**0.608** (0.0554)		8082A		1	03/20/14 13:09		CC41912
Aroclor 1254	ND (0.0554)		8082A		1	03/20/14 13:09		CC41912
Aroclor 1260	ND (0.0554)		8082A		1	03/20/14 13:09		CC41912
Aroclor 1262	ND (0.0554)		8082A		1	03/20/14 13:09		CC41912
Aroclor 1268	ND (0.0554)		8082A		1	03/20/14 13:09		CC41912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: X-36 60-72
Date Sampled: 03/18/14 12:40
Percent Solids: 87
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0574)		8082A		1	03/20/14 13:28		CC41912
Aroclor 1221	ND (0.0574)		8082A		1	03/20/14 13:28		CC41912
Aroclor 1232	ND (0.0574)		8082A		1	03/20/14 13:28		CC41912
Aroclor 1242	ND (0.0574)		8082A		1	03/20/14 13:28		CC41912
Aroclor 1248	ND (0.0574)		8082A		1	03/20/14 13:28		CC41912
Aroclor 1254	ND (0.0574)		8082A		1	03/20/14 13:28		CC41912
Aroclor 1260	ND (0.0574)		8082A		1	03/20/14 13:28		CC41912
Aroclor 1262	ND (0.0574)		8082A		1	03/20/14 13:28		CC41912
Aroclor 1268	ND (0.0574)		8082A		1	03/20/14 13:28		CC41912

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Y-35 0-12
Date Sampled: 03/18/14 13:00
Percent Solids: 91
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0571)		8082A		1	03/20/14 13:46		CC41912
Aroclor 1221	ND (0.0571)		8082A		1	03/20/14 13:46		CC41912
Aroclor 1232	ND (0.0571)		8082A		1	03/20/14 13:46		CC41912
Aroclor 1242	ND (0.0571)		8082A		1	03/20/14 13:46		CC41912
Aroclor 1248	**8.89** (0.571)		8082A		10	03/21/14 0:10		CC41912
Aroclor 1254	ND (0.0571)		8082A		1	03/20/14 13:46		CC41912
Aroclor 1260	ND (0.0571)		8082A		1	03/20/14 13:46		CC41912
Aroclor 1262	ND (0.0571)		8082A		1	03/20/14 13:46		CC41912
Aroclor 1268	ND (0.0571)		8082A		1	03/20/14 13:46		CC41912

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Y-36 0-12
Date Sampled: 03/18/14 13:15
Percent Solids: 88
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0580)		8082A		1	03/20/14 14:06		CC41912
Aroclor 1221	ND (0.0580)		8082A		1	03/20/14 14:06		CC41912
Aroclor 1232	ND (0.0580)		8082A		1	03/20/14 14:06		CC41912
Aroclor 1242	ND (0.0580)		8082A		1	03/20/14 14:06		CC41912
Aroclor 1248	**6.86** (0.580)		8082A		10	03/21/14 0:29		CC41912
Aroclor 1254	ND (0.0580)		8082A		1	03/20/14 14:06		CC41912
Aroclor 1260	ND (0.0580)		8082A		1	03/20/14 14:06		CC41912
Aroclor 1262	ND (0.0580)		8082A		1	03/20/14 14:06		CC41912
Aroclor 1268	ND (0.0580)		8082A		1	03/20/14 14:06		CC41912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-43 0-12
Date Sampled: 03/18/14 08:50
Percent Solids: 92
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0559)		8082A		1	03/20/14 14:24		CC41912
Aroclor 1221	ND (0.0559)		8082A		1	03/20/14 14:24		CC41912
Aroclor 1232	ND (0.0559)		8082A		1	03/20/14 14:24		CC41912
Aroclor 1242	ND (0.0559)		8082A		1	03/20/14 14:24		CC41912
Aroclor 1248	ND (0.0559)		8082A		1	03/20/14 14:24		CC41912
Aroclor 1254	ND (0.0559)		8082A		1	03/20/14 14:24		CC41912
Aroclor 1260	ND (0.0559)		8082A		1	03/20/14 14:24		CC41912
Aroclor 1262	ND (0.0559)		8082A		1	03/20/14 14:24		CC41912
Aroclor 1268	ND (0.0559)		8082A		1	03/20/14 14:24		CC41912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*91 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-44 0-12
Date Sampled: 03/18/14 09:10
Percent Solids: 92
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0530)		8082A		1	03/20/14 14:44		CC41912
Aroclor 1221	ND (0.0530)		8082A		1	03/20/14 14:44		CC41912
Aroclor 1232	ND (0.0530)		8082A		1	03/20/14 14:44		CC41912
Aroclor 1242	ND (0.0530)		8082A		1	03/20/14 14:44		CC41912
Aroclor 1248	**0.0876** (0.0530)		8082A		1	03/20/14 14:44		CC41912
Aroclor 1254	ND (0.0530)		8082A		1	03/20/14 14:44		CC41912
Aroclor 1260	ND (0.0530)		8082A		1	03/20/14 14:44		CC41912
Aroclor 1262	ND (0.0530)		8082A		1	03/20/14 14:44		CC41912
Aroclor 1268	ND (0.0530)		8082A		1	03/20/14 14:44		CC41912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*73 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-45 0-12
Date Sampled: 03/18/14 09:26
Percent Solids: 91
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0551)		8082A		1	03/20/14 15:02		CC41912
Aroclor 1221	ND (0.0551)		8082A		1	03/20/14 15:02		CC41912
Aroclor 1232	ND (0.0551)		8082A		1	03/20/14 15:02		CC41912
Aroclor 1242	ND (0.0551)		8082A		1	03/20/14 15:02		CC41912
Aroclor 1248	ND (0.0551)		8082A		1	03/20/14 15:02		CC41912
Aroclor 1254	ND (0.0551)		8082A		1	03/20/14 15:02		CC41912
Aroclor 1260	ND (0.0551)		8082A		1	03/20/14 15:02		CC41912
Aroclor 1262	ND (0.0551)		8082A		1	03/20/14 15:02		CC41912
Aroclor 1268	ND (0.0551)		8082A		1	03/20/14 15:02		CC41912

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-25 12-24
Date Sampled: 03/17/14 10:40
Percent Solids: 83
Initial Volume: 19.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0629)		8082A		1	03/20/14 15:21		CC41912
Aroclor 1221	ND (0.0629)		8082A		1	03/20/14 15:21		CC41912
Aroclor 1232	ND (0.0629)		8082A		1	03/20/14 15:21		CC41912
Aroclor 1242	ND (0.0629)		8082A		1	03/20/14 15:21		CC41912
Aroclor 1248	ND (0.0629)		8082A		1	03/20/14 15:21		CC41912
Aroclor 1254	ND (0.0629)		8082A		1	03/20/14 15:21		CC41912
Aroclor 1260	ND (0.0629)		8082A		1	03/20/14 15:21		CC41912
Aroclor 1262	ND (0.0629)		8082A		1	03/20/14 15:21		CC41912
Aroclor 1268	ND (0.0629)		8082A		1	03/20/14 15:21		CC41912

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-26 24-36
Date Sampled: 03/17/14 10:45
Percent Solids: 75
Initial Volume: 19.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0690)		8082A		1	03/20/14 15:40		CC41912
Aroclor 1221	ND (0.0690)		8082A		1	03/20/14 15:40		CC41912
Aroclor 1232	ND (0.0690)		8082A		1	03/20/14 15:40		CC41912
Aroclor 1242	ND (0.0690)		8082A		1	03/20/14 15:40		CC41912
Aroclor 1248	ND (0.0690)		8082A		1	03/20/14 15:40		CC41912
Aroclor 1254	ND (0.0690)		8082A		1	03/20/14 15:40		CC41912
Aroclor 1260	ND (0.0690)		8082A		1	03/20/14 15:40		CC41912
Aroclor 1262	ND (0.0690)		8082A		1	03/20/14 15:40		CC41912
Aroclor 1268	ND (0.0690)		8082A		1	03/20/14 15:40		CC41912

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-27 24-36
Date Sampled: 03/17/14 10:50
Percent Solids: 85
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0592)		8082A		1	03/20/14 15:59		CC41912
Aroclor 1221	ND (0.0592)		8082A		1	03/20/14 15:59		CC41912
Aroclor 1232	ND (0.0592)		8082A		1	03/20/14 15:59		CC41912
Aroclor 1242	ND (0.0592)		8082A		1	03/20/14 15:59		CC41912
Aroclor 1248	ND (0.0592)		8082A		1	03/20/14 15:59		CC41912
Aroclor 1254	ND (0.0592)		8082A		1	03/20/14 15:59		CC41912
Aroclor 1260	ND (0.0592)		8082A		1	03/20/14 15:59		CC41912
Aroclor 1262	ND (0.0592)		8082A		1	03/20/14 15:59		CC41912
Aroclor 1268	ND (0.0592)		8082A		1	03/20/14 15:59		CC41912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-28 24-36
Date Sampled: 03/17/14 10:55
Percent Solids: 89
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0563)		8082A		1	03/20/14 16:18		CC41912
Aroclor 1221	ND (0.0563)		8082A		1	03/20/14 16:18		CC41912
Aroclor 1232	ND (0.0563)		8082A		1	03/20/14 16:18		CC41912
Aroclor 1242	ND (0.0563)		8082A		1	03/20/14 16:18		CC41912
Aroclor 1248	ND (0.0563)		8082A		1	03/20/14 16:18		CC41912
Aroclor 1254	ND (0.0563)		8082A		1	03/20/14 16:18		CC41912
Aroclor 1260	ND (0.0563)		8082A		1	03/20/14 16:18		CC41912
Aroclor 1262	ND (0.0563)		8082A		1	03/20/14 16:18		CC41912
Aroclor 1268	ND (0.0563)		8082A		1	03/20/14 16:18		CC41912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-29 24-36
Date Sampled: 03/17/14 10:58
Percent Solids: 89
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0570)		8082A		1	03/20/14 16:37		CC41912
Aroclor 1221	ND (0.0570)		8082A		1	03/20/14 16:37		CC41912
Aroclor 1232	ND (0.0570)		8082A		1	03/20/14 16:37		CC41912
Aroclor 1242	ND (0.0570)		8082A		1	03/20/14 16:37		CC41912
Aroclor 1248	ND (0.0570)		8082A		1	03/20/14 16:37		CC41912
Aroclor 1254	ND (0.0570)		8082A		1	03/20/14 16:37		CC41912
Aroclor 1260	ND (0.0570)		8082A		1	03/20/14 16:37		CC41912
Aroclor 1262	ND (0.0570)		8082A		1	03/20/14 16:37		CC41912
Aroclor 1268	ND (0.0570)		8082A		1	03/20/14 16:37		CC41912

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-33 24-36
Date Sampled: 03/17/14 11:05
Percent Solids: 88
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0578)		8082A		1	03/20/14 16:55		CC41912
Aroclor 1221	ND (0.0578)		8082A		1	03/20/14 16:55		CC41912
Aroclor 1232	ND (0.0578)		8082A		1	03/20/14 16:55		CC41912
Aroclor 1242	ND (0.0578)		8082A		1	03/20/14 16:55		CC41912
Aroclor 1248	ND (0.0578)		8082A		1	03/20/14 16:55		CC41912
Aroclor 1254	ND (0.0578)		8082A		1	03/20/14 16:55		CC41912
Aroclor 1260	ND (0.0578)		8082A		1	03/20/14 16:55		CC41912
Aroclor 1262	ND (0.0578)		8082A		1	03/20/14 16:55		CC41912
Aroclor 1268	ND (0.0578)		8082A		1	03/20/14 16:55		CC41912

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: P-41 24-36
Date Sampled: 03/17/14 13:20
Percent Solids: 88
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0578)		8082A		1	03/20/14 17:14		CC41912
Aroclor 1221	ND (0.0578)		8082A		1	03/20/14 17:14		CC41912
Aroclor 1232	ND (0.0578)		8082A		1	03/20/14 17:14		CC41912
Aroclor 1242	ND (0.0578)		8082A		1	03/20/14 17:14		CC41912
Aroclor 1248	ND (0.0578)		8082A		1	03/20/14 17:14		CC41912
Aroclor 1254	ND (0.0578)		8082A		1	03/20/14 17:14		CC41912
Aroclor 1260	ND (0.0578)		8082A		1	03/20/14 17:14		CC41912
Aroclor 1262	ND (0.0578)		8082A		1	03/20/14 17:14		CC41912
Aroclor 1268	ND (0.0578)		8082A		1	03/20/14 17:14		CC41912

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: P-42 24-36
Date Sampled: 03/17/14 13:25
Percent Solids: 87
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0584)		8082A		1	03/20/14 17:33		CC41912
Aroclor 1221	ND (0.0584)		8082A		1	03/20/14 17:33		CC41912
Aroclor 1232	ND (0.0584)		8082A		1	03/20/14 17:33		CC41912
Aroclor 1242	ND (0.0584)		8082A		1	03/20/14 17:33		CC41912
Aroclor 1248	ND (0.0584)		8082A		1	03/20/14 17:33		CC41912
Aroclor 1254	ND (0.0584)		8082A		1	03/20/14 17:33		CC41912
Aroclor 1260	ND (0.0584)		8082A		1	03/20/14 17:33		CC41912
Aroclor 1262	ND (0.0584)		8082A		1	03/20/14 17:33		CC41912
Aroclor 1268	ND (0.0584)		8082A		1	03/20/14 17:33		CC41912

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: P-43 24-36
Date Sampled: 03/17/14 13:35
Percent Solids: 86
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0601)		8082A		1	03/20/14 19:45		CC41912
Aroclor 1221	ND (0.0601)		8082A		1	03/20/14 19:45		CC41912
Aroclor 1232	ND (0.0601)		8082A		1	03/20/14 19:45		CC41912
Aroclor 1242	ND (0.0601)		8082A		1	03/20/14 19:45		CC41912
Aroclor 1248	ND (0.0601)		8082A		1	03/20/14 19:45		CC41912
Aroclor 1254	ND (0.0601)		8082A		1	03/20/14 19:45		CC41912
Aroclor 1260	ND (0.0601)		8082A		1	03/20/14 19:45		CC41912
Aroclor 1262	ND (0.0601)		8082A		1	03/20/14 19:45		CC41912
Aroclor 1268	ND (0.0601)		8082A		1	03/20/14 19:45		CC41912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*104 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-30 24-36
Date Sampled: 03/17/14 11:00
Percent Solids: 89
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0567)		8082A		1	03/21/14 13:20		CC41914
Aroclor 1221	ND (0.0567)		8082A		1	03/21/14 13:20		CC41914
Aroclor 1232	ND (0.0567)		8082A		1	03/21/14 13:20		CC41914
Aroclor 1242	ND (0.0567)		8082A		1	03/21/14 13:20		CC41914
Aroclor 1248	ND (0.0567)		8082A		1	03/21/14 13:20		CC41914
Aroclor 1254	ND (0.0567)		8082A		1	03/21/14 13:20		CC41914
Aroclor 1260	ND (0.0567)		8082A		1	03/21/14 13:20		CC41914
Aroclor 1262	ND (0.0567)		8082A		1	03/21/14 13:20		CC41914
Aroclor 1268	ND (0.0567)		8082A		1	03/21/14 13:20		CC41914

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*103 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-26 12-24
Date Sampled: 03/17/14 10:27
Percent Solids: 90
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0574)		8082A		1	03/21/14 15:41		CC42029
Aroclor 1221	ND (0.0574)		8082A		1	03/21/14 15:41		CC42029
Aroclor 1232	ND (0.0574)		8082A		1	03/21/14 15:41		CC42029
Aroclor 1242	ND (0.0574)		8082A		1	03/21/14 15:41		CC42029
Aroclor 1248	ND (0.0574)		8082A		1	03/21/14 15:41		CC42029
Aroclor 1254	ND (0.0574)		8082A		1	03/21/14 15:41		CC42029
Aroclor 1260	ND (0.0574)		8082A		1	03/21/14 15:41		CC42029
Aroclor 1262	ND (0.0574)		8082A		1	03/21/14 15:41		CC42029
Aroclor 1268	ND (0.0574)		8082A		1	03/21/14 15:41		CC42029

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-28 12-24
Date Sampled: 03/17/14 10:32
Percent Solids: 89
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0562)		8082A		1	03/21/14 14:26		CC42029
Aroclor 1221	ND (0.0562)		8082A		1	03/21/14 14:26		CC42029
Aroclor 1232	ND (0.0562)		8082A		1	03/21/14 14:26		CC42029
Aroclor 1242	ND (0.0562)		8082A		1	03/21/14 14:26		CC42029
Aroclor 1248	ND (0.0562)		8082A		1	03/21/14 14:26		CC42029
Aroclor 1254	ND (0.0562)		8082A		1	03/21/14 14:26		CC42029
Aroclor 1260	ND (0.0562)		8082A		1	03/21/14 14:26		CC42029
Aroclor 1262	ND (0.0562)		8082A		1	03/21/14 14:26		CC42029
Aroclor 1268	ND (0.0562)		8082A		1	03/21/14 14:26		CC42029

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-30 12-24
Date Sampled: 03/17/14 10:38
Percent Solids: 88
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403290
ESS Laboratory Sample ID: 1403290-21
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0566)		8082A		1	03/21/14 14:45		CC42029
Aroclor 1221	ND (0.0566)		8082A		1	03/21/14 14:45		CC42029
Aroclor 1232	ND (0.0566)		8082A		1	03/21/14 14:45		CC42029
Aroclor 1242	ND (0.0566)		8082A		1	03/21/14 14:45		CC42029
Aroclor 1248	ND (0.0566)		8082A		1	03/21/14 14:45		CC42029
Aroclor 1254	ND (0.0566)		8082A		1	03/21/14 14:45		CC42029
Aroclor 1260	ND (0.0566)		8082A		1	03/21/14 14:45		CC42029
Aroclor 1262	ND (0.0566)		8082A		1	03/21/14 14:45		CC42029
Aroclor 1268	ND (0.0566)		8082A		1	03/21/14 14:45		CC42029

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403290

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41911 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403290

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41911 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403290

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41911 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0224*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0272*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS										
Aroclor 1016	0.478	0.0500	mg/kg wet	0.5000		96	40-140			
Aroclor 1260	0.483	0.0500	mg/kg wet	0.5000		97	40-140			
Surrogate: Decachlorobiphenyl	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0209*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
LCS Dup										
Aroclor 1016	0.469	0.0500	mg/kg wet	0.5000		94	40-140	2	30	
Aroclor 1260	0.491	0.0500	mg/kg wet	0.5000		98	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0197*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0191*		mg/kg wet	*0.02500*		*76*	*30-150*			
Batch CC41912 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403290

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41912 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403290

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41912 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41912 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS										
Aroclor 1016	0.509	0.0500	mg/kg wet	0.5000		102	40-140			
Aroclor 1260	0.496	0.0500	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0246*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS Dup										
Aroclor 1016	0.491	0.0500	mg/kg wet	0.5000		98	40-140	4	30	
Aroclor 1260	0.481	0.0500	mg/kg wet	0.5000		96	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Batch CC41914 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41914 - 3540C										
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41914 - 3540C										
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0190*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0204*		mg/kg wet	*0.02500*		*82*	*30-150*			
LCS										
Aroclor 1016	0.521	0.0500	mg/kg wet	0.5000		104	40-140			
Aroclor 1260	0.502	0.0500	mg/kg wet	0.5000		100	40-140			
Surrogate: Decachlorobiphenyl	*0.0269*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0226*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS Dup										
Aroclor 1016	0.498	0.0500	mg/kg wet	0.5000		100	40-140	4	30	
Aroclor 1260	0.487	0.0500	mg/kg wet	0.5000		97	40-140	3	30	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41914 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0257*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Batch CC42029 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42029 - 3540C										
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403290

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42029 - 3540C										
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS										
Aroclor 1016	0.537	0.0500	mg/kg wet	0.5000		107	40-140			
Aroclor 1260	0.515	0.0500	mg/kg wet	0.5000		103	40-140			
Surrogate: Decachlorobiphenyl	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0254*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
LCS Dup										
Aroclor 1016	0.489	0.0500	mg/kg wet	0.5000		98	40-140	9	30	
Aroclor 1260	0.483	0.0500	mg/kg wet	0.5000		97	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford ESS Laboratory Work Order: 1403290

Notes and Definitions

U	Analyte included in the analysis, but not detected
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403290

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030290
Date Project Due: 3/26/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **1.0**
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes | No**
17. Were samples received intact? **Yes | No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

extra samples not on chain added and barcoded.
as 3/20/14

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP
21	Yes	4 oz Soil Jar	1	NP

Completed By: [signature] Date/Time: 3/20/14 1755
Reviewed By: LOG Date/Time: 3/20/14 2100

See Page 1 for other info ~~3 of 6~~ 1 of 2

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403290

Turn Time _____ Standard Other _____

Regulatory State: MA RI CT NH NJ NY ME Other TSCA

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other TSCA

Reporting Limits - _____

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond
Project #: RJ-1011
Project Name: Polyply - New Bedford
Contact Person: Mike Martin / Todd Kirton
Address:
City:
State:
Zip:
PO #:
Tel.:
Fax.:
email:

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
1	3/18/14	1310	G	Soil	X-35 (0-12)	NP	1	G	4 oz	X
2		1225			X-36 (0-12)					
3		1240			X-36 (60-72)					
4		1300			X-35 (0-12)					
5		1315			X-36 (0-12)					
6		0850			Q-43 (0-12)					
7		0910			Q-44 (0-12)					
8		0926			Q-45 (0-12)					
9	3/17/14	1040			N-25 (12-24)					
10		1045			N-26 (24-36)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1-0 ICE KH

Internal Use Only
[ ] Pickup
[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: Neil, Lamb

Comments:

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/19/14 0938	3/19/14 09:38	3/19/14 10:29	3/19/14 1034
Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

cut 3/19/14 ~~4 of 6~~ 2 of 2

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403290

Turn Time _____ Standard Other _____

Regulatory State: MA RI CT NH NJ NY ME Other TSCA

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other TSCA

Reporting Limits - _____

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond	Project #: N-1011	Project Name: Polyply, New Bedford	
Contact Person: Mike Martin/Todd Kirton	Address:		
City:	State:	Zip:	PO #:
Tel.:	Fax.:	email: eo 3/24/14	

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
18 ~~11~~	3/17/14	1040	Grab	Soil	~~N-25 (24-36)~~ N-25 12-24 *	NP	1	G	4 oz	X
~~12~~		1045			~~N-26 (24-36)~~					
11 ~~13~~		1050			N-27 (24-36)					
12 ~~14~~		1055			N-28 (24-36)					
13 ~~15~~		1058			N-29 (24-36)					
18 ~~14 16~~		1100			~~N-30 (12-24)~~ N-30 24-36 *					
14 ~~15 17~~		1105			N-33 (24-36)					
15 ~~16 18~~		1320			P-41 (24-36)					
16 ~~17 19~~		1325			P-42 (24-36)					
17 ~~18 20~~		1335			P-43 (24-36)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.0 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technician ___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: per client request. See attached email.

Comments: Added samples 19 - O-26 (12-24) 3/17/14 @ 1027 / 20 - O-28 (12-24) 3/17/14 @ 1032 and 21 - O-30 (12-24) 3/17/14 @ 1038 3/20/14 (LA)

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
[signature] 3/19/14 0938	[signature] 3/19/14 09:38	[signature] 3/19/14 10:29	[signature] 3/19/14 1034
Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

1403290-19. O-26 12-24 3/17/14 10:27 1403291-21. O-30 12-24 10:38

1403290-20. O-28 12-24 3/17/14 10:32 * added per client eo 3/24/14

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403291

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 3:39 pm, Mar 25, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403291

SAMPLE RECEIPT

The following samples were received on March 19, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403291-01	P-46 24-36	Soil	8082A
1403291-02	P-46 36-48	Soil	8082A
1403291-03	K-28 12-24	Soil	8082A
1403291-04	K-30 12-24	Soil	8082A
1403291-05	K-31 12-24	Soil	8082A
1403291-06	L-29 12-24	Soil	8082A
1403291-07	L-31 36-48	Soil	8082A
1403291-08	L-33 36-48	Soil	8082A
1403291-09	M-26 12-24	Soil	8082A
1403291-10	M-28 24-36	Soil	8082A
1403291-11	M-29 24-36	Soil	8082A
1403291-12	M-30 12-24	Soil	8082A
1403291-13	M-32 36-48	Soil	8082A
1403291-14	M-33 36-48	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403291

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403291-05 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Tetrachloro-m-xylene (177% @ 30-150%)

1403291-07 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403291

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403291

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403291-01 through 1403291-14**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: March 25, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: P-46 24-36
Date Sampled: 03/17/14 13:48
Percent Solids: 86
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0591)		8082A		1	03/20/14 15:22		CC41911
Aroclor 1221	ND (0.0591)		8082A		1	03/20/14 15:22		CC41911
Aroclor 1232	ND (0.0591)		8082A		1	03/20/14 15:22		CC41911
Aroclor 1242	ND (0.0591)		8082A		1	03/20/14 15:22		CC41911
Aroclor 1248	ND (0.0591)		8082A		1	03/20/14 15:22		CC41911
Aroclor 1254	ND (0.0591)		8082A		1	03/20/14 15:22		CC41911
Aroclor 1260	ND (0.0591)		8082A		1	03/20/14 15:22		CC41911
Aroclor 1262	ND (0.0591)		8082A		1	03/20/14 15:22		CC41911
Aroclor 1268	ND (0.0591)		8082A		1	03/20/14 15:22		CC41911

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: P-46 36-48
Date Sampled: 03/17/14 13:52
Percent Solids: 87
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0560)		8082A		1	03/20/14 15:41		CC41911
Aroclor 1221	ND (0.0560)		8082A		1	03/20/14 15:41		CC41911
Aroclor 1232	ND (0.0560)		8082A		1	03/20/14 15:41		CC41911
Aroclor 1242	ND (0.0560)		8082A		1	03/20/14 15:41		CC41911
Aroclor 1248	ND (0.0560)		8082A		1	03/20/14 15:41		CC41911
Aroclor 1254	ND (0.0560)		8082A		1	03/20/14 15:41		CC41911
Aroclor 1260	ND (0.0560)		8082A		1	03/20/14 15:41		CC41911
Aroclor 1262	ND (0.0560)		8082A		1	03/20/14 15:41		CC41911
Aroclor 1268	ND (0.0560)		8082A		1	03/20/14 15:41		CC41911

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-28 12-24
Date Sampled: 03/17/14 13:00
Percent Solids: 88
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0583)		8082A		1	03/20/14 16:00		CC41911
Aroclor 1221	ND (0.0583)		8082A		1	03/20/14 16:00		CC41911
Aroclor 1232	ND (0.0583)		8082A		1	03/20/14 16:00		CC41911
Aroclor 1242	ND (0.0583)		8082A		1	03/20/14 16:00		CC41911
Aroclor 1248	ND (0.0583)		8082A		1	03/20/14 16:00		CC41911
Aroclor 1254	ND (0.0583)		8082A		1	03/20/14 16:00		CC41911
Aroclor 1260	ND (0.0583)		8082A		1	03/20/14 16:00		CC41911
Aroclor 1262	ND (0.0583)		8082A		1	03/20/14 16:00		CC41911
Aroclor 1268	ND (0.0583)		8082A		1	03/20/14 16:00		CC41911

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-30 12-24
Date Sampled: 03/17/14 13:05
Percent Solids: 90
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0554)		8082A		1	03/20/14 16:19		CC41911
Aroclor 1221	ND (0.0554)		8082A		1	03/20/14 16:19		CC41911
Aroclor 1232	ND (0.0554)		8082A		1	03/20/14 16:19		CC41911
Aroclor 1242	ND (0.0554)		8082A		1	03/20/14 16:19		CC41911
Aroclor 1248	ND (0.0554)		8082A		1	03/20/14 16:19		CC41911
Aroclor 1254	ND (0.0554)		8082A		1	03/20/14 16:19		CC41911
Aroclor 1260	ND (0.0554)		8082A		1	03/20/14 16:19		CC41911
Aroclor 1262	ND (0.0554)		8082A		1	03/20/14 16:19		CC41911
Aroclor 1268	ND (0.0554)		8082A		1	03/20/14 16:19		CC41911

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-31 12-24
Date Sampled: 03/17/14 13:10
Percent Solids: 89
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0553)		8082A		1	03/20/14 16:38		CC41911
Aroclor 1221	ND (0.0553)		8082A		1	03/20/14 16:38		CC41911
Aroclor 1232	ND (0.0553)		8082A		1	03/20/14 16:38		CC41911
Aroclor 1242	**7.32** (0.553)		8082A		10	03/21/14 7:10		CC41911
Aroclor 1248	ND (0.0553)		8082A		1	03/20/14 16:38		CC41911
Aroclor 1254	ND (0.0553)		8082A		1	03/20/14 16:38		CC41911
Aroclor 1260	ND (0.0553)		8082A		1	03/20/14 16:38		CC41911
Aroclor 1262	ND (0.0553)		8082A		1	03/20/14 16:38		CC41911
Aroclor 1268	ND (0.0553)		8082A		1	03/20/14 16:38		CC41911

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*177 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-29 12-24
Date Sampled: 03/17/14 11:50
Percent Solids: 90
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0571)		8082A		1	03/20/14 16:57		CC41911
Aroclor 1221	ND (0.0571)		8082A		1	03/20/14 16:57		CC41911
Aroclor 1232	ND (0.0571)		8082A		1	03/20/14 16:57		CC41911
Aroclor 1242	ND (0.0571)		8082A		1	03/20/14 16:57		CC41911
Aroclor 1248	ND (0.0571)		8082A		1	03/20/14 16:57		CC41911
Aroclor 1254	ND (0.0571)		8082A		1	03/20/14 16:57		CC41911
Aroclor 1260	ND (0.0571)		8082A		1	03/20/14 16:57		CC41911
Aroclor 1262	ND (0.0571)		8082A		1	03/20/14 16:57		CC41911
Aroclor 1268	ND (0.0571)		8082A		1	03/20/14 16:57		CC41911

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-31 36-48
Date Sampled: 03/17/14 12:00
Percent Solids: 88
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.84)		8082A		100	03/21/14 7:29		CC41911
Aroclor 1221	ND (5.84)		8082A		100	03/21/14 7:29		CC41911
Aroclor 1232	ND (5.84)		8082A		100	03/21/14 7:29		CC41911
Aroclor 1242	**43.1** (5.84)		8082A		100	03/21/14 7:29		CC41911
Aroclor 1248	ND (5.84)		8082A		100	03/21/14 7:29		CC41911
Aroclor 1254	ND (5.84)		8082A		100	03/21/14 7:29		CC41911
Aroclor 1260	ND (5.84)		8082A		100	03/21/14 7:29		CC41911
Aroclor 1262	ND (5.84)		8082A		100	03/21/14 7:29		CC41911
Aroclor 1268	ND (5.84)		8082A		100	03/21/14 7:29		CC41911

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-33 36-48
Date Sampled: 03/17/14 12:05
Percent Solids: 87
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0570)		8082A		1	03/20/14 17:35		CC41911
Aroclor 1221	ND (0.0570)		8082A		1	03/20/14 17:35		CC41911
Aroclor 1232	ND (0.0570)		8082A		1	03/20/14 17:35		CC41911
Aroclor 1242	ND (0.0570)		8082A		1	03/20/14 17:35		CC41911
Aroclor 1248	ND (0.0570)		8082A		1	03/20/14 17:35		CC41911
Aroclor 1254	ND (0.0570)		8082A		1	03/20/14 17:35		CC41911
Aroclor 1260	ND (0.0570)		8082A		1	03/20/14 17:35		CC41911
Aroclor 1262	ND (0.0570)		8082A		1	03/20/14 17:35		CC41911
Aroclor 1268	ND (0.0570)		8082A		1	03/20/14 17:35		CC41911

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-26 12-24
Date Sampled: 03/17/14 11:09
Percent Solids: 86
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0591)		8082A		1	03/20/14 17:53		CC41911
Aroclor 1221	ND (0.0591)		8082A		1	03/20/14 17:53		CC41911
Aroclor 1232	ND (0.0591)		8082A		1	03/20/14 17:53		CC41911
Aroclor 1242	ND (0.0591)		8082A		1	03/20/14 17:53		CC41911
Aroclor 1248	ND (0.0591)		8082A		1	03/20/14 17:53		CC41911
Aroclor 1254	ND (0.0591)		8082A		1	03/20/14 17:53		CC41911
Aroclor 1260	ND (0.0591)		8082A		1	03/20/14 17:53		CC41911
Aroclor 1262	ND (0.0591)		8082A		1	03/20/14 17:53		CC41911
Aroclor 1268	ND (0.0591)		8082A		1	03/20/14 17:53		CC41911

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-28 24-36
Date Sampled: 03/17/14 11:29
Percent Solids: 88
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0581)		8082A		1	03/20/14 18:12		CC41911
Aroclor 1221	ND (0.0581)		8082A		1	03/20/14 18:12		CC41911
Aroclor 1232	ND (0.0581)		8082A		1	03/20/14 18:12		CC41911
Aroclor 1242	ND (0.0581)		8082A		1	03/20/14 18:12		CC41911
Aroclor 1248	ND (0.0581)		8082A		1	03/20/14 18:12		CC41911
Aroclor 1254	ND (0.0581)		8082A		1	03/20/14 18:12		CC41911
Aroclor 1260	ND (0.0581)		8082A		1	03/20/14 18:12		CC41911
Aroclor 1262	ND (0.0581)		8082A		1	03/20/14 18:12		CC41911
Aroclor 1268	ND (0.0581)		8082A		1	03/20/14 18:12		CC41911

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-29 24-36
Date Sampled: 03/17/14 11:15
Percent Solids: 84
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0608)		8082A		1	03/20/14 20:25		CC41911
Aroclor 1221	ND (0.0608)		8082A		1	03/20/14 20:25		CC41911
Aroclor 1232	ND (0.0608)		8082A		1	03/20/14 20:25		CC41911
Aroclor 1242	ND (0.0608)		8082A		1	03/20/14 20:25		CC41911
Aroclor 1248	ND (0.0608)		8082A		1	03/20/14 20:25		CC41911
Aroclor 1254	ND (0.0608)		8082A		1	03/20/14 20:25		CC41911
Aroclor 1260	ND (0.0608)		8082A		1	03/20/14 20:25		CC41911
Aroclor 1262	ND (0.0608)		8082A		1	03/20/14 20:25		CC41911
Aroclor 1268	ND (0.0608)		8082A		1	03/20/14 20:25		CC41911

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-30 12-24
Date Sampled: 03/17/14 11:18
Percent Solids: 90
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0570)		8082A		1	03/20/14 20:44		CC41911
Aroclor 1221	ND (0.0570)		8082A		1	03/20/14 20:44		CC41911
Aroclor 1232	ND (0.0570)		8082A		1	03/20/14 20:44		CC41911
Aroclor 1242	ND (0.0570)		8082A		1	03/20/14 20:44		CC41911
Aroclor 1248	ND (0.0570)		8082A		1	03/20/14 20:44		CC41911
Aroclor 1254	ND (0.0570)		8082A		1	03/20/14 20:44		CC41911
Aroclor 1260	ND (0.0570)		8082A		1	03/20/14 20:44		CC41911
Aroclor 1262	ND (0.0570)		8082A		1	03/20/14 20:44		CC41911
Aroclor 1268	ND (0.0570)		8082A		1	03/20/14 20:44		CC41911

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-32 36-48
Date Sampled: 03/17/14 11:22
Percent Solids: 86
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0587)		8082A		1	03/20/14 21:03		CC41911
Aroclor 1221	ND (0.0587)		8082A		1	03/20/14 21:03		CC41911
Aroclor 1232	ND (0.0587)		8082A		1	03/20/14 21:03		CC41911
Aroclor 1242	ND (0.0587)		8082A		1	03/20/14 21:03		CC41911
Aroclor 1248	ND (0.0587)		8082A		1	03/20/14 21:03		CC41911
Aroclor 1254	ND (0.0587)		8082A		1	03/20/14 21:03		CC41911
Aroclor 1260	ND (0.0587)		8082A		1	03/20/14 21:03		CC41911
Aroclor 1262	ND (0.0587)		8082A		1	03/20/14 21:03		CC41911
Aroclor 1268	ND (0.0587)		8082A		1	03/20/14 21:03		CC41911

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-33 36-48
Date Sampled: 03/17/14 11:25
Percent Solids: 87
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403291
ESS Laboratory Sample ID: 1403291-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/19/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0587)		8082A		1	03/20/14 21:22		CC41911
Aroclor 1221	ND (0.0587)		8082A		1	03/20/14 21:22		CC41911
Aroclor 1232	ND (0.0587)		8082A		1	03/20/14 21:22		CC41911
Aroclor 1242	ND (0.0587)		8082A		1	03/20/14 21:22		CC41911
Aroclor 1248	**0.0620** (0.0587)		8082A		1	03/20/14 21:22		CC41911
Aroclor 1254	ND (0.0587)		8082A		1	03/20/14 21:22		CC41911
Aroclor 1260	ND (0.0587)		8082A		1	03/20/14 21:22		CC41911
Aroclor 1262	ND (0.0587)		8082A		1	03/20/14 21:22		CC41911
Aroclor 1268	ND (0.0587)		8082A		1	03/20/14 21:22		CC41911

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403291

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41911 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403291

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41911 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403291

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC41911 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0224*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0272*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS										
Aroclor 1016	0.478	0.0500	mg/kg wet	0.5000		96	40-140			
Aroclor 1260	0.483	0.0500	mg/kg wet	0.5000		97	40-140			
Surrogate: Decachlorobiphenyl	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0209*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
LCS Dup										
Aroclor 1016	0.469	0.0500	mg/kg wet	0.5000		94	40-140	2	30	
Aroclor 1260	0.491	0.0500	mg/kg wet	0.5000		98	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0197*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0191*		mg/kg wet	*0.02500*		*76*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford ESS Laboratory Work Order: 1403291

Notes and Definitions

U	Analyte included in the analysis, but not detected
SM	Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403291

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030291
Date Project Due: 3/26/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **1.0**
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP

Completed By: _____ Date/Time: 3/19/14 1044
Reviewed By: _____ Date/Time: 3/19/14 1114

~~5 of 6~~ 1 of 2

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403 291

Turn Time _____ Standard Other _____

Regulatory State: MA RI CT NH NJ NY ME Other _____

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other _____

Reporting Limits - _____

Electonic Deliverables Excel Access PDF

Co. Name: Tighe + Bond	Project #	Project Name	
Contact Person	Address		
City	State	Zip	PO #
Tel.	Fax.	email:	

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
1	3/17/14	1348	Grab	Soil	P-46 (24-36)	NP	1	G	4oz	+
2		1358			P-46 (36-48)					
3		1300			K-28 (12-24)					
4		1305			K-30 (12-24)					
5		1310			K-31 (12-24)					
6		1150			L-27 (12-24)					
7		1200			L-31 (36-48)					
8		1205			L-33 (36-48)					
9		1109			M-26 (12-24)					
10		1129			M-28 (24-36)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present _____Yes _____No

Seals Intact ____ Yes _____No NA:___

Cooler Temperature: 1.0 Ice KH

Internal Use Only
[ ] Pickup
[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by :

Comments:

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/19/14	3/19/14 09:38	3/19/14 10:24	3/19/14 1035
Relinquished by: (Signature, Date & Time) 0935	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab #

Turn Time _____ Standard Other _____

Reporting Limits - _____

Regulatory State: MA RI CT NH NJ NY ME Other _____

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other _____

Electonic Deliverables Excel Access PDF

Co. Name: Tighe + Bond

Project #

Project Name

Contact Person

Address

City

State

Zip

PO #

Tel.

Fax.

email:

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
11	3/17/14	1115	Grab	Soil	M-29 (24-36)	NP	1	G	1 oz	x
12	↓	1118	↓	↓	M-30 (12-24)	↓	↓	↓	↓	↓
13	↓	1122	↓	↓	M-31 (36-48)	↓	↓	↓	↓	↓
14	↓	1125	↓	↓	M-33 (36-48)	↓	↓	↓	↓	↓

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present _____ Yes _____ No Internal Use Only

Seals Intact ____ Yes _____ No NA: ___ [✓] Pickup

Cooler Temperature: 1.0 Ice Kit [ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by :

Comments:

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/19/14 0935	3/19/14 09:38	3/19/14 10:29	3/19/14 1035
Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403342

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 2:57 pm, Apr 21, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403342

SAMPLE RECEIPT

The following samples were received on April 14, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

These samples were originally received on hold on March 21, 2014.

Lab Number	Sample Name	Matrix	Analysis
1403342-01	K41 48-60	Soil	8082A
1403342-02	K42 48-60	Soil	8082A
1403342-03	K43 48-60	Soil	8082A
1403342-04	G-30 24-36	Soil	8082A
1403342-09	I-37 36-48	Soil	8082A
1403342-10	L-41 60-72	Soil	8082A
1403342-11	L-47 24-36	Soil	8082A
1403342-13	M-48 24-36	Soil	8082A
1403342-14	M-49 24-36	Soil	8082A
1403342-15	M-40 60-72	Soil	8082A
1403342-16	M-39 60-72	Soil	8082A
1403342-17	M-39 84-96	Soil	8082A
1403342-18	N41 60-72	Soil	8082A
1403342-19	K-47 12-24	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403342

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403342-01 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403342-09 **Surrogate recovery(ies) above upper control limit (S+).**
Tetrachloro-m-xylene (168% @ 30-150%)

1403342-14 **Surrogate recovery(ies) above upper control limit (S+).**
Decachlorobiphenyl (157% @ 30-150%)

1403342-15 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403342-16 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403342-17 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403342-19 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1248

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403342

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403342

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403342-01 through 1403342-19**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: Laurel Stoddard
Date: April 21, 2014
Printed Name: Laurel Stoddard
Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K41 48-60
Date Sampled: 03/18/14 11:10
Percent Solids: 27
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (9.13)		8082A		50	04/17/14 22:34		CD41839
Aroclor 1221	ND (9.13)		8082A		50	04/17/14 22:34		CD41839
Aroclor 1232	ND (9.13)		8082A		50	04/17/14 22:34		CD41839
Aroclor 1242	ND (9.13)		8082A		50	04/17/14 22:34		CD41839
Aroclor 1248	**92.1** (9.13)		8082A		50	04/17/14 22:34		CD41839
Aroclor 1254	ND (9.13)		8082A		50	04/17/14 22:34		CD41839
Aroclor 1260	ND (9.13)		8082A		50	04/17/14 22:34		CD41839
Aroclor 1262	ND (9.13)		8082A		50	04/17/14 22:34		CD41839
Aroclor 1268	ND (9.13)		8082A		50	04/17/14 22:34		CD41839

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K42 48-60
Date Sampled: 03/18/14 13:05
Percent Solids: 19
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.271)		8082A		1	04/16/14 17:31		CD41839
Aroclor 1221	ND (0.271)		8082A		1	04/16/14 17:31		CD41839
Aroclor 1232	ND (0.271)		8082A		1	04/16/14 17:31		CD41839
Aroclor 1242	ND (0.271)		8082A		1	04/16/14 17:31		CD41839
Aroclor 1248	**0.971** (0.271)		8082A		1	04/16/14 17:31		CD41839
Aroclor 1254	ND (0.271)		8082A		1	04/16/14 17:31		CD41839
Aroclor 1260	ND (0.271)		8082A		1	04/16/14 17:31		CD41839
Aroclor 1262	ND (0.271)		8082A		1	04/16/14 17:31		CD41839
Aroclor 1268	ND (0.271)		8082A		1	04/16/14 17:31		CD41839

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*51 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K43 48-60
Date Sampled: 03/18/14 13:20
Percent Solids: 44
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.110)		8082A		1	04/16/14 18:31		CD41839
Aroclor 1221	ND (0.110)		8082A		1	04/16/14 18:31		CD41839
Aroclor 1232	ND (0.110)		8082A		1	04/16/14 18:31		CD41839
Aroclor 1242	ND (0.110)		8082A		1	04/16/14 18:31		CD41839
Aroclor 1248	**0.927** (0.110)		8082A		1	04/16/14 18:31		CD41839
Aroclor 1254	ND (0.110)		8082A		1	04/16/14 18:31		CD41839
Aroclor 1260	ND (0.110)		8082A		1	04/16/14 18:31		CD41839
Aroclor 1262	ND (0.110)		8082A		1	04/16/14 18:31		CD41839
Aroclor 1268	ND (0.110)		8082A		1	04/16/14 18:31		CD41839

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*51 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*49 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G-30 24-36
Date Sampled: 03/20/14 11:05
Percent Solids: 86
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0572)		8082A		1	04/16/14 18:50		CD41839
Aroclor 1221	ND (0.0572)		8082A		1	04/16/14 18:50		CD41839
Aroclor 1232	ND (0.0572)		8082A		1	04/16/14 18:50		CD41839
Aroclor 1242	ND (0.0572)		8082A		1	04/16/14 18:50		CD41839
Aroclor 1248	**0.187** (0.0572)		8082A		1	04/16/14 18:50		CD41839
Aroclor 1254	ND (0.0572)		8082A		1	04/16/14 18:50		CD41839
Aroclor 1260	ND (0.0572)		8082A		1	04/16/14 18:50		CD41839
Aroclor 1262	ND (0.0572)		8082A		1	04/16/14 18:50		CD41839
Aroclor 1268	ND (0.0572)		8082A		1	04/16/14 18:50		CD41839

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*103 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-37 36-48
Date Sampled: 03/19/14 09:09
Percent Solids: 83
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0588)		8082A		1	04/16/14 19:09		CD41839
Aroclor 1221	ND (0.0588)		8082A		1	04/16/14 19:09		CD41839
Aroclor 1232	ND (0.0588)		8082A		1	04/16/14 19:09		CD41839
Aroclor 1242	**1.80** (0.294)		8082A		5	04/17/14 17:32		CD41839
Aroclor 1248	ND (0.0588)		8082A		1	04/16/14 19:09		CD41839
Aroclor 1254	ND (0.0588)		8082A		1	04/16/14 19:09		CD41839
Aroclor 1260	ND (0.0588)		8082A		1	04/16/14 19:09		CD41839
Aroclor 1262	ND (0.0588)		8082A		1	04/16/14 19:09		CD41839
Aroclor 1268	ND (0.0588)		8082A		1	04/16/14 19:09		CD41839

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*168 %*	*S+*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-41 60-72
Date Sampled: 03/20/14 14:50
Percent Solids: 21
Initial Volume: 20.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.233)		8082A		1	04/16/14 19:28		CD41839
Aroclor 1221	ND (0.233)		8082A		1	04/16/14 19:28		CD41839
Aroclor 1232	ND (0.233)		8082A		1	04/16/14 19:28		CD41839
Aroclor 1242	ND (0.233)		8082A		1	04/16/14 19:28		CD41839
Aroclor 1248	**3.66** (0.233)		8082A		1	04/16/14 19:28		CD41839
Aroclor 1254	ND (0.233)		8082A		1	04/16/14 19:28		CD41839
Aroclor 1260	ND (0.233)		8082A		1	04/16/14 19:28		CD41839
Aroclor 1262	ND (0.233)		8082A		1	04/16/14 19:28		CD41839
Aroclor 1268	ND (0.233)		8082A		1	04/16/14 19:28		CD41839

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*60 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-47 24-36
Date Sampled: 03/20/14 13:54
Percent Solids: 12
Initial Volume: 30.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/17/14 16:15
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.264)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1221	ND (0.264)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1232	ND (0.264)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1242	ND (0.264)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1248	**2.07** (0.264)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1254	ND (0.264)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1260	ND (0.264)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1262	ND (0.264)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1268	ND (0.264)		8082A		1	04/18/14 12:53		CD41620

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*114 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*58 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-48 24-36
Date Sampled: 03/20/14 13:35
Percent Solids: 14
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.382)		8082A		1	04/16/14 19:47		CD41839
Aroclor 1221	ND (0.382)		8082A		1	04/16/14 19:47		CD41839
Aroclor 1232	ND (0.382)		8082A		1	04/16/14 19:47		CD41839
Aroclor 1242	ND (0.382)		8082A		1	04/16/14 19:47		CD41839
Aroclor 1248	**3.25** (0.382)		8082A		1	04/16/14 19:47		CD41839
Aroclor 1254	ND (0.382)		8082A		1	04/16/14 19:47		CD41839
Aroclor 1260	ND (0.382)		8082A		1	04/16/14 19:47		CD41839
Aroclor 1262	ND (0.382)		8082A		1	04/16/14 19:47		CD41839
Aroclor 1268	ND (0.382)		8082A		1	04/16/14 19:47		CD41839

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-49 24-36
Date Sampled: 03/20/14 13:42
Percent Solids: 13
Initial Volume: 30.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/17/14 16:15
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.244)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1221	ND (0.244)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1232	ND (0.244)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1242	ND (0.244)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1248	**5.62** (1.22)		8082A		5	04/21/14 11:24		CD41620
Aroclor 1254	ND (0.244)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1260	ND (0.244)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1262	ND (0.244)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1268	ND (0.244)		8082A		1	04/18/14 13:12		CD41620

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*157 %*	*S+*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*64 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-40 60-72
Date Sampled: 03/20/14 10:57
Percent Solids: 32
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (16.1)		8082A		100	04/17/14 17:51		CD41839
Aroclor 1221	ND (16.1)		8082A		100	04/17/14 17:51		CD41839
Aroclor 1232	ND (16.1)		8082A		100	04/17/14 17:51		CD41839
Aroclor 1242	ND (16.1)		8082A		100	04/17/14 17:51		CD41839
Aroclor 1248	**293** (16.1)		8082A		100	04/17/14 17:51		CD41839
Aroclor 1254	ND (16.1)		8082A		100	04/17/14 17:51		CD41839
Aroclor 1260	ND (16.1)		8082A		100	04/17/14 17:51		CD41839
Aroclor 1262	ND (16.1)		8082A		100	04/17/14 17:51		CD41839
Aroclor 1268	ND (16.1)		8082A		100	04/17/14 17:51		CD41839

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-39 60-72
Date Sampled: 03/20/14 10:47
Percent Solids: 46
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (55.7)		8082A		500	04/17/14 18:10		CD41839
Aroclor 1221	ND (55.7)		8082A		500	04/17/14 18:10		CD41839
Aroclor 1232	ND (55.7)		8082A		500	04/17/14 18:10		CD41839
Aroclor 1242	ND (55.7)		8082A		500	04/17/14 18:10		CD41839
Aroclor 1248	**978** (55.7)		8082A		500	04/17/14 18:10		CD41839
Aroclor 1254	ND (55.7)		8082A		500	04/17/14 18:10		CD41839
Aroclor 1260	ND (55.7)		8082A		500	04/17/14 18:10		CD41839
Aroclor 1262	ND (55.7)		8082A		500	04/17/14 18:10		CD41839
Aroclor 1268	ND (55.7)		8082A		500	04/17/14 18:10		CD41839

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-39 84-96
Date Sampled: 03/20/14 10:50
Percent Solids: 17
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.99)		8082A		20	04/17/14 18:29		CD41839
Aroclor 1221	ND (5.99)		8082A		20	04/17/14 18:29		CD41839
Aroclor 1232	ND (5.99)		8082A		20	04/17/14 18:29		CD41839
Aroclor 1242	ND (5.99)		8082A		20	04/17/14 18:29		CD41839
Aroclor 1248	**102** (5.99)		8082A		20	04/17/14 18:29		CD41839
Aroclor 1254	ND (5.99)		8082A		20	04/17/14 18:29		CD41839
Aroclor 1260	ND (5.99)		8082A		20	04/17/14 18:29		CD41839
Aroclor 1262	ND (5.99)		8082A		20	04/17/14 18:29		CD41839
Aroclor 1268	ND (5.99)		8082A		20	04/17/14 18:29		CD41839

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N41 60-72
Date Sampled: 03/20/14 11:35
Percent Solids: 16
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.301)		8082A		1	04/16/14 21:02		CD41839
Aroclor 1221	ND (0.301)		8082A		1	04/16/14 21:02		CD41839
Aroclor 1232	ND (0.301)		8082A		1	04/16/14 21:02		CD41839
Aroclor 1242	ND (0.301)		8082A		1	04/16/14 21:02		CD41839
Aroclor 1248	ND (0.301)		8082A		1	04/16/14 21:02		CD41839
Aroclor 1254	ND (0.301)		8082A		1	04/16/14 21:02		CD41839
Aroclor 1260	ND (0.301)		8082A		1	04/16/14 21:02		CD41839
Aroclor 1262	ND (0.301)		8082A		1	04/16/14 21:02		CD41839
Aroclor 1268	ND (0.301)		8082A		1	04/16/14 21:02		CD41839

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-47 12-24
Date Sampled: 03/20/14 14:07
Percent Solids: 15
Initial Volume: 30.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403342
ESS Laboratory Sample ID: 1403342-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/17/14 16:15
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.226)		8082A		1	04/18/14 13:31		CD41620
Aroclor 1221	ND (0.226)		8082A		1	04/18/14 13:31		CD41620
Aroclor 1232	ND (0.226)		8082A		1	04/18/14 13:31		CD41620
Aroclor 1242	ND (0.226)		8082A		1	04/18/14 13:31		CD41620
Aroclor 1248	**P 0.268** (0.226)		8082A		1	04/18/14 13:31		CD41620
Aroclor 1254	ND (0.226)		8082A		1	04/18/14 13:31		CD41620
Aroclor 1260	ND (0.226)		8082A		1	04/18/14 13:31		CD41620
Aroclor 1262	ND (0.226)		8082A		1	04/18/14 13:31		CD41620
Aroclor 1268	ND (0.226)		8082A		1	04/18/14 13:31		CD41620

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*120 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403342

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41620 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403342

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41620 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403342

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41620 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
LCS										
Aroclor 1016	0.499	0.0500	mg/kg wet	0.5000		100	40-140			
Aroclor 1260	0.496	0.0500	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS Dup										
Aroclor 1016	0.513	0.0500	mg/kg wet	0.5000		103	40-140	3	30	
Aroclor 1260	0.519	0.0500	mg/kg wet	0.5000		104	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0209*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Batch CD41839 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403342

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41839 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403342

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41839 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0216*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403342

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41839 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
LCS										
Aroclor 1016	0.501	0.0500	mg/kg wet	0.5000		100	40-140			
Aroclor 1260	0.507	0.0500	mg/kg wet	0.5000		101	40-140			
Surrogate: Decachlorobiphenyl	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0204*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS Dup										
Aroclor 1016	0.546	0.0500	mg/kg wet	0.5000		109	40-140	9	30	
Aroclor 1260	0.554	0.0500	mg/kg wet	0.5000		111	40-140	9	30	
Surrogate: Decachlorobiphenyl	*0.0226*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0241*		mg/kg wet	*0.02500*		*96*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403342

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
S+	Surrogate recovery(ies) above upper control limit (S+).
P	Percent difference between primary and confirmation results exceeds 40% (P).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403342

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030342
Date Project Due: ~~3/28/14~~ 4/21/14*
Days For Project: ~~5 Day~~ 21 days
eo 4/17/14

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes** 1.6 eo 4/17/14
   Cooler Temp: ~~5.0~~ 2.0 adj 4/15/14
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes** / **No**
17. Were samples received intact? **Yes** / **No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

5+11 on Hold

Completed By: FOG Date/Time: 4/15/14 0300
Reviewed By: [signature] Date/Time: 4/15/14 1017

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403342

Turn Time X Standard Other ____

Regulatory State: MA RI CT NH NJ NY ME Other ____

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other ____

Reporting Limits - < 1 ppm

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond
Project #: N-1011
Project Name: Polyply
Contact Person: Mike Martin
Address: 4 Barlows Landing Rd
City: Pocasset
State:
Zip:
PO #:
Tel.:
Fax.:
email:

	ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	Analysis: PCBs
1	01	3/18/19	1110	Grab	Soil	K-41 (48-60)	NP	1	Glass	4 oz	X
1	02	↓	1305	↓	↓	K-42 (48-60)	↓	↓	↓	↓	↓
1	03	↓	1320	↓	↓	K-43 (48-60)	↓	↓	↓	↓	↓
1	04	3/20/14	1105	↓	↓	G-30 (24-36)	↓	↓	↓	↓	↓
	05	↓	1115	↓	↓	G-31 (24-36)	↓	↓	↓	↓	↓
	06	↓	1025	↓	↓	H-30 (36-48)	↓	↓	↓	↓	↓
	07	↓	0930	↓	↓	I-31 (36-48)	↓	↓	↓	↓	↓
	08	↓	0918	↓	↓	I-34 (24-36)	↓	↓	↓	↓	↓
1	09	3/19/14	0909	↓	↓	I-37 (36-48	↓	↓	↓	↓	↓
1	10	3/20/14	1450	↓	↓	L-41 (60-72)	↓	↓	↓	↓	↓

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 ICE KLt

Internal Use Only
[✓] Pickup
[ ] Technician ____

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-____

Sampled by: Holli Lamb

① off Hold per client request. 4/15/14 (4) ESS

Comments: TSCA Extraction *HOLD*

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
[signature] 3/21/14 0938	[signature]	COLER 3/21/14 9:44	[signature] 3/21/14 09:44
[signature] 3/21/14 10:44	[signature] 3/21/14 1044	3/21/14 KHS	

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403342

Turn Time ___X___ Standard Other_____

Reporting Limits - < 1 ppm

Regulatory State: (MA) RI CT NH NJ NY ME Other_____

Is this project for any of the following:(please circle)
(MA-MCP) Navy USACE CT DEP Other TSCA

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond	Project #: N-1011	Project Name: Polyply	
Contact Person: Mike Martin	Address: 4 Barlows		
City	State	Zip	PO #
Tel.	Fax.	email:	

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
11	3/20/14	1354	Grab	Soil	L-47 (24-36)	NP	1	Glass	4 oz	X
12		1400			L-49 (24-36)					
(1) 13		1335			M-48 (24-36)					
14		1342			M-49 (24-36)					
(1) 15		1057			M-40 (60-72)					
(1) 16		1047			M-39 (60-72)					
(1) 17		1050			M-39 (84-96)					
(1) 18		1135			N-41 (60-72)					
(1) 19		1407			K-47 (12-24)					
4/15/14 20		1410			K-47 (24-36)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ___✓___ Yes _____ No

Seals Intact ____ Yes _____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 CEKH

Internal Use Only
[✓] Pickup
[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: Holli Lamb

Comments: TSCA Extraction *HOLD*

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/20/14 0935		COOLER 3/21/14 09:44	K Gallahan 3/21/14 09:44
K Gallahan 3/21/14 10:44	M. Mud 3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403343

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 12:08 pm, Apr 21, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403343

SAMPLE RECEIPT

The following samples were received on April 14, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

These samples were originally received on hold on March 21, 2014.

Lab Number	Sample Name	Matrix	Analysis
1403343-01	K-48 12-24	Soil	8082A
1403343-03	R-34 24-36	Soil	8082A
1403343-04	S-34 48-60	Soil	8082A
1403343-05	S-35 24-36	Soil	8082A
1403343-06	S-35 36-48	Soil	8082A
1403343-07	S-35 48-60	Soil	8082A
1403343-09	T-35 48-60	Soil	8082A
1403343-12	X-36 12-24	Soil	8082A
1403343-13	X-36 24-36	Soil	8082A
1403343-17	Q-45 12-24	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403343

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403343-04 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403343

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403343

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403343-01 through 1403343-17**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: April 21, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-48 12-24
Date Sampled: 03/20/14 14:15
Percent Solids: 20
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403343
ESS Laboratory Sample ID: 1403343-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.251)		8082A		1	04/16/14 21:21		CD41839
Aroclor 1221	ND (0.251)		8082A		1	04/16/14 21:21		CD41839
Aroclor 1232	ND (0.251)		8082A		1	04/16/14 21:21		CD41839
Aroclor 1242	ND (0.251)		8082A		1	04/16/14 21:21		CD41839
Aroclor 1248	**0.256** (0.251)		8082A		1	04/16/14 21:21		CD41839
Aroclor 1254	ND (0.251)		8082A		1	04/16/14 21:21		CD41839
Aroclor 1260	ND (0.251)		8082A		1	04/16/14 21:21		CD41839
Aroclor 1262	ND (0.251)		8082A		1	04/16/14 21:21		CD41839
Aroclor 1268	ND (0.251)		8082A		1	04/16/14 21:21		CD41839

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*57 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-34 24-36
Date Sampled: 03/20/14 09:57
Percent Solids: 87
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403343
ESS Laboratory Sample ID: 1403343-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0572)		8082A		1	04/16/14 23:52		CD41839
Aroclor 1221	ND (0.0572)		8082A		1	04/16/14 23:52		CD41839
Aroclor 1232	ND (0.0572)		8082A		1	04/16/14 23:52		CD41839
Aroclor 1242	ND (0.0572)		8082A		1	04/16/14 23:52		CD41839
Aroclor 1248	**0.438** (0.0572)		8082A		1	04/16/14 23:52		CD41839
Aroclor 1254	ND (0.0572)		8082A		1	04/16/14 23:52		CD41839
Aroclor 1260	ND (0.0572)		8082A		1	04/16/14 23:52		CD41839
Aroclor 1262	ND (0.0572)		8082A		1	04/16/14 23:52		CD41839
Aroclor 1268	ND (0.0572)		8082A		1	04/16/14 23:52		CD41839

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-34 48-60
Date Sampled: 03/20/14 09:25
Percent Solids: 91
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403343
ESS Laboratory Sample ID: 1403343-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (21.3)		8082A		400	04/17/14 22:53		CD41839
Aroclor 1221	ND (21.3)		8082A		400	04/17/14 22:53		CD41839
Aroclor 1232	ND (21.3)		8082A		400	04/17/14 22:53		CD41839
Aroclor 1242	ND (21.3)		8082A		400	04/17/14 22:53		CD41839
Aroclor 1248	**213** (21.3)		8082A		400	04/17/14 22:53		CD41839
Aroclor 1254	ND (21.3)		8082A		400	04/17/14 22:53		CD41839
Aroclor 1260	ND (21.3)		8082A		400	04/17/14 22:53		CD41839
Aroclor 1262	ND (21.3)		8082A		400	04/17/14 22:53		CD41839
Aroclor 1268	ND (21.3)		8082A		400	04/17/14 22:53		CD41839

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-35 24-36
Date Sampled: 03/20/14 09:37
Percent Solids: 91
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403343
ESS Laboratory Sample ID: 1403343-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 17:40
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0543)		8082A		1	04/17/14 0:30		CD41839
Aroclor 1221	ND (0.0543)		8082A		1	04/17/14 0:30		CD41839
Aroclor 1232	ND (0.0543)		8082A		1	04/17/14 0:30		CD41839
Aroclor 1242	ND (0.0543)		8082A		1	04/17/14 0:30		CD41839
Aroclor 1248	**0.260** (0.0543)		8082A		1	04/17/14 0:30		CD41839
Aroclor 1254	ND (0.0543)		8082A		1	04/17/14 0:30		CD41839
Aroclor 1260	ND (0.0543)		8082A		1	04/17/14 0:30		CD41839
Aroclor 1262	ND (0.0543)		8082A		1	04/17/14 0:30		CD41839
Aroclor 1268	ND (0.0543)		8082A		1	04/17/14 0:30		CD41839

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-35 36-48
Date Sampled: 03/20/14 09:40
Percent Solids: 88
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403343
ESS Laboratory Sample ID: 1403343-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0547)		8082A		1	04/16/14 16:10		CD41516
Aroclor 1221	ND (0.0547)		8082A		1	04/16/14 16:10		CD41516
Aroclor 1232	ND (0.0547)		8082A		1	04/16/14 16:10		CD41516
Aroclor 1242	ND (0.0547)		8082A		1	04/16/14 16:10		CD41516
Aroclor 1248	**9.91** (0.547)		8082A		10	04/17/14 18:42		CD41516
Aroclor 1254	ND (0.0547)		8082A		1	04/16/14 16:10		CD41516
Aroclor 1260	ND (0.0547)		8082A		1	04/16/14 16:10		CD41516
Aroclor 1262	ND (0.0547)		8082A		1	04/16/14 16:10		CD41516
Aroclor 1268	ND (0.0547)		8082A		1	04/16/14 16:10		CD41516

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-35 48-60
Date Sampled: 03/20/14 09:42
Percent Solids: 91
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403343
ESS Laboratory Sample ID: 1403343-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0557)		8082A		1	04/16/14 16:29		CD41516
Aroclor 1221	ND (0.0557)		8082A		1	04/16/14 16:29		CD41516
Aroclor 1232	ND (0.0557)		8082A		1	04/16/14 16:29		CD41516
Aroclor 1242	ND (0.0557)		8082A		1	04/16/14 16:29		CD41516
Aroclor 1248	**0.517** (0.0557)		8082A		1	04/16/14 16:29		CD41516
Aroclor 1254	ND (0.0557)		8082A		1	04/16/14 16:29		CD41516
Aroclor 1260	ND (0.0557)		8082A		1	04/16/14 16:29		CD41516
Aroclor 1262	ND (0.0557)		8082A		1	04/16/14 16:29		CD41516
Aroclor 1268	ND (0.0557)		8082A		1	04/16/14 16:29		CD41516

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-35 48-60
Date Sampled: 03/20/14 08:48
Percent Solids: 87
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403343
ESS Laboratory Sample ID: 1403343-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0556)		8082A		1	04/16/14 16:48		CD41516
Aroclor 1221	ND (0.0556)		8082A		1	04/16/14 16:48		CD41516
Aroclor 1232	ND (0.0556)		8082A		1	04/16/14 16:48		CD41516
Aroclor 1242	ND (0.0556)		8082A		1	04/16/14 16:48		CD41516
Aroclor 1248	**0.555** (0.0556)		8082A		1	04/16/14 16:48		CD41516
Aroclor 1254	ND (0.0556)		8082A		1	04/16/14 16:48		CD41516
Aroclor 1260	ND (0.0556)		8082A		1	04/16/14 16:48		CD41516
Aroclor 1262	ND (0.0556)		8082A		1	04/16/14 16:48		CD41516
Aroclor 1268	ND (0.0556)		8082A		1	04/16/14 16:48		CD41516

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: X-36 12-24
Date Sampled: 03/18/14 12:30
Percent Solids: 96
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403343
ESS Laboratory Sample ID: 1403343-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0534)		8082A		1	04/16/14 17:45		CD41516
Aroclor 1221	ND (0.0534)		8082A		1	04/16/14 17:45		CD41516
Aroclor 1232	ND (0.0534)		8082A		1	04/16/14 17:45		CD41516
Aroclor 1242	ND (0.0534)		8082A		1	04/16/14 17:45		CD41516
Aroclor 1248	**0.714** (0.0534)		8082A		1	04/16/14 17:45		CD41516
Aroclor 1254	ND (0.0534)		8082A		1	04/16/14 17:45		CD41516
Aroclor 1260	ND (0.0534)		8082A		1	04/16/14 17:45		CD41516
Aroclor 1262	ND (0.0534)		8082A		1	04/16/14 17:45		CD41516
Aroclor 1268	ND (0.0534)		8082A		1	04/16/14 17:45		CD41516

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: X-36 24-36
Date Sampled: 03/18/14 12:35
Percent Solids: 88
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403343
ESS Laboratory Sample ID: 1403343-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0578)		8082A		1	04/16/14 18:12		CD41516
Aroclor 1221	ND (0.0578)		8082A		1	04/16/14 18:12		CD41516
Aroclor 1232	ND (0.0578)		8082A		1	04/16/14 18:12		CD41516
Aroclor 1242	**3.91** (0.289)		8082A		5	04/17/14 19:01		CD41516
Aroclor 1248	ND (0.0578)		8082A		1	04/16/14 18:12		CD41516
Aroclor 1254	ND (0.0578)		8082A		1	04/16/14 18:12		CD41516
Aroclor 1260	ND (0.0578)		8082A		1	04/16/14 18:12		CD41516
Aroclor 1262	ND (0.0578)		8082A		1	04/16/14 18:12		CD41516
Aroclor 1268	ND (0.0578)		8082A		1	04/16/14 18:12		CD41516

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*58 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-45 12-24
Date Sampled: 03/18/14 09:30
Percent Solids: 91
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403343
ESS Laboratory Sample ID: 1403343-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0536)		8082A		1	04/16/14 18:30		CD41516
Aroclor 1221	ND (0.0536)		8082A		1	04/16/14 18:30		CD41516
Aroclor 1232	ND (0.0536)		8082A		1	04/16/14 18:30		CD41516
Aroclor 1242	ND (0.0536)		8082A		1	04/16/14 18:30		CD41516
Aroclor 1248	**0.0792** (0.0536)		8082A		1	04/16/14 18:30		CD41516
Aroclor 1254	ND (0.0536)		8082A		1	04/16/14 18:30		CD41516
Aroclor 1260	ND (0.0536)		8082A		1	04/16/14 18:30		CD41516
Aroclor 1262	ND (0.0536)		8082A		1	04/16/14 18:30		CD41516
Aroclor 1268	ND (0.0536)		8082A		1	04/16/14 18:30		CD41516

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403343

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41516 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403343

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41516 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403343

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41516 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0176*		mg/kg wet	*0.02500*		*70*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0187*		mg/kg wet	*0.02500*		*75*	*30-150*			
LCS										
Aroclor 1016	0.431	0.0500	mg/kg wet	0.5000		86	40-140			
Aroclor 1260	0.438	0.0500	mg/kg wet	0.5000		88	40-140			
Surrogate: Decachlorobiphenyl	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0177*		mg/kg wet	*0.02500*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0176*		mg/kg wet	*0.02500*		*70*	*30-150*			
LCS Dup										
Aroclor 1016	0.466	0.0500	mg/kg wet	0.5000		93	40-140	8	30	
Aroclor 1260	0.456	0.0500	mg/kg wet	0.5000		91	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0236*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0185*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0187*		mg/kg wet	*0.02500*		*75*	*30-150*			
Batch CD41839 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403343

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41839 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403343

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41839 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0216*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403343

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41839 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
LCS										
Aroclor 1016	0.501	0.0500	mg/kg wet	0.5000		100	40-140			
Aroclor 1260	0.507	0.0500	mg/kg wet	0.5000		101	40-140			
Surrogate: Decachlorobiphenyl	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0204*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS Dup										
Aroclor 1016	0.546	0.0500	mg/kg wet	0.5000		109	40-140	9	30	
Aroclor 1260	0.554	0.0500	mg/kg wet	0.5000		111	40-140	9	30	
Surrogate: Decachlorobiphenyl	*0.0226*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0241*		mg/kg wet	*0.02500*		*96*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403343

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403343

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030343
Date Project Due: ~~3/28/14~~ 4/21/14
Days For Project: ~~5 Day~~ 21 days
eo 4/17/14

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: ~~2.0°~~ 4/15/14 * 1.6 eo 4/17/14
   Iced With: ~~**Icepacks**~~
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes | No**
17. Were samples received intact? **Yes | No**
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP

Still on Hold ①

Completed By: HJG Date/Time: 4/15/14 0318
Reviewed By: [signature] Date/Time: 4/15/14 10 20

3 of 5 1 of 2

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403343

Turn Time X Standard Other_____

Regulatory State: MA RI CT NH NJ NY ME Other_____

Is this project for any of the following:(please circle) MA-MCP Navy USACE CT DEP Other TSCA

Reporting Limits - < 1ppm

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond	Project #: N-1011	Project Name: Poly	
Contact Person: Mike Martin	Address: 4 Barlows Landing Rd		
City: New Bedford	State: MA	Zip: 02559	PO #:
Tel.	Fax.	email:	

Analysis

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBS
01	3/20/14	1415	Grab	Soil	K-48 (12-24)	NP	1	Glass	4 oz	X
02		0955			R-34 (12-24)					
03		0957			R-34 (24-36)					
04		0925			S-34 (48-60)					
05		0937			S-35 (24-36)					
06		0940			S-35 (36-48)					
07		0942			S-35 (48-60)					
08		0827			W-34 (24-36)					
		~~0817~~			~~X-34 (12-24)~~					
		~~0820~~			~~X-34 (24-36)~~					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 ICE KH

Internal Use Only

[✓] Pickup

[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: Holli Lamb Off Hold per client request. 4/15/14 0315 ESS

Comments: TSCA Extraction * HOLD *

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
[signature] 3/21/14		COOLER 3/21/14 09:44	K Hallahan 3/21/14 09:44
K Hallahan 3/21/14 10:44	M. Meier 3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

~~4 of 5~~ 2 of 2

ESS Laboratory

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CHAIN OF CUSTODY

ESS Lab # 1403343

Turn Time X Standard Other_____

Regulatory State: MA RI CT NH NJ NY ME Other_____

Is this project for any of the following:(please circle) MA-MCP Navy USACE CT DEP Other TSCA

Reporting Limits - < 1 ppm

Electonic Deliverables Excel Access PDF

Co. Name Tighe & Bond	Project # N-1011	Project Name Polyply	
Contact Person Mike Martin	Address 4 Barlows Landing Rd		
City Pocasset	State MA	Zip 02559	PO #
Tel.	Fax.	email:	

	ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	Analysis: PCBs
	~~3/20/14~~	~~0822~~	~~Grab~~	~~Soil~~	~~X-34 (36-48)~~	~~NP~~	~~1~~	~~Glass~~	~~4oz~~	~~*~~	~~*~~ EO 3/24/14
1	09	↓	0848	↓	↓	T-35 (48-60)	↓	↓	↓	↓	↓
	10	↓	0905	↓	↓	U-34 (0905)	↓	↓	↓	↓	↓
	11	3/18/14	1320	↓	↓	X-35 (24-36)	↓	↓	↓	↓	↓
1	12	↓	1230	↓	↓	X-36 (12-24)	↓	↓	↓	↓	↓
1	13	↓	1235	↓	↓	X-36 (24-36)	↓	↓	↓	↓	↓
	14	↓	1315	↓	↓	X-35 (12-24)	↓	↓	↓	↓	↓
	15	↓	0912	↓	↓	Q-44 (12-24)	↓	↓	↓	↓	↓
	16	↓	0917	↓	↓	Q-44 (24-36)	↓	↓	↓	↓	↓
1	17	↓	0930	↓	↓	Q-45 (12-24)	↓	↓	↓	↓	↓

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 ICE KH

Internal Use Only

[✓] Pickup

[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: Holli Lamb

Comments: TSCA Extraction * HOLD *

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
[signature] 3/21/14		COOLER 3/21/14 09:44	[signature] 3/21/14 09:44
[signature] 3/21/14 10:44	[signature] 3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403344

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 12:18 pm, Apr 21, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403344

SAMPLE RECEIPT

The following samples were received on April 14, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

These samples were originally received on hold on March 21, 2014.

Lab Number	Sample Name	Matrix	Analysis
1403344-04	U-35 36-48	Soil	8082A
1403344-08	V-34 12-24	Soil	8082A
1403344-09	V-34 24-36	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403344

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403344-08 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403344-09 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403344

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403344

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403344-04 through 1403344-09**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: April 21, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-35 36-48
Date Sampled: 03/18/14 13:35
Percent Solids: 91
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403344
ESS Laboratory Sample ID: 1403344-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0559)		8082A		1	04/16/14 18:49		CD41516
Aroclor 1221	ND (0.0559)		8082A		1	04/16/14 18:49		CD41516
Aroclor 1232	ND (0.0559)		8082A		1	04/16/14 18:49		CD41516
Aroclor 1242	ND (0.0559)		8082A		1	04/16/14 18:49		CD41516
Aroclor 1248	ND (0.0559)		8082A		1	04/16/14 18:49		CD41516
Aroclor 1254	ND (0.0559)		8082A		1	04/16/14 18:49		CD41516
Aroclor 1260	ND (0.0559)		8082A		1	04/16/14 18:49		CD41516
Aroclor 1262	ND (0.0559)		8082A		1	04/16/14 18:49		CD41516
Aroclor 1268	ND (0.0559)		8082A		1	04/16/14 18:49		CD41516

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-34 12-24
Date Sampled: 03/20/14 08:02
Percent Solids: 91
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403344
ESS Laboratory Sample ID: 1403344-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.09)		8082A		20	04/18/14 13:31		CD41516
Aroclor 1221	ND (1.09)		8082A		20	04/18/14 13:31		CD41516
Aroclor 1232	ND (1.09)		8082A		20	04/18/14 13:31		CD41516
Aroclor 1242	ND (1.09)		8082A		20	04/18/14 13:31		CD41516
Aroclor 1248	**14.8** (1.09)		8082A		20	04/18/14 13:31		CD41516
Aroclor 1254	ND (1.09)		8082A		20	04/18/14 13:31		CD41516
Aroclor 1260	ND (1.09)		8082A		20	04/18/14 13:31		CD41516
Aroclor 1262	ND (1.09)		8082A		20	04/18/14 13:31		CD41516
Aroclor 1268	ND (1.09)		8082A		20	04/18/14 13:31		CD41516

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-34 24-36
Date Sampled: 03/20/14 08:05
Percent Solids: 93
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403344
ESS Laboratory Sample ID: 1403344-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.65)		8082A		50	04/17/14 19:38		CD41516
Aroclor 1221	ND (2.65)		8082A		50	04/17/14 19:38		CD41516
Aroclor 1232	ND (2.65)		8082A		50	04/17/14 19:38		CD41516
Aroclor 1242	ND (2.65)		8082A		50	04/17/14 19:38		CD41516
Aroclor 1248	**43.1** (2.65)		8082A		50	04/17/14 19:38		CD41516
Aroclor 1254	ND (2.65)		8082A		50	04/17/14 19:38		CD41516
Aroclor 1260	ND (2.65)		8082A		50	04/17/14 19:38		CD41516
Aroclor 1262	ND (2.65)		8082A		50	04/17/14 19:38		CD41516
Aroclor 1268	ND (2.65)		8082A		50	04/17/14 19:38		CD41516

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403344

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41516 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403344

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41516 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403344

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41516 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0176*		mg/kg wet	*0.02500*		*70*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0187*		mg/kg wet	*0.02500*		*75*	*30-150*			
LCS										
Aroclor 1016	0.431	0.0500	mg/kg wet	0.5000		86	40-140			
Aroclor 1260	0.438	0.0500	mg/kg wet	0.5000		88	40-140			
Surrogate: Decachlorobiphenyl	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0177*		mg/kg wet	*0.02500*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0176*		mg/kg wet	*0.02500*		*70*	*30-150*			
LCS Dup										
Aroclor 1016	0.466	0.0500	mg/kg wet	0.5000		93	40-140	8	30	
Aroclor 1260	0.456	0.0500	mg/kg wet	0.5000		91	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0236*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0185*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0187*		mg/kg wet	*0.02500*		*75*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403344

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403344

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030344
Date Project Due: ~~3/28/14~~ 4/21/14
Days For Project: ~~5 Day~~ 21 Days
eo 4/17/14

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: ~~2.0°~~ ~~4/15/14~~ 1.6
   Iced With: **Icepacks**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes | No**
17. Were samples received intact? **Yes | No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP

Samples still on Hold

Completed By: FOG Date/Time: 4/15/14 0321
Reviewed By: [signature] Date/Time: 4/15/14 1024

~~5 of 5~~ 1 of ~~2~~ 1

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403344

Turn Time X Standard Other

Regulatory State: MA RI CT NH NJ NY ME Other

Is this project for any of the following:(please circle) MA-MCP Navy USACE CT DEP Other TSCA

Reporting Limits - < 1 ppm

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond	Project #: N-1011	Project Name: Polyply	
Contact Person: Mike Martin	Address: 4 Barlows Landing Rd		
City: Pocasset	State: MA	Zip: 02559	PO #:
Tel.	Fax.	email:	

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
01	3/18/14	0937	Grab	Soil	Q-45 (36-48)	NP	1	Glass	4 oz	X
02	3/17/14	1330	↓	↓	P-43 (12-24)	↓	↓	↓	↓	↓
03	3/18/14	1332	↓	↓	U-35 (24-36)	↓	↓	↓	↓	↓
(1) 04	↓	1335	↓	↓	U-35 (36-48)	↓	↓	↓	↓	↓
05	↓	1340	↓	↓	U-35 (48-60)	↓	↓	↓	↓	↓
06	↓	0933	↓	↓	Q-45 (24-36)	↓	↓	↓	↓	↓
07	3/20/14	0823	↓	↓	W-34 (12-24)	↓	↓	↓	↓	↓
(1) 08	↓	0802			V-34 (12-24)	↓	↓	↓	↓	↓
(1) 09	↓	0805			V-34 (24-36)	↓	↓	↓	↓	↓

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ___ No

Seals Intact ___ Yes ___ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 Ice KH

Internal Use Only
[✓] Pickup
[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-___

Sampled by: Holli Lamb OOFF Hold per client request. 4/15/14 (LG) ESS

Comments: TSCA Extraction *HOLD*

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
[signature] 3/21/14		K. Hallahan 3/21/14 09:44	K. Hallahan 3/21/14 09:44
K. Hallahan 3/21/14 10:44	[signature] 3/21/14 10:44		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403345

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 11:33 am, Mar 27, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403345

SAMPLE RECEIPT

The following samples were received on March 21, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403345-01	J-35 36-48	Soil	8082A
1403345-02	J-37 36-48	Soil	8082A
1403345-03	J-38 36-48	Soil	8082A
1403345-04	J-39 36-48	Soil	8082A
1403345-05	H-40 24-36	Soil	8082A
1403345-06	H-41 36-48	Soil	8082A
1403345-07	H-43 36-48	Soil	8082A
1403345-08	H-44 36-48	Soil	8082A
1403345-09	I-35 24-36	Soil	8082A
1403345-10	I-36 36-48	Soil	8082A
1403345-11	I-39 24-36	Soil	8082A
1403345-12	I-41 36-48	Soil	8082A
1403345-13	I-42 36-48	Soil	8082A
1403345-14	I-43 36-48	Soil	8082A
1403345-15	I-44 36-48	Soil	8082A
1403345-16	F-40 24-36	Soil	8082A
1403345-17	F-41 24-36	Soil	8082A
1403345-18	F-44 36-48	Soil	8082A
1403345-19	I-46 24-36	Soil	8082A
1403345-20	J-29 24-36	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403345

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403345-01 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403345-02 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403345-03 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403345-04 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403345-10 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403345-12 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403345-17 **Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).**
Tetrachloro-m-xylene (28% @ 30-150%), Tetrachloro-m-xylene [2C] (29% @ 30-150%)

1403345-17RE1 **Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).**
Decachlorobiphenyl [2C] (24% @ 30-150%), Tetrachloro-m-xylene (22% @ 30-150%), Tetrachloro-m-xylene [2C] (24% @ 30-150%)

1403345-20 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Tetrachloro-m-xylene (168% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403345

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403345

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403345-01 through 1403345-20**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)? ***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.***	Yes (X) No ( )*
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: March 27, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-35 36-48
Date Sampled: 03/19/14 09:00
Percent Solids: 64
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (3.85)		8082A		50	03/23/14 15:49		CC42029
Aroclor 1221	ND (3.85)		8082A		50	03/23/14 15:49		CC42029
Aroclor 1232	ND (3.85)		8082A		50	03/23/14 15:49		CC42029
Aroclor 1242	ND (3.85)		8082A		50	03/23/14 15:49		CC42029
Aroclor 1248	**60.0** (3.85)		8082A		50	03/23/14 15:49		CC42029
Aroclor 1254	ND (3.85)		8082A		50	03/23/14 15:49		CC42029
Aroclor 1260	ND (3.85)		8082A		50	03/23/14 15:49		CC42029
Aroclor 1262	ND (3.85)		8082A		50	03/23/14 15:49		CC42029
Aroclor 1268	ND (3.85)		8082A		50	03/23/14 15:49		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-37 36-48
Date Sampled: 03/19/14 08:50
Percent Solids: 77
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (6.69)		8082A		100	03/24/14 18:55		CC42029
Aroclor 1221	ND (6.69)		8082A		100	03/24/14 18:55		CC42029
Aroclor 1232	ND (6.69)		8082A		100	03/24/14 18:55		CC42029
Aroclor 1242	ND (6.69)		8082A		100	03/24/14 18:55		CC42029
Aroclor 1248	**80.9** (6.69)		8082A		100	03/24/14 18:55		CC42029
Aroclor 1254	ND (6.69)		8082A		100	03/24/14 18:55		CC42029
Aroclor 1260	ND (6.69)		8082A		100	03/24/14 18:55		CC42029
Aroclor 1262	ND (6.69)		8082A		100	03/24/14 18:55		CC42029
Aroclor 1268	ND (6.69)		8082A		100	03/24/14 18:55		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-38 36-48
Date Sampled: 03/19/14 08:55
Percent Solids: 85
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.96)		8082A		100	03/23/14 16:27		CC42029
Aroclor 1221	ND (5.96)		8082A		100	03/23/14 16:27		CC42029
Aroclor 1232	ND (5.96)		8082A		100	03/23/14 16:27		CC42029
Aroclor 1242	**84.8** (5.96)		8082A		100	03/23/14 16:27		CC42029
Aroclor 1248	ND (5.96)		8082A		100	03/23/14 16:27		CC42029
Aroclor 1254	ND (5.96)		8082A		100	03/23/14 16:27		CC42029
Aroclor 1260	ND (5.96)		8082A		100	03/23/14 16:27		CC42029
Aroclor 1262	ND (5.96)		8082A		100	03/23/14 16:27		CC42029
Aroclor 1268	ND (5.96)		8082A		100	03/23/14 16:27		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-39 36-48
Date Sampled: 03/19/14 08:35
Percent Solids: 62
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (16.4)		8082A		200	03/23/14 16:46		CC42029
Aroclor 1221	ND (16.4)		8082A		200	03/23/14 16:46		CC42029
Aroclor 1232	ND (16.4)		8082A		200	03/23/14 16:46		CC42029
Aroclor 1242	**204** (16.4)		8082A		200	03/23/14 16:46		CC42029
Aroclor 1248	ND (16.4)		8082A		200	03/23/14 16:46		CC42029
Aroclor 1254	ND (16.4)		8082A		200	03/23/14 16:46		CC42029
Aroclor 1260	ND (16.4)		8082A		200	03/23/14 16:46		CC42029
Aroclor 1262	ND (16.4)		8082A		200	03/23/14 16:46		CC42029
Aroclor 1268	ND (16.4)		8082A		200	03/23/14 16:46		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-40 24-36
Date Sampled: 03/19/14 09:35
Percent Solids: 87
Initial Volume: 20.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0551)		8082A		1	03/22/14 17:08		CC42029
Aroclor 1221	ND (0.0551)		8082A		1	03/22/14 17:08		CC42029
Aroclor 1232	ND (0.0551)		8082A		1	03/22/14 17:08		CC42029
Aroclor 1242	ND (0.0551)		8082A		1	03/22/14 17:08		CC42029
Aroclor 1248	ND (0.0551)		8082A		1	03/22/14 17:08		CC42029
Aroclor 1254	ND (0.0551)		8082A		1	03/22/14 17:08		CC42029
Aroclor 1260	ND (0.0551)		8082A		1	03/22/14 17:08		CC42029
Aroclor 1262	ND (0.0551)		8082A		1	03/22/14 17:08		CC42029
Aroclor 1268	ND (0.0551)		8082A		1	03/22/14 17:08		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-41 36-48
Date Sampled: 03/19/14 09:37
Percent Solids: 61
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0790)		8082A		1	03/22/14 17:27		CC42029
Aroclor 1221	ND (0.0790)		8082A		1	03/22/14 17:27		CC42029
Aroclor 1232	ND (0.0790)		8082A		1	03/22/14 17:27		CC42029
Aroclor 1242	ND (0.0790)		8082A		1	03/22/14 17:27		CC42029
Aroclor 1248	**0.515** (0.0790)		8082A		1	03/22/14 17:27		CC42029
Aroclor 1254	ND (0.0790)		8082A		1	03/22/14 17:27		CC42029
Aroclor 1260	ND (0.0790)		8082A		1	03/22/14 17:27		CC42029
Aroclor 1262	ND (0.0790)		8082A		1	03/22/14 17:27		CC42029
Aroclor 1268	ND (0.0790)		8082A		1	03/22/14 17:27		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*107 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-43 36-48
Date Sampled: 03/19/14 09:40
Percent Solids: 35
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.144)		8082A		1	03/25/14 16:10		CC42404
Aroclor 1221	ND (0.144)		8082A		1	03/25/14 16:10		CC42404
Aroclor 1232	**9.52** (1.44)		8082A		10	03/25/14 23:44		CC42404
Aroclor 1242	ND (0.144)		8082A		1	03/25/14 16:10		CC42404
Aroclor 1248	ND (0.144)		8082A		1	03/25/14 16:10		CC42404
Aroclor 1254	ND (0.144)		8082A		1	03/25/14 16:10		CC42404
Aroclor 1260	ND (0.144)		8082A		1	03/25/14 16:10		CC42404
Aroclor 1262	ND (0.144)		8082A		1	03/25/14 16:10		CC42404
Aroclor 1268	ND (0.144)		8082A		1	03/25/14 16:10		CC42404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*138 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*142 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*50 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-44 36-48
Date Sampled: 03/19/14 09:30
Percent Solids: 22
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.219)		8082A		1	03/22/14 18:04		CC42029
Aroclor 1221	ND (0.219)		8082A		1	03/22/14 18:04		CC42029
Aroclor 1232	ND (0.219)		8082A		1	03/22/14 18:04		CC42029
Aroclor 1242	**1.29** (0.219)		8082A		1	03/22/14 18:04		CC42029
Aroclor 1248	ND (0.219)		8082A		1	03/22/14 18:04		CC42029
Aroclor 1254	ND (0.219)		8082A		1	03/22/14 18:04		CC42029
Aroclor 1260	ND (0.219)		8082A		1	03/22/14 18:04		CC42029
Aroclor 1262	ND (0.219)		8082A		1	03/22/14 18:04		CC42029
Aroclor 1268	ND (0.219)		8082A		1	03/22/14 18:04		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*57 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*38 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*38 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-35 24-36
Date Sampled: 03/19/14 09:02
Percent Solids: 84
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0610)		8082A		1	03/22/14 18:23		CC42029
Aroclor 1221	ND (0.0610)		8082A		1	03/22/14 18:23		CC42029
Aroclor 1232	ND (0.0610)		8082A		1	03/22/14 18:23		CC42029
Aroclor 1242	ND (0.0610)		8082A		1	03/22/14 18:23		CC42029
Aroclor 1248	**0.620** (0.0610)		8082A		1	03/22/14 18:23		CC42029
Aroclor 1254	ND (0.0610)		8082A		1	03/22/14 18:23		CC42029
Aroclor 1260	ND (0.0610)		8082A		1	03/22/14 18:23		CC42029
Aroclor 1262	ND (0.0610)		8082A		1	03/22/14 18:23		CC42029
Aroclor 1268	ND (0.0610)		8082A		1	03/22/14 18:23		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*114 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-36 36-48
Date Sampled: 03/19/14 09:04
Percent Solids: 87
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.66)		8082A		100	03/23/14 17:23		CC42029
Aroclor 1221	ND (5.66)		8082A		100	03/23/14 17:23		CC42029
Aroclor 1232	ND (5.66)		8082A		100	03/23/14 17:23		CC42029
Aroclor 1242	**67.1** (5.66)		8082A		100	03/23/14 17:23		CC42029
Aroclor 1248	ND (5.66)		8082A		100	03/23/14 17:23		CC42029
Aroclor 1254	ND (5.66)		8082A		100	03/23/14 17:23		CC42029
Aroclor 1260	ND (5.66)		8082A		100	03/23/14 17:23		CC42029
Aroclor 1262	ND (5.66)		8082A		100	03/23/14 17:23		CC42029
Aroclor 1268	ND (5.66)		8082A		100	03/23/14 17:23		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-39 24-36
Date Sampled: 03/19/14 09:10
Percent Solids: 89
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0574)		8082A		1	03/22/14 19:01		CC42029
Aroclor 1221	ND (0.0574)		8082A		1	03/22/14 19:01		CC42029
Aroclor 1232	ND (0.0574)		8082A		1	03/22/14 19:01		CC42029
Aroclor 1242	ND (0.0574)		8082A		1	03/22/14 19:01		CC42029
Aroclor 1248	**0.0590** (0.0574)		8082A		1	03/22/14 19:01		CC42029
Aroclor 1254	ND (0.0574)		8082A		1	03/22/14 19:01		CC42029
Aroclor 1260	ND (0.0574)		8082A		1	03/22/14 19:01		CC42029
Aroclor 1262	ND (0.0574)		8082A		1	03/22/14 19:01		CC42029
Aroclor 1268	ND (0.0574)		8082A		1	03/22/14 19:01		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*91 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*107 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-41 36-48
Date Sampled: 03/19/14 09:12
Percent Solids: 75
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (3.36)		8082A		50	03/23/14 17:42		CC42029
Aroclor 1221	ND (3.36)		8082A		50	03/23/14 17:42		CC42029
Aroclor 1232	ND (3.36)		8082A		50	03/23/14 17:42		CC42029
Aroclor 1242	ND (3.36)		8082A		50	03/23/14 17:42		CC42029
Aroclor 1248	**23.0** (3.36)		8082A		50	03/23/14 17:42		CC42029
Aroclor 1254	ND (3.36)		8082A		50	03/23/14 17:42		CC42029
Aroclor 1260	ND (3.36)		8082A		50	03/23/14 17:42		CC42029
Aroclor 1262	ND (3.36)		8082A		50	03/23/14 17:42		CC42029
Aroclor 1268	ND (3.36)		8082A		50	03/23/14 17:42		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-42 36-48
Date Sampled: 03/19/14 09:15
Percent Solids: 22
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.241)		8082A		1	03/22/14 19:39		CC42029
Aroclor 1221	ND (0.241)		8082A		1	03/22/14 19:39		CC42029
Aroclor 1232	ND (0.241)		8082A		1	03/22/14 19:39		CC42029
Aroclor 1242	ND (0.241)		8082A		1	03/22/14 19:39		CC42029
Aroclor 1248	**13.7** (1.20)		8082A		5	03/23/14 18:01		CC42029
Aroclor 1254	ND (0.241)		8082A		1	03/22/14 19:39		CC42029
Aroclor 1260	ND (0.241)		8082A		1	03/22/14 19:39		CC42029
Aroclor 1262	ND (0.241)		8082A		1	03/22/14 19:39		CC42029
Aroclor 1268	ND (0.241)		8082A		1	03/22/14 19:39		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-43 36-48
Date Sampled: 03/19/14 09:20
Percent Solids: 31
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.162)		8082A		1	03/22/14 19:57		CC42029
Aroclor 1221	ND (0.162)		8082A		1	03/22/14 19:57		CC42029
Aroclor 1232	ND (0.162)		8082A		1	03/22/14 19:57		CC42029
Aroclor 1242	ND (0.162)		8082A		1	03/22/14 19:57		CC42029
Aroclor 1248	**4.01** (0.810)		8082A		5	03/23/14 18:20		CC42029
Aroclor 1254	ND (0.162)		8082A		1	03/22/14 19:57		CC42029
Aroclor 1260	ND (0.162)		8082A		1	03/22/14 19:57		CC42029
Aroclor 1262	ND (0.162)		8082A		1	03/22/14 19:57		CC42029
Aroclor 1268	ND (0.162)		8082A		1	03/22/14 19:57		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-44 36-48
Date Sampled: 03/19/14 09:25
Percent Solids: 15
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.315)		8082A		1	03/22/14 20:16		CC42029
Aroclor 1221	ND (0.315)		8082A		1	03/22/14 20:16		CC42029
Aroclor 1232	ND (0.315)		8082A		1	03/22/14 20:16		CC42029
Aroclor 1242	ND (0.315)		8082A		1	03/22/14 20:16		CC42029
Aroclor 1248	**27.3** (3.15)		8082A		10	03/23/14 18:39		CC42029
Aroclor 1254	ND (0.315)		8082A		1	03/22/14 20:16		CC42029
Aroclor 1260	ND (0.315)		8082A		1	03/22/14 20:16		CC42029
Aroclor 1262	ND (0.315)		8082A		1	03/22/14 20:16		CC42029
Aroclor 1268	ND (0.315)		8082A		1	03/22/14 20:16		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*125 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*109 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: F-40 24-36
Date Sampled: 03/19/14 11:00
Percent Solids: 66
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0745)		8082A		1	03/22/14 20:35		CC42029
Aroclor 1221	ND (0.0745)		8082A		1	03/22/14 20:35		CC42029
Aroclor 1232	ND (0.0745)		8082A		1	03/22/14 20:35		CC42029
Aroclor 1242	ND (0.0745)		8082A		1	03/22/14 20:35		CC42029
Aroclor 1248	**0.354** (0.0745)		8082A		1	03/22/14 20:35		CC42029
Aroclor 1254	ND (0.0745)		8082A		1	03/22/14 20:35		CC42029
Aroclor 1260	ND (0.0745)		8082A		1	03/22/14 20:35		CC42029
Aroclor 1262	ND (0.0745)		8082A		1	03/22/14 20:35		CC42029
Aroclor 1268	ND (0.0745)		8082A		1	03/22/14 20:35		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*49 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: F-41 24-36
Date Sampled: 03/19/14 10:55
Percent Solids: 56
Initial Volume: 20.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0852)		8082A		1	03/22/14 20:54		CC42029
Aroclor 1221	ND (0.0852)		8082A		1	03/22/14 20:54		CC42029
Aroclor 1232	ND (0.0852)		8082A		1	03/22/14 20:54		CC42029
Aroclor 1242	ND (0.0852)		8082A		1	03/22/14 20:54		CC42029
Aroclor 1248	**0.134** (0.0852)		8082A		1	03/22/14 20:54		CC42029
Aroclor 1254	ND (0.0852)		8082A		1	03/22/14 20:54		CC42029
Aroclor 1260	ND (0.0852)		8082A		1	03/22/14 20:54		CC42029
Aroclor 1262	ND (0.0852)		8082A		1	03/22/14 20:54		CC42029
Aroclor 1268	ND (0.0852)		8082A		1	03/22/14 20:54		CC42029

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*46 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*32 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*28 %*	*SC*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*29 %*	*SC*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: F-41 24-36
Date Sampled: 03/19/14 10:55
Percent Solids: 56
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-17RE1
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/21/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0918)		8082A		1	03/25/14 16:29		CC42404
Aroclor 1221	ND (0.0918)		8082A		1	03/25/14 16:29		CC42404
Aroclor 1232	ND (0.0918)		8082A		1	03/25/14 16:29		CC42404
Aroclor 1242	ND (0.0918)		8082A		1	03/25/14 16:29		CC42404
Aroclor 1248	**0.126** (0.0918)		8082A		1	03/25/14 16:29		CC42404
Aroclor 1254	ND (0.0918)		8082A		1	03/25/14 16:29		CC42404
Aroclor 1260	ND (0.0918)		8082A		1	03/25/14 16:29		CC42404
Aroclor 1262	ND (0.0918)		8082A		1	03/25/14 16:29		CC42404
Aroclor 1268	ND (0.0918)		8082A		1	03/25/14 16:29		CC42404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*37 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*24 %*	*SC*	*30-150*
Surrogate: Tetrachloro-m-xylene	*22 %*	*SC*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*24 %*	*SC*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: F-44 36-48
Date Sampled: 03/19/14 10:50
Percent Solids: 11
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.450)		8082A		1	03/22/14 14:37		CC42030
Aroclor 1221	ND (0.450)		8082A		1	03/22/14 14:37		CC42030
Aroclor 1232	ND (0.450)		8082A		1	03/22/14 14:37		CC42030
Aroclor 1242	ND (0.450)		8082A		1	03/22/14 14:37		CC42030
Aroclor 1248	**1.41** (0.450)		8082A		1	03/22/14 14:37		CC42030
Aroclor 1254	ND (0.450)		8082A		1	03/22/14 14:37		CC42030
Aroclor 1260	ND (0.450)		8082A		1	03/22/14 14:37		CC42030
Aroclor 1262	ND (0.450)		8082A		1	03/22/14 14:37		CC42030
Aroclor 1268	ND (0.450)		8082A		1	03/22/14 14:37		CC42030

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*118 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-46 24-36
Date Sampled: 03/20/14 14:32
Percent Solids: 16
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.316)		8082A		1	03/22/14 15:59		CC42030
Aroclor 1221	ND (0.316)		8082A		1	03/22/14 15:59		CC42030
Aroclor 1232	ND (0.316)		8082A		1	03/22/14 15:59		CC42030
Aroclor 1242	ND (0.316)		8082A		1	03/22/14 15:59		CC42030
Aroclor 1248	**2.20** (0.316)		8082A		1	03/22/14 15:59		CC42030
Aroclor 1254	ND (0.316)		8082A		1	03/22/14 15:59		CC42030
Aroclor 1260	ND (0.316)		8082A		1	03/22/14 15:59		CC42030
Aroclor 1262	ND (0.316)		8082A		1	03/22/14 15:59		CC42030
Aroclor 1268	ND (0.316)		8082A		1	03/22/14 15:59		CC42030

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*128 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-29 24-36
Date Sampled: 03/20/14 09:08
Percent Solids: 85
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403345
ESS Laboratory Sample ID: 1403345-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0604)		8082A		1	03/22/14 16:18		CC42030
Aroclor 1221	ND (0.0604)		8082A		1	03/22/14 16:18		CC42030
Aroclor 1232	ND (0.0604)		8082A		1	03/22/14 16:18		CC42030
Aroclor 1242	**7.13** (0.604)		8082A		10	03/23/14 16:48		CC42030
Aroclor 1248	ND (0.0604)		8082A		1	03/22/14 16:18		CC42030
Aroclor 1254	ND (0.0604)		8082A		1	03/22/14 16:18		CC42030
Aroclor 1260	ND (0.0604)		8082A		1	03/22/14 16:18		CC42030
Aroclor 1262	ND (0.0604)		8082A		1	03/22/14 16:18		CC42030
Aroclor 1268	ND (0.0604)		8082A		1	03/22/14 16:18		CC42030

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*109 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*105 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*168 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403345

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42029 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403345

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42029 - 3540C										
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42029 - 3540C										
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS										
Aroclor 1016	0.537	0.0500	mg/kg wet	0.5000		107	40-140			
Aroclor 1260	0.515	0.0500	mg/kg wet	0.5000		103	40-140			
Surrogate: Decachlorobiphenyl	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0254*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
LCS Dup										
Aroclor 1016	0.489	0.0500	mg/kg wet	0.5000		98	40-140	9	30	
Aroclor 1260	0.483	0.0500	mg/kg wet	0.5000		97	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Batch CC42030 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42030 - 3540C										
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42030 - 3540C										
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42030 - 3540C										
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0266*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
LCS										
Aroclor 1016	0.489	0.0500	mg/kg wet	0.5000		98	40-140			
Aroclor 1260	0.481	0.0500	mg/kg wet	0.5000		96	40-140			
Surrogate: Decachlorobiphenyl	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
LCS Dup										
Aroclor 1016	0.531	0.0500	mg/kg wet	0.5000		106	40-140	8	30	
Aroclor 1260	0.517	0.0500	mg/kg wet	0.5000		103	40-140	7	30	
Surrogate: Decachlorobiphenyl	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Batch CC42404 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42404 - 3540C										
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403345

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42404 - 3540C										
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS										
Aroclor 1016	0.440	0.0250	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.454	0.0250	mg/kg wet	0.5000		91	40-140			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403345

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42404 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0257*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS Dup										
Aroclor 1016	0.448	0.0250	mg/kg wet	0.5000		90	40-140	2	30	
Aroclor 1260	0.471	0.0250	mg/kg wet	0.5000		94	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403345

Notes and Definitions

U	Analyte included in the analysis, but not detected
SM	Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
SD	Surrogate recovery(ies) diluted below the MRL (SD).
SC	Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403345

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030345
Date Project Due: 3/28/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: ~~5.0~~ * 1.6 eo 3/24/14
   Iced With: Ice
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample Yes
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? Yes|No
17. Were samples received intact? Yes|No
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: [illegible] Date/Time: 3/21/14 1109
Reviewed By: MEK Date/Time: 3/21/14 1113

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403345

Turn Time X Standard Other_____

Regulatory State: MA RI CT NH NJ NY ME Other TSCA

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other TSCA

Reporting Limits - PCB < 1 ppm

Electonic Deliverables Excel Access PDF

Co. Name Tighe & Bond

Project # N-1011

Project Name Polyply

Contact Person Mike Martin

Address 4 Barlows Landing Rd, Unit 15

City Pocasset

State MA

Zip 02259

PO #

Tel. 508-564-7285

Fax. 508-564-4298

email: mamartin@tighebond.com

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
01	3/19/14	0900	Grab	Soil	J-35 (36-48)	NP	1	Glass	4 oz	X
02		0850			J-37 (36-49)					
03		0855			J-38 (36-48)					
04		0835			J-39 (36-48)					
05		~~1100~~	0935		H-40 (24-36)					
06		~~1355~~	0937		H-41 (36-48)					
07		~~1350~~	0940		H-43 (36-48)					
08		0930			H-44 (36-48)					
09		0902			I-35 (24-36)					
10		0904			I-36 (36-48)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: Holl, Lamb

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		COOLER 3/21/14 09:44	3/21/14 09:44
3/21/14 10:44	3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403345

Turn Time _____ Standard Other _____

Regulatory State: (MA) RI CT NH NJ NY ME Other TSCA

Reporting Limits - <1 ppm

Is this project for any of the following:(please circle)
(MA-MCP) Navy USACE CT DEP Other TSCA

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond

Project # N-1011

Project Name: Polyply

Contact Person: Mike Martin

Address:

City: New Bedford

State: MA

Zip: 02559

PO #:

Tel. 508-564-[illegible]285

Fax. 508-564-4298

email:

Analysis: PCB

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCB
11	3/19/14	0910	Grab	Soil	I-39 (24-36)	NO	1	Glass	4 oz	X
12		0912			I-41 (36-48)					
13		0915			I-42 (36-48)					
14		0920			I-43 (36-48)					
15		0925			I-44 (36-48)					
16		1100			F-40 (24-36)					
17		1055			F-41 (24-36)					
18		1050			F-44 (36-48)					
19	3/20/14	1432			I-46 (24-36)					
20		0908			J-29 (24-36					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 ICE KH

Internal Use Only

[✓] Pickup

[ ] Technician ____

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-____

Sampled by: Holli Lamb

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		COOLER 3/21/14 09:44	3/21/14 09:44
Relinquished by: (Signature, Date & Time) 3/21/14 10:44	Received by: (Signature, Date & Time) 3/21/14 10:44	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403346

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 12:04 pm, Mar 27, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403346

SAMPLE RECEIPT

The following samples were received on March 21, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403346-01	J-30 24-36	Soil	8082A
1403346-02	J-31 24-36	Soil	8082A
1403346-03	J-32 24-36	Soil	8082A
1403346-04	J-33 24-36	Soil	8082A
1403346-05	J-34 24-36	Soil	8082A
1403346-06	J-46 24-36	Soil	8082A
1403346-07	K-45 36-48	Soil	8082A
1403346-08	K-46 12-24	Soil	8082A
1403346-09	K-46 24-36	Soil	8082A
1403346-10	K-48 0-12	Soil	8082A
1403346-11	K-50 0-12	Soil	8082A
1403346-12	N-46 12-24	Soil	8082A
1403346-13	G-28 12-24	Soil	8082A
1403346-14	G-29 12-24	Soil	8082A
1403346-15	G-30 12-24	Soil	8082A
1403346-16	G-32 12-24	Soil	8082A
1403346-17	G-33 12-24	Soil	8082A
1403346-18	G-34 12-24	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403346

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403346-01 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403346-02 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403346-03 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403346-04 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403346-08 **Surrogate recovery(ies) below lower control limit (S-).**
Tetrachloro-m-xylene [2C] (28% @ 30-150%)

1403346-15 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403346

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403346

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403346-01 through 1403346-18**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: Laurel Stoddard
Date: March 27, 2014
Printed Name: Laurel Stoddard
Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-30 24-36
Date Sampled: 03/20/14 09:05
Percent Solids: 83
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (3.04)		8082A		50	03/23/14 17:44		CC42030
Aroclor 1221	ND (3.04)		8082A		50	03/23/14 17:44		CC42030
Aroclor 1232	ND (3.04)		8082A		50	03/23/14 17:44		CC42030
Aroclor 1242	**27.9** (3.04)		8082A		50	03/23/14 17:44		CC42030
Aroclor 1248	ND (3.04)		8082A		50	03/23/14 17:44		CC42030
Aroclor 1254	ND (3.04)		8082A		50	03/23/14 17:44		CC42030
Aroclor 1260	ND (3.04)		8082A		50	03/23/14 17:44		CC42030
Aroclor 1262	ND (3.04)		8082A		50	03/23/14 17:44		CC42030
Aroclor 1268	ND (3.04)		8082A		50	03/23/14 17:44		CC42030

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-31 24-36
Date Sampled: 03/20/14 09:03
Percent Solids: 85
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.95)		8082A		50	03/23/14 18:03		CC42030
Aroclor 1221	ND (2.95)		8082A		50	03/23/14 18:03		CC42030
Aroclor 1232	ND (2.95)		8082A		50	03/23/14 18:03		CC42030
Aroclor 1242	**38.4** (2.95)		8082A		50	03/23/14 18:03		CC42030
Aroclor 1248	ND (2.95)		8082A		50	03/23/14 18:03		CC42030
Aroclor 1254	ND (2.95)		8082A		50	03/23/14 18:03		CC42030
Aroclor 1260	ND (2.95)		8082A		50	03/23/14 18:03		CC42030
Aroclor 1262	ND (2.95)		8082A		50	03/23/14 18:03		CC42030
Aroclor 1268	ND (2.95)		8082A		50	03/23/14 18:03		CC42030

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-32 24-36
Date Sampled: 03/20/14 09:00
Percent Solids: 80
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.25)		8082A		20	03/23/14 18:22		CC42030
Aroclor 1221	ND (1.25)		8082A		20	03/23/14 18:22		CC42030
Aroclor 1232	ND (1.25)		8082A		20	03/23/14 18:22		CC42030
Aroclor 1242	**14.1** (1.25)		8082A		20	03/23/14 18:22		CC42030
Aroclor 1248	ND (1.25)		8082A		20	03/23/14 18:22		CC42030
Aroclor 1254	ND (1.25)		8082A		20	03/23/14 18:22		CC42030
Aroclor 1260	ND (1.25)		8082A		20	03/23/14 18:22		CC42030
Aroclor 1262	ND (1.25)		8082A		20	03/23/14 18:22		CC42030
Aroclor 1268	ND (1.25)		8082A		20	03/23/14 18:22		CC42030

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-33 24-36
Date Sampled: 03/20/14 08:55
Percent Solids: 81
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (6.11)		8082A		100	03/24/14 16:40		CC42030
Aroclor 1221	ND (6.11)		8082A		100	03/24/14 16:40		CC42030
Aroclor 1232	**95.9** (6.11)		8082A		100	03/24/14 16:40		CC42030
Aroclor 1242	ND (6.11)		8082A		100	03/24/14 16:40		CC42030
Aroclor 1248	ND (6.11)		8082A		100	03/24/14 16:40		CC42030
Aroclor 1254	ND (6.11)		8082A		100	03/24/14 16:40		CC42030
Aroclor 1260	ND (6.11)		8082A		100	03/24/14 16:40		CC42030
Aroclor 1262	ND (6.11)		8082A		100	03/24/14 16:40		CC42030
Aroclor 1268	ND (6.11)		8082A		100	03/24/14 16:40		CC42030

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-34 24-36
Date Sampled: 03/20/14 08:50
Percent Solids: 81
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0621)		8082A		1	03/22/14 18:32		CC42030
Aroclor 1221	ND (0.0621)		8082A		1	03/22/14 18:32		CC42030
Aroclor 1232	ND (0.0621)		8082A		1	03/22/14 18:32		CC42030
Aroclor 1242	ND (0.0621)		8082A		1	03/22/14 18:32		CC42030
Aroclor 1248	**0.337** (0.0621)		8082A		1	03/22/14 18:32		CC42030
Aroclor 1254	ND (0.0621)		8082A		1	03/22/14 18:32		CC42030
Aroclor 1260	ND (0.0621)		8082A		1	03/22/14 18:32		CC42030
Aroclor 1262	ND (0.0621)		8082A		1	03/22/14 18:32		CC42030
Aroclor 1268	ND (0.0621)		8082A		1	03/22/14 18:32		CC42030

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*107 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-46 24-36
Date Sampled: 03/20/14 14:30
Percent Solids: 14
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.345)		8082A		1	03/22/14 18:51		CC42030
Aroclor 1221	ND (0.345)		8082A		1	03/22/14 18:51		CC42030
Aroclor 1232	ND (0.345)		8082A		1	03/22/14 18:51		CC42030
Aroclor 1242	ND (0.345)		8082A		1	03/22/14 18:51		CC42030
Aroclor 1248	**0.453** (0.345)		8082A		1	03/22/14 18:51		CC42030
Aroclor 1254	ND (0.345)		8082A		1	03/22/14 18:51		CC42030
Aroclor 1260	ND (0.345)		8082A		1	03/22/14 18:51		CC42030
Aroclor 1262	ND (0.345)		8082A		1	03/22/14 18:51		CC42030
Aroclor 1268	ND (0.345)		8082A		1	03/22/14 18:51		CC42030

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*32 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-45 36-48
Date Sampled: 03/20/14 14:00
Percent Solids: 13
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.375)		8082A		1	03/22/14 19:10		CC42030
Aroclor 1221	ND (0.375)		8082A		1	03/22/14 19:10		CC42030
Aroclor 1232	ND (0.375)		8082A		1	03/22/14 19:10		CC42030
Aroclor 1242	**21.8** (1.88)		8082A		5	03/23/14 19:00		CC42030
Aroclor 1248	ND (0.375)		8082A		1	03/22/14 19:10		CC42030
Aroclor 1254	ND (0.375)		8082A		1	03/22/14 19:10		CC42030
Aroclor 1260	ND (0.375)		8082A		1	03/22/14 19:10		CC42030
Aroclor 1262	ND (0.375)		8082A		1	03/22/14 19:10		CC42030
Aroclor 1268	ND (0.375)		8082A		1	03/22/14 19:10		CC42030

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*106 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*135 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-46 12-24
Date Sampled: 03/20/14 14:03
Percent Solids: 16
Initial Volume: 19.5
Final Volume: 5
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0788)		8082A		1	03/26/14 17:14		CC42404
Aroclor 1221	ND (0.0788)		8082A		1	03/26/14 17:14		CC42404
Aroclor 1232	ND (0.0788)		8082A		1	03/26/14 17:14		CC42404
Aroclor 1242	ND (0.0788)		8082A		1	03/26/14 17:14		CC42404
Aroclor 1248	**0.161** (0.0788)		8082A		1	03/26/14 17:14		CC42404
Aroclor 1254	ND (0.0788)		8082A		1	03/26/14 17:14		CC42404
Aroclor 1260	ND (0.0788)		8082A		1	03/26/14 17:14		CC42404
Aroclor 1262	ND (0.0788)		8082A		1	03/26/14 17:14		CC42404
Aroclor 1268	ND (0.0788)		8082A		1	03/26/14 17:14		CC42404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*34 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*28 %*	*S-*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-46 24-36
Date Sampled: 03/20/14 14:05
Percent Solids: 16
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.306)		8082A		1	03/22/14 19:48		CC42030
Aroclor 1221	ND (0.306)		8082A		1	03/22/14 19:48		CC42030
Aroclor 1232	ND (0.306)		8082A		1	03/22/14 19:48		CC42030
Aroclor 1242	ND (0.306)		8082A		1	03/22/14 19:48		CC42030
Aroclor 1248	**0.895** (0.306)		8082A		1	03/22/14 19:48		CC42030
Aroclor 1254	ND (0.306)		8082A		1	03/22/14 19:48		CC42030
Aroclor 1260	ND (0.306)		8082A		1	03/22/14 19:48		CC42030
Aroclor 1262	ND (0.306)		8082A		1	03/22/14 19:48		CC42030
Aroclor 1268	ND (0.306)		8082A		1	03/22/14 19:48		CC42030

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*148 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-48 0-12
Date Sampled: 03/20/14 14:20
Percent Solids: 15
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.321)		8082A		1	03/22/14 20:08		CC42030
Aroclor 1221	ND (0.321)		8082A		1	03/22/14 20:08		CC42030
Aroclor 1232	ND (0.321)		8082A		1	03/22/14 20:08		CC42030
Aroclor 1242	ND (0.321)		8082A		1	03/22/14 20:08		CC42030
Aroclor 1248	**1.11** (0.321)		8082A		1	03/22/14 20:08		CC42030
Aroclor 1254	ND (0.321)		8082A		1	03/22/14 20:08		CC42030
Aroclor 1260	ND (0.321)		8082A		1	03/22/14 20:08		CC42030
Aroclor 1262	ND (0.321)		8082A		1	03/22/14 20:08		CC42030
Aroclor 1268	ND (0.321)		8082A		1	03/22/14 20:08		CC42030

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-50 0-12
Date Sampled: 03/20/14 14:25
Percent Solids: 13
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.374)		8082A		1	03/22/14 20:27		CC42030
Aroclor 1221	ND (0.374)		8082A		1	03/22/14 20:27		CC42030
Aroclor 1232	ND (0.374)		8082A		1	03/22/14 20:27		CC42030
Aroclor 1242	ND (0.374)		8082A		1	03/22/14 20:27		CC42030
Aroclor 1248	ND (0.374)		8082A		1	03/22/14 20:27		CC42030
Aroclor 1254	**1.01** (0.374)		8082A		1	03/22/14 20:27		CC42030
Aroclor 1260	ND (0.374)		8082A		1	03/22/14 20:27		CC42030
Aroclor 1262	ND (0.374)		8082A		1	03/22/14 20:27		CC42030
Aroclor 1268	ND (0.374)		8082A		1	03/22/14 20:27		CC42030

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*140 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-46 12-24
Date Sampled: 03/20/14 13:05
Percent Solids: 23
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.216)		8082A		1	03/22/14 20:46		CC42030
Aroclor 1221	ND (0.216)		8082A		1	03/22/14 20:46		CC42030
Aroclor 1232	ND (0.216)		8082A		1	03/22/14 20:46		CC42030
Aroclor 1242	ND (0.216)		8082A		1	03/22/14 20:46		CC42030
Aroclor 1248	**16.9** (1.08)		8082A		5	03/23/14 19:38		CC42030
Aroclor 1254	ND (0.216)		8082A		1	03/22/14 20:46		CC42030
Aroclor 1260	ND (0.216)		8082A		1	03/22/14 20:46		CC42030
Aroclor 1262	ND (0.216)		8082A		1	03/22/14 20:46		CC42030
Aroclor 1268	ND (0.216)		8082A		1	03/22/14 20:46		CC42030

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*46 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*41 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G-28 12-24
Date Sampled: 03/20/14 10:40
Percent Solids: 72
Initial Volume: 20.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0665)		8082A		1	03/22/14 21:05		CC42030
Aroclor 1221	ND (0.0665)		8082A		1	03/22/14 21:05		CC42030
Aroclor 1232	ND (0.0665)		8082A		1	03/22/14 21:05		CC42030
Aroclor 1242	ND (0.0665)		8082A		1	03/22/14 21:05		CC42030
Aroclor 1248	**0.118** (0.0665)		8082A		1	03/22/14 21:05		CC42030
Aroclor 1254	ND (0.0665)		8082A		1	03/22/14 21:05		CC42030
Aroclor 1260	ND (0.0665)		8082A		1	03/22/14 21:05		CC42030
Aroclor 1262	ND (0.0665)		8082A		1	03/22/14 21:05		CC42030
Aroclor 1268	ND (0.0665)		8082A		1	03/22/14 21:05		CC42030

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G-29 12-24
Date Sampled: 03/20/14 10:45
Percent Solids: 82
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0592)		8082A		1	03/22/14 21:24		CC42030
Aroclor 1221	ND (0.0592)		8082A		1	03/22/14 21:24		CC42030
Aroclor 1232	ND (0.0592)		8082A		1	03/22/14 21:24		CC42030
Aroclor 1242	ND (0.0592)		8082A		1	03/22/14 21:24		CC42030
Aroclor 1248	ND (0.0592)		8082A		1	03/22/14 21:24		CC42030
Aroclor 1254	ND (0.0592)		8082A		1	03/22/14 21:24		CC42030
Aroclor 1260	ND (0.0592)		8082A		1	03/22/14 21:24		CC42030
Aroclor 1262	ND (0.0592)		8082A		1	03/22/14 21:24		CC42030
Aroclor 1268	ND (0.0592)		8082A		1	03/22/14 21:24		CC42030

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G-30 12-24
Date Sampled: 03/20/14 10:58
Percent Solids: 60
Initial Volume: 29.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.13)		8082A		20	03/23/14 19:57		CC42030
Aroclor 1221	ND (1.13)		8082A		20	03/23/14 19:57		CC42030
Aroclor 1232	ND (1.13)		8082A		20	03/23/14 19:57		CC42030
Aroclor 1242	ND (1.13)		8082A		20	03/23/14 19:57		CC42030
Aroclor 1248	**12.5** (1.13)		8082A		20	03/23/14 19:57		CC42030
Aroclor 1254	ND (1.13)		8082A		20	03/23/14 19:57		CC42030
Aroclor 1260	ND (1.13)		8082A		20	03/23/14 19:57		CC42030
Aroclor 1262	ND (1.13)		8082A		20	03/23/14 19:57		CC42030
Aroclor 1268	ND (1.13)		8082A		20	03/23/14 19:57		CC42030

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G-32 12-24
Date Sampled: 03/20/14 11:20
Percent Solids: 74
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0679)		8082A		1	03/22/14 23:56		CC42030
Aroclor 1221	ND (0.0679)		8082A		1	03/22/14 23:56		CC42030
Aroclor 1232	ND (0.0679)		8082A		1	03/22/14 23:56		CC42030
Aroclor 1242	ND (0.0679)		8082A		1	03/22/14 23:56		CC42030
Aroclor 1248	**0.0906** (0.0679)		8082A		1	03/22/14 23:56		CC42030
Aroclor 1254	ND (0.0679)		8082A		1	03/22/14 23:56		CC42030
Aroclor 1260	ND (0.0679)		8082A		1	03/22/14 23:56		CC42030
Aroclor 1262	ND (0.0679)		8082A		1	03/22/14 23:56		CC42030
Aroclor 1268	ND (0.0679)		8082A		1	03/22/14 23:56		CC42030

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G-33 12-24
Date Sampled: 03/20/14 11:25
Percent Solids: 75
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 19:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0663)		8082A		1	03/23/14 0:15		CC42030
Aroclor 1221	ND (0.0663)		8082A		1	03/23/14 0:15		CC42030
Aroclor 1232	ND (0.0663)		8082A		1	03/23/14 0:15		CC42030
Aroclor 1242	ND (0.0663)		8082A		1	03/23/14 0:15		CC42030
Aroclor 1248	ND (0.0663)		8082A		1	03/23/14 0:15		CC42030
Aroclor 1254	ND (0.0663)		8082A		1	03/23/14 0:15		CC42030
Aroclor 1260	ND (0.0663)		8082A		1	03/23/14 0:15		CC42030
Aroclor 1262	ND (0.0663)		8082A		1	03/23/14 0:15		CC42030
Aroclor 1268	ND (0.0663)		8082A		1	03/23/14 0:15		CC42030

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*105 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G-34 12-24
Date Sampled: 03/20/14 11:30
Percent Solids: 86
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403346
ESS Laboratory Sample ID: 1403346-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0595)		8082A		1	03/23/14 0:34		CC42031
Aroclor 1221	ND (0.0595)		8082A		1	03/23/14 0:34		CC42031
Aroclor 1232	ND (0.0595)		8082A		1	03/23/14 0:34		CC42031
Aroclor 1242	**0.201** (0.0595)		8082A		1	03/23/14 0:34		CC42031
Aroclor 1248	ND (0.0595)		8082A		1	03/23/14 0:34		CC42031
Aroclor 1254	ND (0.0595)		8082A		1	03/23/14 0:34		CC42031
Aroclor 1260	ND (0.0595)		8082A		1	03/23/14 0:34		CC42031
Aroclor 1262	ND (0.0595)		8082A		1	03/23/14 0:34		CC42031
Aroclor 1268	ND (0.0595)		8082A		1	03/23/14 0:34		CC42031

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403346

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42030 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403346

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42030 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403346

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42030 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0266*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
LCS										
Aroclor 1016	0.489	0.0500	mg/kg wet	0.5000		98	40-140			
Aroclor 1260	0.481	0.0500	mg/kg wet	0.5000		96	40-140			
Surrogate: Decachlorobiphenyl	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
LCS Dup										
Aroclor 1016	0.531	0.0500	mg/kg wet	0.5000		106	40-140	8	30	
Aroclor 1260	0.517	0.0500	mg/kg wet	0.5000		103	40-140	7	30	
Surrogate: Decachlorobiphenyl	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Batch CC42031 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403346

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42031 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42031 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0257*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0187*		mg/kg wet	*0.02500*		*75*	*30-150*			

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42031 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS										
Aroclor 1016	0.515	0.0500	mg/kg wet	0.5000		103	40-140			
Aroclor 1260	0.510	0.0500	mg/kg wet	0.5000		102	40-140			
Surrogate: Decachlorobiphenyl	*0.0273*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS Dup										
Aroclor 1016	0.524	0.0500	mg/kg wet	0.5000		105	40-140	2	30	
Aroclor 1260	0.517	0.0500	mg/kg wet	0.5000		103	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0264*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0221*		mg/kg wet	*0.02500*		*89*	*30-150*			
Batch CC42404 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42404 - 3540C										
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42404 - 3540C										
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS										
Aroclor 1016	0.440	0.0250	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.454	0.0250	mg/kg wet	0.5000		91	40-140			
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0257*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS Dup										
Aroclor 1016	0.448	0.0250	mg/kg wet	0.5000		90	40-140	2	30	
Aroclor 1260	0.471	0.0250	mg/kg wet	0.5000		94	40-140	4	30	

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42404 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			

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Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
S-	Surrogate recovery(ies) below lower control limit (S-).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403346

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030346
Date Project Due: 3/28/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: **1.6**
   Iced With: **Ice**
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample ~~Yes~~ No as 3/21/14
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? Yes | No
17. Were samples received intact? Yes | No
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

Missing jars: N-46 (24-36); 6-31 (12-24)

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP

Completed By: [signature] Date/Time: 3/21/14 1145
Reviewed By: MEK Date/Time: 3/21/14 1150

1 of 2 ~~3 of 10~~ out 3/21/14

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403346

Turn Time _____ Standard Other TSCA

Reporting Limits - < 1 ppm

Regulatory State: (MA) RI CT NH NJ NY ME Other_____

Electonic Deliverables Excel Access PDF

Is this project for any of the following:(please circle)
(MA-MCP) Navy USACE CT DEP Other TSCA

Co. Name: Tighe & Bond
Project #: N-1011
Project Name: Polyply
Contact Person: Mike Martin
Address: 4 Barlows Landing Rd, Unit 1S
City: Pocasset
State: MA
Zip: 02559
PO #:
Tel. 508-564-7285
Fax. 508-564-4298
email: mmartin@tighebond.com

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
01	3/20/14	0905	Grab	Soil	J-30 (24-36)	NP	1	Glass	4 oz	X
02		0903			J-31 (24-36)					
03		0900			J-32 (24-36)					
04		855			J-33 (24-36)					
05		0850			J-34 (24-36)					
06		1430			J-46 (24-36)					
07		1400			K-45 (36-48)					
08		1403			K-46 (12-24)					
09		1405			K-46 (24-36)					
10		1420			K-48 (0-12)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: Holl. Lamb

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		COOLER 3/21/14 09:44	3/21/14 09:44
Relinquished by: (Signature, Date & Time) 3/21/14 10:44	Received by: (Signature, Date & Time) 3/21/14 10:44	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

2 of 2 ~~4 of 10~~ 3/21/14

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Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403346

Turn Time X Standard Other TSCA

Reporting Limits - < 1 ppm

Regulatory State: MA RI CT NH NJ NY ME Other

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond

Project # N-1011

Project Name: Polyply

Contact Person: Mike Martin

Address: 4 Barlows Landing Rd

City: Pocasset

State: MA

Zip: 02559

PO #

Tel.

Fax.

email:

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
11 11	3/20/14	1425	Grab	Soil	K-50 (0-12)	NP	1	Glass	4 oz	X
12 12		1305			N-46 (12-24)					
13		1310			~~N-46 (24-36)~~					*
13 14		1040			G-28 (12-24)					
14 15		1045			G-29 (12-24)					
15 16		1058			G-30 (12-24)					
17		1110			~~G-31 (12-24)~~					*
16 18		1120			G-32 (12-24)					
17 19		1125			G-33 (12-24)					
18 20	3/21/14	1130			G-34 (12-24)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ____Yes ____No

Seals Intact ____ Yes ____No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 Ice KH

Internal Use Only
[ ] Pickup
[ ] Technician

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-

Sampled by: Holl, Lamb

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		Cooler 3/21/14 09:44	3/21/14 09:44
3/21/14 10:44	3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

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*samples were not received - eo 3/24/14

1 of 2 ~~3 of 10~~ out 3/21/14

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CHAIN OF CUSTODY

ESS Lab # 1403346

Turn Time _____ Standard Other TSCA

Reporting Limits - < 1 ppm

Regulatory State: (MA) RI CT NH NJ NY ME Other_____

Electonic Deliverables Excel Access PDF

Is this project for any of the following:(please circle)
(MA-MCP) Navy USACE CT DEP Other TSCA

Co. Name: Tighe & Bond
Project #: N-1011
Project Name: Polyply
Contact Person: Mike Martin
Address: 4 Barlows Landing Rd, Unit 1S
City: Pocasset
State: MA
Zip: 02559
PO #:
Tel. 508-564-7285
Fax. 508-564-4298
email: mmartin@tighebond.com

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
01	3/20/14	0905	Grab	Soil	J-30 (24-36)	NP	1	Glass	4 oz	X
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04		855			J-33 (24-36)					
05		0850			J-34 (24-36)					
06		1430			J-46 (24-36)					
07		1400			K-45 (36-48)					
08		1403			K-46 (12-24)					
09		1405			K-46 (24-36)					
10		1420			K-48 (0-12)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: Holl. Lamb

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		COOLER 3/21/14 09:44	3/21/14 09:44
Relinquished by: (Signature, Date & Time) 3/21/14 10:44	Received by: (Signature, Date & Time) 3/21/14 10:44	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

2 of 2 ~~4 of 10~~ 3/21/14

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CHAIN OF CUSTODY

ESS Lab # 1403346

Turn Time X Standard Other TSCA

Reporting Limits - < 1 ppm

Regulatory State: MA RI CT NH NJ NY ME Other

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond
Project #: N-1011
Project Name: Polyply
Contact Person: Mike Martin
Address: 4 Barlows Landing Rd
City: Pocasset
State: MA
Zip: 02559
PO #:
Tel.:
Fax.:
email:

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
11 11	3/20/14	1425	Grab	Soil	K-50 (0-12)	NP	1	Glass	4 oz	X
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13 14		1040			G-28 (12-24)					
14 15		1045			G-29 (12-24)					
15 16		1058			G-30 (12-24)					
17		1110			G-31 (12-24)					
16 18		1120			G-32 (12-24)					
17 19		1125			G-33 (12-24)					
18 20	3/21/14	1130			G-34 (12-24)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ____Yes ____No

Seals Intact ____ Yes ____No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 ICE KH

Internal Use Only
[ ] Pickup
[ ] Technician

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-

Sampled by: Holl, Lamb

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		Cooler 3/21/14 09:44	3/21/14 09:44
3/21/14 10:44	3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403347

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 11:41 am, Mar 27, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403347

SAMPLE RECEIPT

The following samples were received on March 21, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403347-01	G-42 36-48	Soil	8082A
1403347-02	G-43 36-48	Soil	8082A
1403347-03	G-44 36-48	Soil	8082A
1403347-04	G-46 24-36	Soil	8082A
1403347-05	H-29 24-36	Soil	8082A
1403347-06	H-30 36-48	Soil	8082A
1403347-07	H-31 24-36	Soil	8082A
1403347-08	H-32 24-36	Soil	8082A
1403347-09	H-33 24-36	Soil	8082A
1403347-10	H-45 24-36	Soil	8082A
1403347-11	H-46 24-36	Soil	8082A
1403347-12	L-39 48-60	Soil	8082A
1403347-13	L-40 48-60	Soil	8082A
1403347-14	L-41 48-60	Soil	8082A
1403347-15	L-45 36-48	Soil	8082A
1403347-16	L-46 12-24	Soil	8082A
1403347-17	L-46 26-36	Soil	8082A
1403347-18	L-48 12-24	Soil	8082A
1403347-19	L-49 12-24	Soil	8082A
1403347-20	L-51 1402	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403347

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403347-03 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (231% @ 30-150%), Tetrachloro-m-xylene (155% @ 30-150%)

1403347-12 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403347-15 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1248

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403347

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403347

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403347-01 through 1403347-20**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

All negative responses must be addressed in an attached laboratory 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: Laurel Stoddard
Date: March 27, 2014
Printed Name: Laurel Stoddard
Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G-42 36-48
Date Sampled: 03/19/14 10:00
Percent Solids: 24
Initial Volume: 20.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.198)		8082A		1	03/23/14 1:31		CC42031
Aroclor 1221	ND (0.198)		8082A		1	03/23/14 1:31		CC42031
Aroclor 1232	ND (0.198)		8082A		1	03/23/14 1:31		CC42031
Aroclor 1242	ND (0.198)		8082A		1	03/23/14 1:31		CC42031
Aroclor 1248	**1.56** (0.198)		8082A		1	03/23/14 1:31		CC42031
Aroclor 1254	ND (0.198)		8082A		1	03/23/14 1:31		CC42031
Aroclor 1260	ND (0.198)		8082A		1	03/23/14 1:31		CC42031
Aroclor 1262	ND (0.198)		8082A		1	03/23/14 1:31		CC42031
Aroclor 1268	ND (0.198)		8082A		1	03/23/14 1:31		CC42031

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*33 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*51 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*41 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G-43 36-48
Date Sampled: 03/20/14 10:08
Percent Solids: 51
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0981)		8082A		1	03/23/14 1:50		CC42031
Aroclor 1221	ND (0.0981)		8082A		1	03/23/14 1:50		CC42031
Aroclor 1232	ND (0.0981)		8082A		1	03/23/14 1:50		CC42031
Aroclor 1242	**19.0** (0.981)		8082A		10	03/24/14 16:58		CC42031
Aroclor 1248	ND (0.0981)		8082A		1	03/23/14 1:50		CC42031
Aroclor 1254	ND (0.0981)		8082A		1	03/23/14 1:50		CC42031
Aroclor 1260	ND (0.0981)		8082A		1	03/23/14 1:50		CC42031
Aroclor 1262	ND (0.0981)		8082A		1	03/23/14 1:50		CC42031
Aroclor 1268	ND (0.0981)		8082A		1	03/23/14 1:50		CC42031

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*107 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G-44 36-48
Date Sampled: 03/20/14 10:45
Percent Solids: 20
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.246)		8082A		1	03/23/14 2:08		CC42031
Aroclor 1221	ND (0.246)		8082A		1	03/23/14 2:08		CC42031
Aroclor 1232	ND (0.246)		8082A		1	03/23/14 2:08		CC42031
Aroclor 1242	ND (0.246)		8082A		1	03/23/14 2:08		CC42031
Aroclor 1248	**8.65** (1.23)		8082A		5	03/23/14 20:35		CC42031
Aroclor 1254	ND (0.246)		8082A		1	03/23/14 2:08		CC42031
Aroclor 1260	ND (0.246)		8082A		1	03/23/14 2:08		CC42031
Aroclor 1262	ND (0.246)		8082A		1	03/23/14 2:08		CC42031
Aroclor 1268	ND (0.246)		8082A		1	03/23/14 2:08		CC42031

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*231 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*155 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G-46 24-36
Date Sampled: 03/20/14 14:40
Percent Solids: 18
Initial Volume: 20.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.271)		8082A		1	03/23/14 2:27		CC42031
Aroclor 1221	ND (0.271)		8082A		1	03/23/14 2:27		CC42031
Aroclor 1232	ND (0.271)		8082A		1	03/23/14 2:27		CC42031
Aroclor 1242	ND (0.271)		8082A		1	03/23/14 2:27		CC42031
Aroclor 1248	**0.713** (0.271)		8082A		1	03/23/14 2:27		CC42031
Aroclor 1254	ND (0.271)		8082A		1	03/23/14 2:27		CC42031
Aroclor 1260	ND (0.271)		8082A		1	03/23/14 2:27		CC42031
Aroclor 1262	ND (0.271)		8082A		1	03/23/14 2:27		CC42031
Aroclor 1268	ND (0.271)		8082A		1	03/23/14 2:27		CC42031

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*107 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*39 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*34 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*35 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-29 24-36
Date Sampled: 03/20/14 10:35
Percent Solids: 83
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0595)		8082A		1	03/23/14 2:46		CC42031
Aroclor 1221	ND (0.0595)		8082A		1	03/23/14 2:46		CC42031
Aroclor 1232	ND (0.0595)		8082A		1	03/23/14 2:46		CC42031
Aroclor 1242	**0.529** (0.0595)		8082A		1	03/23/14 2:46		CC42031
Aroclor 1248	ND (0.0595)		8082A		1	03/23/14 2:46		CC42031
Aroclor 1254	ND (0.0595)		8082A		1	03/23/14 2:46		CC42031
Aroclor 1260	ND (0.0595)		8082A		1	03/23/14 2:46		CC42031
Aroclor 1262	ND (0.0595)		8082A		1	03/23/14 2:46		CC42031
Aroclor 1268	ND (0.0595)		8082A		1	03/23/14 2:46		CC42031

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-30 36-48
Date Sampled: 03/20/14 10:30
Percent Solids: 87
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0555)		8082A		1	03/23/14 3:05		CC42031
Aroclor 1221	ND (0.0555)		8082A		1	03/23/14 3:05		CC42031
Aroclor 1232	ND (0.0555)		8082A		1	03/23/14 3:05		CC42031
Aroclor 1242	**0.0723** (0.0555)		8082A		1	03/23/14 3:05		CC42031
Aroclor 1248	ND (0.0555)		8082A		1	03/23/14 3:05		CC42031
Aroclor 1254	ND (0.0555)		8082A		1	03/23/14 3:05		CC42031
Aroclor 1260	ND (0.0555)		8082A		1	03/23/14 3:05		CC42031
Aroclor 1262	ND (0.0555)		8082A		1	03/23/14 3:05		CC42031
Aroclor 1268	ND (0.0555)		8082A		1	03/23/14 3:05		CC42031

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-31 24-36
Date Sampled: 03/20/14 10:20
Percent Solids: 78
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0616)		8082A		1	03/23/14 3:24		CC42031
Aroclor 1221	ND (0.0616)		8082A		1	03/23/14 3:24		CC42031
Aroclor 1232	ND (0.0616)		8082A		1	03/23/14 3:24		CC42031
Aroclor 1242	ND (0.0616)		8082A		1	03/23/14 3:24		CC42031
Aroclor 1248	**0.198** (0.0616)		8082A		1	03/23/14 3:24		CC42031
Aroclor 1254	ND (0.0616)		8082A		1	03/23/14 3:24		CC42031
Aroclor 1260	ND (0.0616)		8082A		1	03/23/14 3:24		CC42031
Aroclor 1262	ND (0.0616)		8082A		1	03/23/14 3:24		CC42031
Aroclor 1268	ND (0.0616)		8082A		1	03/23/14 3:24		CC42031

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*39 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*35 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*37 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-32 24-36
Date Sampled: 03/20/14 10:10
Percent Solids: 86
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0562)		8082A		1	03/23/14 3:43		CC42031
Aroclor 1221	ND (0.0562)		8082A		1	03/23/14 3:43		CC42031
Aroclor 1232	ND (0.0562)		8082A		1	03/23/14 3:43		CC42031
Aroclor 1242	**0.200** (0.0562)		8082A		1	03/23/14 3:43		CC42031
Aroclor 1248	ND (0.0562)		8082A		1	03/23/14 3:43		CC42031
Aroclor 1254	ND (0.0562)		8082A		1	03/23/14 3:43		CC42031
Aroclor 1260	ND (0.0562)		8082A		1	03/23/14 3:43		CC42031
Aroclor 1262	ND (0.0562)		8082A		1	03/23/14 3:43		CC42031
Aroclor 1268	ND (0.0562)		8082A		1	03/23/14 3:43		CC42031

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*114 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*105 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*104 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-33 24-36
Date Sampled: 03/20/14 10:00
Percent Solids: 83
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0584)		8082A		1	03/23/14 4:01		CC42031
Aroclor 1221	ND (0.0584)		8082A		1	03/23/14 4:01		CC42031
Aroclor 1232	ND (0.0584)		8082A		1	03/23/14 4:01		CC42031
Aroclor 1242	ND (0.0584)		8082A		1	03/23/14 4:01		CC42031
Aroclor 1248	**0.420** (0.0584)		8082A		1	03/23/14 4:01		CC42031
Aroclor 1254	ND (0.0584)		8082A		1	03/23/14 4:01		CC42031
Aroclor 1260	ND (0.0584)		8082A		1	03/23/14 4:01		CC42031
Aroclor 1262	ND (0.0584)		8082A		1	03/23/14 4:01		CC42031
Aroclor 1268	ND (0.0584)		8082A		1	03/23/14 4:01		CC42031

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*108 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*106 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*101 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-45 24-36
Date Sampled: 03/20/14 14:35
Percent Solids: 16
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.317)		8082A		1	03/23/14 4:20		CC42031
Aroclor 1221	ND (0.317)		8082A		1	03/23/14 4:20		CC42031
Aroclor 1232	ND (0.317)		8082A		1	03/23/14 4:20		CC42031
Aroclor 1242	ND (0.317)		8082A		1	03/23/14 4:20		CC42031
Aroclor 1248	**4.88** (1.58)		8082A		5	03/24/14 16:20		CC42031
Aroclor 1254	ND (0.317)		8082A		1	03/23/14 4:20		CC42031
Aroclor 1260	ND (0.317)		8082A		1	03/23/14 4:20		CC42031
Aroclor 1262	ND (0.317)		8082A		1	03/23/14 4:20		CC42031
Aroclor 1268	ND (0.317)		8082A		1	03/23/14 4:20		CC42031

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-46 24-36
Date Sampled: 03/20/14 14:38
Percent Solids: 16
Initial Volume: 20.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.291)		8082A		1	03/23/14 4:39		CC42031
Aroclor 1221	ND (0.291)		8082A		1	03/23/14 4:39		CC42031
Aroclor 1232	ND (0.291)		8082A		1	03/23/14 4:39		CC42031
Aroclor 1242	ND (0.291)		8082A		1	03/23/14 4:39		CC42031
Aroclor 1248	**0.947** (0.291)		8082A		1	03/23/14 4:39		CC42031
Aroclor 1254	ND (0.291)		8082A		1	03/23/14 4:39		CC42031
Aroclor 1260	ND (0.291)		8082A		1	03/23/14 4:39		CC42031
Aroclor 1262	ND (0.291)		8082A		1	03/23/14 4:39		CC42031
Aroclor 1268	ND (0.291)		8082A		1	03/23/14 4:39		CC42031

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*121 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-39 48-60
Date Sampled: 03/20/14 14:48
Percent Solids: 78
Initial Volume: 20.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (30.5)		8082A		500	03/23/14 20:53		CC42031
Aroclor 1221	ND (30.5)		8082A		500	03/23/14 20:53		CC42031
Aroclor 1232	ND (30.5)		8082A		500	03/23/14 20:53		CC42031
Aroclor 1242	ND (30.5)		8082A		500	03/23/14 20:53		CC42031
Aroclor 1248	**427** (30.5)		8082A		500	03/23/14 20:53		CC42031
Aroclor 1254	ND (30.5)		8082A		500	03/23/14 20:53		CC42031
Aroclor 1260	ND (30.5)		8082A		500	03/23/14 20:53		CC42031
Aroclor 1262	ND (30.5)		8082A		500	03/23/14 20:53		CC42031
Aroclor 1268	ND (30.5)		8082A		500	03/23/14 20:53		CC42031

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-40 48-60
Date Sampled: 03/20/14 14:45
Percent Solids: 83
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0592)		8082A		1	03/23/14 21:12		CC42031
Aroclor 1221	ND (0.0592)		8082A		1	03/23/14 21:12		CC42031
Aroclor 1232	**7.57** (0.592)		8082A		10	03/24/14 16:01		CC42031
Aroclor 1242	ND (0.0592)		8082A		1	03/23/14 21:12		CC42031
Aroclor 1248	ND (0.0592)		8082A		1	03/23/14 21:12		CC42031
Aroclor 1254	ND (0.0592)		8082A		1	03/23/14 21:12		CC42031
Aroclor 1260	ND (0.0592)		8082A		1	03/23/14 21:12		CC42031
Aroclor 1262	ND (0.0592)		8082A		1	03/23/14 21:12		CC42031
Aroclor 1268	ND (0.0592)		8082A		1	03/23/14 21:12		CC42031

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*111 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*110 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*124 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*103 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-41 48-60
Date Sampled: 03/20/14 14:50
Percent Solids: 22
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.236)		8082A		1	03/23/14 5:36		CC42031
Aroclor 1221	ND (0.236)		8082A		1	03/23/14 5:36		CC42031
Aroclor 1232	ND (0.236)		8082A		1	03/23/14 5:36		CC42031
Aroclor 1242	ND (0.236)		8082A		1	03/23/14 5:36		CC42031
Aroclor 1248	**9.35** (1.18)		8082A		5	03/23/14 21:32		CC42031
Aroclor 1254	ND (0.236)		8082A		1	03/23/14 5:36		CC42031
Aroclor 1260	ND (0.236)		8082A		1	03/23/14 5:36		CC42031
Aroclor 1262	ND (0.236)		8082A		1	03/23/14 5:36		CC42031
Aroclor 1268	ND (0.236)		8082A		1	03/23/14 5:36		CC42031

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-45 36-48
Date Sampled: 03/20/14 13:48
Percent Solids: 14
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.349)		8082A		1	03/23/14 5:54		CC42031
Aroclor 1221	ND (0.349)		8082A		1	03/23/14 5:54		CC42031
Aroclor 1232	ND (0.349)		8082A		1	03/23/14 5:54		CC42031
Aroclor 1242	ND (0.349)		8082A		1	03/23/14 5:54		CC42031
Aroclor 1248	**P 6.78** (0.349)		8082A		1	03/23/14 5:54		CC42031
Aroclor 1254	ND (0.349)		8082A		1	03/23/14 5:54		CC42031
Aroclor 1260	ND (0.349)		8082A		1	03/23/14 5:54		CC42031
Aroclor 1262	ND (0.349)		8082A		1	03/23/14 5:54		CC42031
Aroclor 1268	ND (0.349)		8082A		1	03/23/14 5:54		CC42031

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*59 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-46 12-24
Date Sampled: 03/20/14 13:50
Percent Solids: 53
Initial Volume: 30.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0621)		8082A		1	03/25/14 17:07		CC42404
Aroclor 1221	ND (0.0621)		8082A		1	03/25/14 17:07		CC42404
Aroclor 1232	ND (0.0621)		8082A		1	03/25/14 17:07		CC42404
Aroclor 1242	ND (0.0621)		8082A		1	03/25/14 17:07		CC42404
Aroclor 1248	**5.12** (0.621)		8082A		10	03/26/14 0:03		CC42404
Aroclor 1254	ND (0.0621)		8082A		1	03/25/14 17:07		CC42404
Aroclor 1260	ND (0.0621)		8082A		1	03/25/14 17:07		CC42404
Aroclor 1262	ND (0.0621)		8082A		1	03/25/14 17:07		CC42404
Aroclor 1268	ND (0.0621)		8082A		1	03/25/14 17:07		CC42404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*116 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-46 26-36
Date Sampled: 03/20/14 13:52
Percent Solids: 18
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 17:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.278)		8082A		1	03/23/14 8:25		CC42031
Aroclor 1221	ND (0.278)		8082A		1	03/23/14 8:25		CC42031
Aroclor 1232	ND (0.278)		8082A		1	03/23/14 8:25		CC42031
Aroclor 1242	ND (0.278)		8082A		1	03/23/14 8:25		CC42031
Aroclor 1248	**2.38** (0.278)		8082A		1	03/23/14 8:25		CC42031
Aroclor 1254	ND (0.278)		8082A		1	03/23/14 8:25		CC42031
Aroclor 1260	ND (0.278)		8082A		1	03/23/14 8:25		CC42031
Aroclor 1262	ND (0.278)		8082A		1	03/23/14 8:25		CC42031
Aroclor 1268	ND (0.278)		8082A		1	03/23/14 8:25		CC42031

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*110 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-48 12-24
Date Sampled: 03/20/14 13:56
Percent Solids: 16
Initial Volume: 5.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/22/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.07)		8082A		1	03/24/14 10:47		CC42121
Aroclor 1221	ND (1.07)		8082A		1	03/24/14 10:47		CC42121
Aroclor 1232	ND (1.07)		8082A		1	03/24/14 10:47		CC42121
Aroclor 1242	ND (1.07)		8082A		1	03/24/14 10:47		CC42121
Aroclor 1248	**1.13** (1.07)		8082A		1	03/24/14 10:47		CC42121
Aroclor 1254	ND (1.07)		8082A		1	03/24/14 10:47		CC42121
Aroclor 1260	ND (1.07)		8082A		1	03/24/14 10:47		CC42121
Aroclor 1262	ND (1.07)		8082A		1	03/24/14 10:47		CC42121
Aroclor 1268	ND (1.07)		8082A		1	03/24/14 10:47		CC42121

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*109 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-49 12-24
Date Sampled: 03/20/14 13:58
Percent Solids: 16
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.310)		8082A		1	03/22/14 21:13		CC42032
Aroclor 1221	ND (0.310)		8082A		1	03/22/14 21:13		CC42032
Aroclor 1232	ND (0.310)		8082A		1	03/22/14 21:13		CC42032
Aroclor 1242	ND (0.310)		8082A		1	03/22/14 21:13		CC42032
Aroclor 1248	**0.900** (0.310)		8082A		1	03/22/14 21:13		CC42032
Aroclor 1254	ND (0.310)		8082A		1	03/22/14 21:13		CC42032
Aroclor 1260	ND (0.310)		8082A		1	03/22/14 21:13		CC42032
Aroclor 1262	ND (0.310)		8082A		1	03/22/14 21:13		CC42032
Aroclor 1268	ND (0.310)		8082A		1	03/22/14 21:13		CC42032

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-51 1402
Date Sampled: 03/20/14 14:02
Percent Solids: 15
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403347
ESS Laboratory Sample ID: 1403347-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.169)		8082A		1	03/22/14 21:32		CC42032
Aroclor 1221	ND (0.169)		8082A		1	03/22/14 21:32		CC42032
Aroclor 1232	ND (0.169)		8082A		1	03/22/14 21:32		CC42032
Aroclor 1242	ND (0.169)		8082A		1	03/22/14 21:32		CC42032
Aroclor 1248	**0.332** (0.169)		8082A		1	03/22/14 21:32		CC42032
Aroclor 1254	ND (0.169)		8082A		1	03/22/14 21:32		CC42032
Aroclor 1260	ND (0.169)		8082A		1	03/22/14 21:32		CC42032
Aroclor 1262	ND (0.169)		8082A		1	03/22/14 21:32		CC42032
Aroclor 1268	ND (0.169)		8082A		1	03/22/14 21:32		CC42032

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*112 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403347

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42031 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403347

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42031 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403347

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42031 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0257*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0187*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS										
Aroclor 1016	0.515	0.0500	mg/kg wet	0.5000		103	40-140			
Aroclor 1260	0.510	0.0500	mg/kg wet	0.5000		102	40-140			
Surrogate: Decachlorobiphenyl	*0.0273*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS Dup										
Aroclor 1016	0.524	0.0500	mg/kg wet	0.5000		105	40-140	2	30	
Aroclor 1260	0.517	0.0500	mg/kg wet	0.5000		103	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0264*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0221*		mg/kg wet	*0.02500*		*89*	*30-150*			
Batch CC42032 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42032 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

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Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42032 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42032 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
LCS										
Aroclor 1016	0.557	0.0500	mg/kg wet	0.5000		111	40-140			
Aroclor 1260	0.551	0.0500	mg/kg wet	0.5000		110	40-140			
Surrogate: Decachlorobiphenyl	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0268*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
LCS Dup										
Aroclor 1016	0.528	0.0500	mg/kg wet	0.5000		106	40-140	5	30	
Aroclor 1260	0.527	0.0500	mg/kg wet	0.5000		105	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Batch CC42121 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42121 - 3540C										
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42121 - 3540C										
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0209*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
LCS										
Aroclor 1016	0.507	0.0500	mg/kg wet	0.5000		101	40-140			
Aroclor 1260	0.516	0.0500	mg/kg wet	0.5000		103	40-140			
Surrogate: Decachlorobiphenyl	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS Dup										
Aroclor 1016	0.543	0.0500	mg/kg wet	0.5000		109	40-140	7	30	
Aroclor 1260	0.550	0.0500	mg/kg wet	0.5000		110	40-140	6	30	

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Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42121 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0266*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0271*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
Batch CC42404 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403347

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42404 - 3540C										
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403347

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42404 - 3540C										
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS										
Aroclor 1016	0.440	0.0250	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.454	0.0250	mg/kg wet	0.5000		91	40-140			
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0257*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS Dup										
Aroclor 1016	0.448	0.0250	mg/kg wet	0.5000		90	40-140	2	30	
Aroclor 1260	0.471	0.0250	mg/kg wet	0.5000		94	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford ESS Laboratory Work Order: 1403347

Notes and Definitions

U	Analyte included in the analysis, but not detected
SM	Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
SD	Surrogate recovery(ies) diluted below the MRL (SD).
P	Percent difference between primary and confirmation results exceeds 40% (P).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403347

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030347
Date Project Due: 3/28/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: ~~5.0~~ * 1.6 eo 3/24/14
   Iced With: Ice
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample No ~~Yes~~ as 3/21/14
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? Yes | No
17. Were samples received intact? Yes | No
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.
Sample 6 has mismatching depths - Bottle Status 36-48 + COC states 24-36. Sample 17 chain=6-46(24-36); Label=(26-36)
Times on chain do not match labels.

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: [signature] Date/Time: 3/21/14 1154
Reviewed By: [signature] Date/Time: 3/21/14 1200

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403347

Turn Time _____ Standard Other _____

Regulatory State: (MA) RI CT NH NJ NY ME Other TSCA

Reporting Limits - < 1 ppm

Is this project for any of the following:(please circle)
(MA-MCP) Navy USACE CT DEP Other TSCA

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond
Project #: N-1011
Project Name: Polyply
Contact Person: Mike Martin
Address: 4 Barlows Landing Rd, Unit 1S
City: Pocasset
State: MA
Zip: 02559
PO #:
Tel. 508-564-7285
Fax. 508-564-7298
email: memartin@tighebond.com

Analysis: PCB

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCB
11	1438	3/20/14	Grab	Soil	H-46 (24-36)	NP	1	Glass	4 oz	X
12	1448				L-39 (48-60)					
13	1445				L-40 (48-60)					
14	1450				L-41 (48-60)					
15	1348				L-45 (36-48)					
16	1350				L-46 (12-24)					
17	1352				~~L-46 (24-36)~~ L-46 26-36	*				
18	1356				L-48 (12-24)					
19	1358				L-49 (12-24)					
20	1402				L-51 (1402)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: Holli Lamb *use ID on jars per client eo 3/26/14

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		COOLER 3/21/14 09:44	K Hallahan 3/21/14 09:44
K Hallahan 3/21/14 10:44	M Mzid 3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

1 of 2 ~~5 of 10~~

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403347

Turn Time ✓ Standard Other _____

Regulatory State: MA RI CT NH NJ NY ME Other TSCA

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other TSCA

Reporting Limits - < 1ppm

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond	Project #: N-1011	Project Name: Polyply	
Contact Person: Mike Martin	Address: 4 Barlows Landing Rd, Unit 15		
City: Pocasset	State: MA	Zip: 02559	PO #:
Tel.	Fax.	email:	

Analysis

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container
01	3/19/14	1000	Grab	Soil	G-42 (36-48)	NP	1	Glass	4oz
02		1008			G-43 (36-48)				
03		1045			G-44 (36-48)				
04	3/20/14	1440			G-46 (24-36)				
05		1035			H-29 (24-36)				
06		1030			~~H-30 (24-36)~~ H-30 34-36 *				
07		1020			H-31 (24-36)				
08		1010			H-32 (24-36)				
09		1000			H-33 (24-36)				
10		1435			H-45 (24-36)				

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ___ No

Seals Intact ___ Yes ___ No NA: ✓

Cooler Temperature: 16+50+2-0 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by :

Comments: *use ID on jars per client eo 3/26/14

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
[signature] 3/21/14		COOLER 3/21/14 09:44	K. Hallahan 3/21/14 09:44
K. Hallahan 3/21/14 10:44	[signature] 3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

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CHAIN OF CUSTODY

ESS Lab # 1403347

Turn Time _____ Standard Other _____

Regulatory State: (MA) RI CT NH NJ NY ME Other TSCA

Reporting Limits - < 1 ppm

Is this project for any of the following:(please circle)
(MA-MCP) Navy USACE CT DEP Other TSCA

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond
Project #: N-1011
Project Name: Polyply
Contact Person: Mike Martin
Address: 4 Barlows Landing Rd, Unit 15
City: Pocasset
State: MA
Zip: 02559
PO #:
Tel. 508-564-7285
Fax. 508-564-7298
email: memartin@tighebond.com

Analysis: PCB

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCB
11	1438	3/20/14	Grab	Soil	H-46 (24-36)	NP	1	Glass	4 oz	X
12	1448				L-39 (48-60)					
13	1445				L-40 (48-60)					
14	1450				L-41 (48-60)					
15	1348				L-45 (36-48)					
16	1350				L-46 (12-24)					
17	1352				L-46 (24-36)					
18	1356				L-48 (12-24)					
19	1358				L-49 (12-24)					
20	1402				L-51 (1402)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: Holli Lamb

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		COOLER 3/21/14 09:44	K Hallahan 3/21/14 09:44
K Hallahan 3/21/14 10:44	M Mzid 3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

1 of 2 ~~5 of 10~~

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CHAIN OF CUSTODY

ESS Lab # 1403347

Turn Time ✓ Standard Other _____

Regulatory State: MA RI CT NH NJ NY ME Other TSCA

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other TSCA

Reporting Limits - < 1ppm

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond	Project #: N-1011	Project Name: Polyply	
Contact Person: Mike Martin	Address: 4 Barlows Landing Rd, Unit 15		
City: Pocasset	State: MA	Zip: 02559	PO #:
Tel.	Fax.	email:	

Analysis

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container
01	3/19/14	1000	Grab	Soil	G-42 (36-48)	NP	1	Glass	4oz
02		1008			G-43 (36-48)				
03		1045			G-44 (36-48)				
04	3/20/14	1440			G-46 (24-36)				
05		1035			H-29 (24-36)				
06		1030			H-30 (24-36)				
07		1020			H-31 (24-36)				
08		1010			H-32 (24-36)				
09		1000			H-33 (24-36)				
10		1435			H-45 (24-36)				

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 16+50+2-0 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technician ___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by :

Comments:

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
[signature] 3/21/14		COOLER 3/21/14 09:44	K. Hallahan 3/21/14 09:44
K. Hallahan 3/21/14 10:44	[signature] 3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403348

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 11:47 am, Mar 27, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403348

SAMPLE RECEIPT

The following samples were received on March 21, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403348-01	M-34 36-48	Soil	8082A
1403348-02	M-35 48-60	Soil	8082A
1403348-03	M-37 48-60	Soil	8082A
1403348-04	M-39 48-60	Soil	8082A
1403348-05	M-40 48-60	Soil	8082A
1403348-06	M-46 12-24	Soil	8082A
1403348-07	M-46 24-36	Soil	8082A
1403348-08	M-47 12-24	Soil	8082A
1403348-09	M-48 12-24	Soil	8082A
1403348-10	M-49 12-24	Soil	8082A
1403348-11	M-50 12-24	Soil	8082A
1403348-12	M-51 0-12	Soil	8082A
1403348-13	N-35 24-36	Soil	8082A
1403348-14	N-36 24-36	Soil	8082A
1403348-15	N-37 24-36	Soil	8082A
1403348-16	N-40 48-60	Soil	8082A
1403348-17	N-41 48-60	Soil	8082A
1403348-18	N-45 36-48	Soil	8082A
1403348-19	R-34 0-12	Soil	8082A
1403348-20	S-34 12-24	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403348

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403348-04 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403348-05 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403348-18 **Surrogate recovery(ies) below lower control limit (S-).**
Tetrachloro-m-xylene (25% @ 30-150%)

1403348-20 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403348

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403348

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403348-01 through 1403348-20**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: Laurel Stoddard
Date: March 27, 2014
Printed Name: Laurel Stoddard
Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-34 36-48
Date Sampled: 03/20/14 10:15
Percent Solids: 81
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0610)		8082A		1	03/22/14 21:50		CC42032
Aroclor 1221	ND (0.0610)		8082A		1	03/22/14 21:50		CC42032
Aroclor 1232	ND (0.0610)		8082A		1	03/22/14 21:50		CC42032
Aroclor 1242	ND (0.0610)		8082A		1	03/22/14 21:50		CC42032
Aroclor 1248	**1.38** (0.305)		8082A		5	03/23/14 19:17		CC42032
Aroclor 1254	ND (0.0610)		8082A		1	03/22/14 21:50		CC42032
Aroclor 1260	ND (0.0610)		8082A		1	03/22/14 21:50		CC42032
Aroclor 1262	ND (0.0610)		8082A		1	03/22/14 21:50		CC42032
Aroclor 1268	ND (0.0610)		8082A		1	03/22/14 21:50		CC42032

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*106 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*110 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*108 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*109 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-35 48-60
Date Sampled: 03/20/14 10:25
Percent Solids: 88
Initial Volume: 20.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0546)		8082A		1	03/23/14 0:03		CC42032
Aroclor 1221	ND (0.0546)		8082A		1	03/23/14 0:03		CC42032
Aroclor 1232	ND (0.0546)		8082A		1	03/23/14 0:03		CC42032
Aroclor 1242	ND (0.0546)		8082A		1	03/23/14 0:03		CC42032
Aroclor 1248	ND (0.0546)		8082A		1	03/23/14 0:03		CC42032
Aroclor 1254	ND (0.0546)		8082A		1	03/23/14 0:03		CC42032
Aroclor 1260	ND (0.0546)		8082A		1	03/23/14 0:03		CC42032
Aroclor 1262	ND (0.0546)		8082A		1	03/23/14 0:03		CC42032
Aroclor 1268	ND (0.0546)		8082A		1	03/23/14 0:03		CC42032

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*104 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*101 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-37 48-60
Date Sampled: 03/20/14 10:35
Percent Solids: 87
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0574)		8082A		1	03/23/14 0:22		CC42032
Aroclor 1221	ND (0.0574)		8082A		1	03/23/14 0:22		CC42032
Aroclor 1232	ND (0.0574)		8082A		1	03/23/14 0:22		CC42032
Aroclor 1242	ND (0.0574)		8082A		1	03/23/14 0:22		CC42032
Aroclor 1248	ND (0.0574)		8082A		1	03/23/14 0:22		CC42032
Aroclor 1254	ND (0.0574)		8082A		1	03/23/14 0:22		CC42032
Aroclor 1260	ND (0.0574)		8082A		1	03/23/14 0:22		CC42032
Aroclor 1262	ND (0.0574)		8082A		1	03/23/14 0:22		CC42032
Aroclor 1268	ND (0.0574)		8082A		1	03/23/14 0:22		CC42032

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-39 48-60
Date Sampled: 03/20/14 10:45
Percent Solids: 19
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/22/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (133)		8082A		500	03/24/14 15:42		CC42121
Aroclor 1221	ND (133)		8082A		500	03/24/14 15:42		CC42121
Aroclor 1232	ND (133)		8082A		500	03/24/14 15:42		CC42121
Aroclor 1242	ND (133)		8082A		500	03/24/14 15:42		CC42121
Aroclor 1248	**1830** (133)		8082A		500	03/24/14 15:42		CC42121
Aroclor 1254	ND (133)		8082A		500	03/24/14 15:42		CC42121
Aroclor 1260	ND (133)		8082A		500	03/24/14 15:42		CC42121
Aroclor 1262	ND (133)		8082A		500	03/24/14 15:42		CC42121
Aroclor 1268	ND (133)		8082A		500	03/24/14 15:42		CC42121

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-40 48-60
Date Sampled: 03/20/14 10:55
Percent Solids: 79
Initial Volume: 20.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (30.6)		8082A		500	03/24/14 19:14		CC42032
Aroclor 1221	ND (30.6)		8082A		500	03/24/14 19:14		CC42032
Aroclor 1232	**335** (30.6)		8082A		500	03/24/14 19:14		CC42032
Aroclor 1242	ND (30.6)		8082A		500	03/24/14 19:14		CC42032
Aroclor 1248	ND (30.6)		8082A		500	03/24/14 19:14		CC42032
Aroclor 1254	ND (30.6)		8082A		500	03/24/14 19:14		CC42032
Aroclor 1260	ND (30.6)		8082A		500	03/24/14 19:14		CC42032
Aroclor 1262	ND (30.6)		8082A		500	03/24/14 19:14		CC42032
Aroclor 1268	ND (30.6)		8082A		500	03/24/14 19:14		CC42032

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-46 12-24
Date Sampled: 03/20/14 13:05
Percent Solids: 19
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.252)		8082A		1	03/23/14 1:18		CC42032
Aroclor 1221	ND (0.252)		8082A		1	03/23/14 1:18		CC42032
Aroclor 1232	ND (0.252)		8082A		1	03/23/14 1:18		CC42032
Aroclor 1242	ND (0.252)		8082A		1	03/23/14 1:18		CC42032
Aroclor 1248	**6.26** (1.26)		8082A		5	03/23/14 19:55		CC42032
Aroclor 1254	ND (0.252)		8082A		1	03/23/14 1:18		CC42032
Aroclor 1260	ND (0.252)		8082A		1	03/23/14 1:18		CC42032
Aroclor 1262	ND (0.252)		8082A		1	03/23/14 1:18		CC42032
Aroclor 1268	ND (0.252)		8082A		1	03/23/14 1:18		CC42032

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*116 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-46 24-36
Date Sampled: 03/20/14 13:20
Percent Solids: 13
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.364)		8082A		1	03/23/14 1:37		CC42032
Aroclor 1221	ND (0.364)		8082A		1	03/23/14 1:37		CC42032
Aroclor 1232	ND (0.364)		8082A		1	03/23/14 1:37		CC42032
Aroclor 1242	ND (0.364)		8082A		1	03/23/14 1:37		CC42032
Aroclor 1248	**3.66** (0.364)		8082A		1	03/23/14 1:37		CC42032
Aroclor 1254	ND (0.364)		8082A		1	03/23/14 1:37		CC42032
Aroclor 1260	ND (0.364)		8082A		1	03/23/14 1:37		CC42032
Aroclor 1262	ND (0.364)		8082A		1	03/23/14 1:37		CC42032
Aroclor 1268	ND (0.364)		8082A		1	03/23/14 1:37		CC42032

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*130 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-47 12-24
Date Sampled: 03/20/14 13:25
Percent Solids: 17
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.280)		8082A		1	03/23/14 1:56		CC42032
Aroclor 1221	ND (0.280)		8082A		1	03/23/14 1:56		CC42032
Aroclor 1232	ND (0.280)		8082A		1	03/23/14 1:56		CC42032
Aroclor 1242	ND (0.280)		8082A		1	03/23/14 1:56		CC42032
Aroclor 1248	**9.41** (1.40)		8082A		5	03/23/14 20:14		CC42032
Aroclor 1254	ND (0.280)		8082A		1	03/23/14 1:56		CC42032
Aroclor 1260	ND (0.280)		8082A		1	03/23/14 1:56		CC42032
Aroclor 1262	ND (0.280)		8082A		1	03/23/14 1:56		CC42032
Aroclor 1268	ND (0.280)		8082A		1	03/23/14 1:56		CC42032

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*119 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-48 12-24
Date Sampled: 03/20/14 13:30
Percent Solids: 13
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.371)		8082A		1	03/23/14 2:15		CC42032
Aroclor 1221	ND (0.371)		8082A		1	03/23/14 2:15		CC42032
Aroclor 1232	ND (0.371)		8082A		1	03/23/14 2:15		CC42032
Aroclor 1242	ND (0.371)		8082A		1	03/23/14 2:15		CC42032
Aroclor 1248	**2.83** (0.371)		8082A		1	03/23/14 2:15		CC42032
Aroclor 1254	ND (0.371)		8082A		1	03/23/14 2:15		CC42032
Aroclor 1260	ND (0.371)		8082A		1	03/23/14 2:15		CC42032
Aroclor 1262	ND (0.371)		8082A		1	03/23/14 2:15		CC42032
Aroclor 1268	ND (0.371)		8082A		1	03/23/14 2:15		CC42032

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*134 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-49 12-24
Date Sampled: 03/20/14 13:40
Percent Solids: 15
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.342)		8082A		1	03/23/14 2:34		CC42032
Aroclor 1221	ND (0.342)		8082A		1	03/23/14 2:34		CC42032
Aroclor 1232	ND (0.342)		8082A		1	03/23/14 2:34		CC42032
Aroclor 1242	ND (0.342)		8082A		1	03/23/14 2:34		CC42032
Aroclor 1248	**5.78** (0.342)		8082A		1	03/23/14 2:34		CC42032
Aroclor 1254	ND (0.342)		8082A		1	03/23/14 2:34		CC42032
Aroclor 1260	ND (0.342)		8082A		1	03/23/14 2:34		CC42032
Aroclor 1262	ND (0.342)		8082A		1	03/23/14 2:34		CC42032
Aroclor 1268	ND (0.342)		8082A		1	03/23/14 2:34		CC42032

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*123 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-50 12-24
Date Sampled: 03/20/14 13:46
Percent Solids: 11
Initial Volume: 30.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.301)		8082A		1	03/23/14 2:53		CC42032
Aroclor 1221	ND (0.301)		8082A		1	03/23/14 2:53		CC42032
Aroclor 1232	ND (0.301)		8082A		1	03/23/14 2:53		CC42032
Aroclor 1242	ND (0.301)		8082A		1	03/23/14 2:53		CC42032
Aroclor 1248	**0.501** (0.301)		8082A		1	03/23/14 2:53		CC42032
Aroclor 1254	ND (0.301)		8082A		1	03/23/14 2:53		CC42032
Aroclor 1260	ND (0.301)		8082A		1	03/23/14 2:53		CC42032
Aroclor 1262	ND (0.301)		8082A		1	03/23/14 2:53		CC42032
Aroclor 1268	ND (0.301)		8082A		1	03/23/14 2:53		CC42032

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-51 0-12
Date Sampled: 03/20/14 12:45
Percent Solids: 14
Initial Volume: 19.3
Final Volume: 5
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0898)		8082A		1	03/26/14 17:34		CC42032
Aroclor 1221	ND (0.0898)		8082A		1	03/26/14 17:34		CC42032
Aroclor 1232	ND (0.0898)		8082A		1	03/26/14 17:34		CC42032
Aroclor 1242	ND (0.0898)		8082A		1	03/26/14 17:34		CC42032
Aroclor 1248	ND (0.0898)		8082A		1	03/26/14 17:34		CC42032
Aroclor 1254	ND (0.0898)		8082A		1	03/26/14 17:34		CC42032
Aroclor 1260	ND (0.0898)		8082A		1	03/26/14 17:34		CC42032
Aroclor 1262	ND (0.0898)		8082A		1	03/26/14 17:34		CC42032
Aroclor 1268	ND (0.0898)		8082A		1	03/26/14 17:34		CC42032

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*55 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-35 24-36
Date Sampled: 03/20/14 12:50
Percent Solids: 88
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0547)		8082A		1	03/23/14 3:31		CC42032
Aroclor 1221	ND (0.0547)		8082A		1	03/23/14 3:31		CC42032
Aroclor 1232	ND (0.0547)		8082A		1	03/23/14 3:31		CC42032
Aroclor 1242	ND (0.0547)		8082A		1	03/23/14 3:31		CC42032
Aroclor 1248	ND (0.0547)		8082A		1	03/23/14 3:31		CC42032
Aroclor 1254	ND (0.0547)		8082A		1	03/23/14 3:31		CC42032
Aroclor 1260	ND (0.0547)		8082A		1	03/23/14 3:31		CC42032
Aroclor 1262	ND (0.0547)		8082A		1	03/23/14 3:31		CC42032
Aroclor 1268	ND (0.0547)		8082A		1	03/23/14 3:31		CC42032

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*118 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*116 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-36 24-36
Date Sampled: 03/20/14 12:55
Percent Solids: 84
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0604)		8082A		1	03/23/14 3:50		CC42032
Aroclor 1221	ND (0.0604)		8082A		1	03/23/14 3:50		CC42032
Aroclor 1232	ND (0.0604)		8082A		1	03/23/14 3:50		CC42032
Aroclor 1242	ND (0.0604)		8082A		1	03/23/14 3:50		CC42032
Aroclor 1248	ND (0.0604)		8082A		1	03/23/14 3:50		CC42032
Aroclor 1254	ND (0.0604)		8082A		1	03/23/14 3:50		CC42032
Aroclor 1260	ND (0.0604)		8082A		1	03/23/14 3:50		CC42032
Aroclor 1262	ND (0.0604)		8082A		1	03/23/14 3:50		CC42032
Aroclor 1268	ND (0.0604)		8082A		1	03/23/14 3:50		CC42032

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*114 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*114 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*106 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-37 24-36
Date Sampled: 03/20/14 11:15
Percent Solids: 89
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0571)		8082A		1	03/23/14 4:09		CC42032
Aroclor 1221	ND (0.0571)		8082A		1	03/23/14 4:09		CC42032
Aroclor 1232	ND (0.0571)		8082A		1	03/23/14 4:09		CC42032
Aroclor 1242	ND (0.0571)		8082A		1	03/23/14 4:09		CC42032
Aroclor 1248	ND (0.0571)		8082A		1	03/23/14 4:09		CC42032
Aroclor 1254	ND (0.0571)		8082A		1	03/23/14 4:09		CC42032
Aroclor 1260	ND (0.0571)		8082A		1	03/23/14 4:09		CC42032
Aroclor 1262	ND (0.0571)		8082A		1	03/23/14 4:09		CC42032
Aroclor 1268	ND (0.0571)		8082A		1	03/23/14 4:09		CC42032

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*114 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*113 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-40 48-60
Date Sampled: 03/20/14 11:25
Percent Solids: 46
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.112)		8082A		1	03/23/14 4:28		CC42032
Aroclor 1221	ND (0.112)		8082A		1	03/23/14 4:28		CC42032
Aroclor 1232	ND (0.112)		8082A		1	03/23/14 4:28		CC42032
Aroclor 1242	ND (0.112)		8082A		1	03/23/14 4:28		CC42032
Aroclor 1248	**0.891** (0.112)		8082A		1	03/23/14 4:28		CC42032
Aroclor 1254	ND (0.112)		8082A		1	03/23/14 4:28		CC42032
Aroclor 1260	ND (0.112)		8082A		1	03/23/14 4:28		CC42032
Aroclor 1262	ND (0.112)		8082A		1	03/23/14 4:28		CC42032
Aroclor 1268	ND (0.112)		8082A		1	03/23/14 4:28		CC42032

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*144 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-41 48-60
Date Sampled: 03/20/14 11:35
Percent Solids: 87
Initial Volume: 19.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0596)		8082A		1	03/23/14 4:47		CC42032
Aroclor 1221	ND (0.0596)		8082A		1	03/23/14 4:47		CC42032
Aroclor 1232	ND (0.0596)		8082A		1	03/23/14 4:47		CC42032
Aroclor 1242	ND (0.0596)		8082A		1	03/23/14 4:47		CC42032
Aroclor 1248	ND (0.0596)		8082A		1	03/23/14 4:47		CC42032
Aroclor 1254	ND (0.0596)		8082A		1	03/23/14 4:47		CC42032
Aroclor 1260	ND (0.0596)		8082A		1	03/23/14 4:47		CC42032
Aroclor 1262	ND (0.0596)		8082A		1	03/23/14 4:47		CC42032
Aroclor 1268	ND (0.0596)		8082A		1	03/23/14 4:47		CC42032

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*118 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*117 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-45 36-48
Date Sampled: 03/20/14 13:00
Percent Solids: 59
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0865)		8082A		1	03/23/14 20:32		CC42032
Aroclor 1221	ND (0.0865)		8082A		1	03/23/14 20:32		CC42032
Aroclor 1232	ND (0.0865)		8082A		1	03/23/14 20:32		CC42032
Aroclor 1242	ND (0.0865)		8082A		1	03/23/14 20:32		CC42032
Aroclor 1248	**0.204** (0.0865)		8082A		1	03/23/14 20:32		CC42032
Aroclor 1254	ND (0.0865)		8082A		1	03/23/14 20:32		CC42032
Aroclor 1260	ND (0.0865)		8082A		1	03/23/14 20:32		CC42032
Aroclor 1262	ND (0.0865)		8082A		1	03/23/14 20:32		CC42032
Aroclor 1268	ND (0.0865)		8082A		1	03/23/14 20:32		CC42032

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*32 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*25 %*	*S-*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*35 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-34 0-12
Date Sampled: 03/20/14 09:50
Percent Solids: 94
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/20/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0519)		8082A		1	03/23/14 5:24		CC42032
Aroclor 1221	ND (0.0519)		8082A		1	03/23/14 5:24		CC42032
Aroclor 1232	ND (0.0519)		8082A		1	03/23/14 5:24		CC42032
Aroclor 1242	ND (0.0519)		8082A		1	03/23/14 5:24		CC42032
Aroclor 1248	**0.114** (0.0519)		8082A		1	03/23/14 5:24		CC42032
Aroclor 1254	ND (0.0519)		8082A		1	03/23/14 5:24		CC42032
Aroclor 1260	ND (0.0519)		8082A		1	03/23/14 5:24		CC42032
Aroclor 1262	ND (0.0519)		8082A		1	03/23/14 5:24		CC42032
Aroclor 1268	ND (0.0519)		8082A		1	03/23/14 5:24		CC42032

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*116 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*118 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-34 12-24
Date Sampled: 03/20/14 09:15
Percent Solids: 90
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403348
ESS Laboratory Sample ID: 1403348-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.11)		8082A		20	03/23/14 20:51		CC42121
Aroclor 1221	ND (1.11)		8082A		20	03/23/14 20:51		CC42121
Aroclor 1232	ND (1.11)		8082A		20	03/23/14 20:51		CC42121
Aroclor 1242	ND (1.11)		8082A		20	03/23/14 20:51		CC42121
Aroclor 1248	**8.09** (1.11)		8082A		20	03/23/14 20:51		CC42121
Aroclor 1254	ND (1.11)		8082A		20	03/23/14 20:51		CC42121
Aroclor 1260	ND (1.11)		8082A		20	03/23/14 20:51		CC42121
Aroclor 1262	ND (1.11)		8082A		20	03/23/14 20:51		CC42121
Aroclor 1268	ND (1.11)		8082A		20	03/23/14 20:51		CC42121

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403348

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42032 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403348

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42032 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42032 - 3540C										
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
LCS										
Aroclor 1016	0.557	0.0500	mg/kg wet	0.5000		111	40-140			
Aroclor 1260	0.551	0.0500	mg/kg wet	0.5000		110	40-140			
Surrogate: Decachlorobiphenyl	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0268*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
LCS Dup										
Aroclor 1016	0.528	0.0500	mg/kg wet	0.5000		106	40-140	5	30	
Aroclor 1260	0.527	0.0500	mg/kg wet	0.5000		105	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Batch CC42121 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403348

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42121 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403348

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42121 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0209*		mg/kg wet	*0.02500*		*84*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403348

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42121 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
LCS										
Aroclor 1016	0.507	0.0500	mg/kg wet	0.5000		101	40-140			
Aroclor 1260	0.516	0.0500	mg/kg wet	0.5000		103	40-140			
Surrogate: Decachlorobiphenyl	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS Dup										
Aroclor 1016	0.543	0.0500	mg/kg wet	0.5000		109	40-140	7	30	
Aroclor 1260	0.550	0.0500	mg/kg wet	0.5000		110	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0266*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0271*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403348

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
S-	Surrogate recovery(ies) below lower control limit (S-).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403348

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030348
Date Project Due: 3/28/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: ~~5.0~~ * 1.6 eo 3/24/14
   Iced With: Ice
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample Yes
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? Yes No
17. Were samples received intact? Yes No
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: M. Mead Date/Time: 3/21/14 1242
Reviewed By: MEK Date/Time: 3/21/14 1243

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # ~~13~~ 1403348

Turn Time X Standard Other_____

Regulatory State: MA RI CT NH NJ NY ME Other_____

Reporting Limits - < 1 ppm

~~Is this project~~ for any of the following:(please circle)
~~MA-MCP~~ Navy USACE CT DEP Other TSCA

Electonic Deliverables Excel Access PDF

Co. Name Tighe & Bond

Project # N-1011

Project Name Polyply

Contact Person Mike Martin

Address 4 Barlows Landing Rd

City Pocasset

State MA

Zip 02559

PO #

Tel.

Fax.

email:

Analysis

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container
11	3/20/14	1346	Grab	Soil	M-50 (12-24)	NP	1	Glass	4oz
12		1245			M-51 (0-12)				
13		1250			N-35 (24-36)				
14		1255			N-36 (24-36)				
15		1115			N-37 (24-36)				
16		1125			N-40 (48-60)				
17		1135			N-41 (48-60)				
18		1300			N-45 (36-48)				
19		0950			R-34 (0-12)				
20		0915			S-34 (12-24)				

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Internal Use Only

Seals Intact ____ Yes ____ No NA: ✓

[✓] Pickup

Cooler Temperature: 1.6+5.0+2.0 Ice Kit [ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by : Holli Lamb

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		Cooler 3/21/14 09:44	3/21/14 09:44
3/21/14 10:44	3/21/14 10:44		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

1 of 2 ~~7 of 10~~

ESS Laboratory

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Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403348

Turn Time X Standard Other_____

Regulatory State: (MA) RI CT NH NJ NY ME Other_____

Reporting Limits - < 1 ppm

Is this project for any of the following:(please circle)
(MA-MCP) Navy USACE CT DEP Other_____

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond
Project #: N-104
Project Name: Polyply
Contact Person: Mike Martin
Address: 4 Barlows Landing Rd, Unit 15
City: Pocasset
State: MA
Zip: 02559
PO #:
Tel. 508-564-7285
Fax. 508-564-4298
email: mmartin@tighebond.com

Analysis: PCB

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCB
01	3/20/14	1015	Grab	Soil	M-34 (36-48)	NP	1	G	4 oz	X
02		1025			M-35 (48-60)					
03		1035			M-37 (48-60)					
04		1045			M-39 (48-60)					
05		1055			M-40 (48-60)					
06		1305			M-46 (12-24)					
07		1320			M-46 (24-36)					
08		1325			M-47 (12-24)					
09		1330			M-48 (12-24)					
10		1340			M-49 (12-24)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 Ice KH

Internal Use Only
[✓] Pickup
[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: Holli Lamb

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		Cooler 3/21/14 09:44	H Hallahan 3/21/14 09:44 KH
H Hallahan 3/21/14 10:44	M-Mis 3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403349

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 2:56 pm, Mar 28, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403349

SAMPLE RECEIPT

The following samples were received on March 21, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403349-01	S-34 24-36	Soil	8082A
1403349-02	S-34 36-48	Soil	8082A
1403349-03	S-34 60-72	Soil	8082A
1403349-04	S-35 12-24	Soil	8082A
1403349-05	S-35 60-72	Soil	8082A
1403349-06	W-34 0-12	Soil	8082A
1403349-07	T-35 12-24	Soil	8082A
1403349-08	T-35 24-36	Soil	8082A
1403349-09	T-35 36-48	Soil	8082A
1403349-10	T-35 60-72	Soil	8082A
1403349-11	U-34 12-24	Soil	8082A
1403349-12	U-34 24-36	Soil	8082A
1403349-13	U-34 36-48	Soil	8082A
1403349-14	U-34 60-72	Soil	8082A
1403349-15	Y-34 0-12	Soil	8082A
1403349-16	V-34 0-12	Soil	8082A
1403349-17	I-30 24-36	Soil	8082A
1403349-18	I-31 36-48	Soil	8082A
1403349-19	I-37 34-36	Soil	8082A
1403349-20	I-34 24-30	Soil	8082A
1403349-21	I-28 12-24	Soil	8082A
1403349-22	M-41 60-72	Soil	8082A
1403349-23	I-32 24-36	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403349

1403349-24	G-31 24-36	Soil	8082A
1403349-25	I-29 24-36	Soil	8082A
1403349-26	I-33 24-36	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403349

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403349-01 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403349-02 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403349-03 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403349-16 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403349-17 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403349-18 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Tetrachloro-m-xylene (161% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403349

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403349

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403349-01 through 1403349-26**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: March 28, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-34 24-36
Date Sampled: 03/20/14 09:17
Percent Solids: 67
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (15.1)		8082A		200	03/24/14 16:06		CC42121
Aroclor 1221	ND (15.1)		8082A		200	03/24/14 16:06		CC42121
Aroclor 1232	ND (15.1)		8082A		200	03/24/14 16:06		CC42121
Aroclor 1242	ND (15.1)		8082A		200	03/24/14 16:06		CC42121
Aroclor 1248	**96.6** (15.1)		8082A		200	03/24/14 16:06		CC42121
Aroclor 1254	ND (15.1)		8082A		200	03/24/14 16:06		CC42121
Aroclor 1260	ND (15.1)		8082A		200	03/24/14 16:06		CC42121
Aroclor 1262	ND (15.1)		8082A		200	03/24/14 16:06		CC42121
Aroclor 1268	ND (15.1)		8082A		200	03/24/14 16:06		CC42121

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-34 36-48
Date Sampled: 03/20/14 09:22
Percent Solids: 87
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.72)		8082A		100	03/24/14 16:24		CC42121
Aroclor 1221	ND (5.72)		8082A		100	03/24/14 16:24		CC42121
Aroclor 1232	ND (5.72)		8082A		100	03/24/14 16:24		CC42121
Aroclor 1242	ND (5.72)		8082A		100	03/24/14 16:24		CC42121
Aroclor 1248	**75.2** (5.72)		8082A		100	03/24/14 16:24		CC42121
Aroclor 1254	ND (5.72)		8082A		100	03/24/14 16:24		CC42121
Aroclor 1260	ND (5.72)		8082A		100	03/24/14 16:24		CC42121
Aroclor 1262	ND (5.72)		8082A		100	03/24/14 16:24		CC42121
Aroclor 1268	ND (5.72)		8082A		100	03/24/14 16:24		CC42121

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-34 60-72
Date Sampled: 03/20/14 09:30
Percent Solids: 85
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.87)		8082A		100	03/24/14 16:42		CC42121
Aroclor 1221	ND (5.87)		8082A		100	03/24/14 16:42		CC42121
Aroclor 1232	ND (5.87)		8082A		100	03/24/14 16:42		CC42121
Aroclor 1242	ND (5.87)		8082A		100	03/24/14 16:42		CC42121
Aroclor 1248	**50.4** (5.87)		8082A		100	03/24/14 16:42		CC42121
Aroclor 1254	ND (5.87)		8082A		100	03/24/14 16:42		CC42121
Aroclor 1260	ND (5.87)		8082A		100	03/24/14 16:42		CC42121
Aroclor 1262	ND (5.87)		8082A		100	03/24/14 16:42		CC42121
Aroclor 1268	ND (5.87)		8082A		100	03/24/14 16:42		CC42121

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-35 12-24
Date Sampled: 03/20/14 09:35
Percent Solids: 90
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0556)		8082A		1	03/23/14 10:46		CC42121
Aroclor 1221	ND (0.0556)		8082A		1	03/23/14 10:46		CC42121
Aroclor 1232	ND (0.0556)		8082A		1	03/23/14 10:46		CC42121
Aroclor 1242	ND (0.0556)		8082A		1	03/23/14 10:46		CC42121
Aroclor 1248	**1.08** (0.0556)		8082A		1	03/23/14 10:46		CC42121
Aroclor 1254	ND (0.0556)		8082A		1	03/23/14 10:46		CC42121
Aroclor 1260	ND (0.0556)		8082A		1	03/23/14 10:46		CC42121
Aroclor 1262	ND (0.0556)		8082A		1	03/23/14 10:46		CC42121
Aroclor 1268	ND (0.0556)		8082A		1	03/23/14 10:46		CC42121

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-35 60-72
Date Sampled: 03/20/14 09:45
Percent Solids: 82
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0593)		8082A		1	03/23/14 11:05		CC42121
Aroclor 1221	ND (0.0593)		8082A		1	03/23/14 11:05		CC42121
Aroclor 1232	ND (0.0593)		8082A		1	03/23/14 11:05		CC42121
Aroclor 1242	ND (0.0593)		8082A		1	03/23/14 11:05		CC42121
Aroclor 1248	ND (0.0593)		8082A		1	03/23/14 11:05		CC42121
Aroclor 1254	ND (0.0593)		8082A		1	03/23/14 11:05		CC42121
Aroclor 1260	ND (0.0593)		8082A		1	03/23/14 11:05		CC42121
Aroclor 1262	ND (0.0593)		8082A		1	03/23/14 11:05		CC42121
Aroclor 1268	ND (0.0593)		8082A		1	03/23/14 11:05		CC42121

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-34 0-12
Date Sampled: 03/20/14 08:25
Percent Solids: 95
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0531)		8082A		1	03/23/14 11:24		CC42121
Aroclor 1221	ND (0.0531)		8082A		1	03/23/14 11:24		CC42121
Aroclor 1232	ND (0.0531)		8082A		1	03/23/14 11:24		CC42121
Aroclor 1242	ND (0.0531)		8082A		1	03/23/14 11:24		CC42121
Aroclor 1248	**0.854** (0.0531)		8082A		1	03/23/14 11:24		CC42121
Aroclor 1254	ND (0.0531)		8082A		1	03/23/14 11:24		CC42121
Aroclor 1260	ND (0.0531)		8082A		1	03/23/14 11:24		CC42121
Aroclor 1262	ND (0.0531)		8082A		1	03/23/14 11:24		CC42121
Aroclor 1268	ND (0.0531)		8082A		1	03/23/14 11:24		CC42121

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*106 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*107 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*101 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-35 12-24
Date Sampled: 03/20/14 08:40
Percent Solids: 91
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0549)		8082A		1	03/23/14 11:43		CC42121
Aroclor 1221	ND (0.0549)		8082A		1	03/23/14 11:43		CC42121
Aroclor 1232	ND (0.0549)		8082A		1	03/23/14 11:43		CC42121
Aroclor 1242	ND (0.0549)		8082A		1	03/23/14 11:43		CC42121
Aroclor 1248	**0.170** (0.0549)		8082A		1	03/23/14 11:43		CC42121
Aroclor 1254	ND (0.0549)		8082A		1	03/23/14 11:43		CC42121
Aroclor 1260	**0.105** (0.0549)		8082A		1	03/23/14 11:43		CC42121
Aroclor 1262	ND (0.0549)		8082A		1	03/23/14 11:43		CC42121
Aroclor 1268	ND (0.0549)		8082A		1	03/23/14 11:43		CC42121

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-35 24-36
Date Sampled: 03/20/14 08:42
Percent Solids: 82
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/22/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0628)		8082A		1	03/24/14 11:25		CC42121
Aroclor 1221	ND (0.0628)		8082A		1	03/24/14 11:25		CC42121
Aroclor 1232	ND (0.0628)		8082A		1	03/24/14 11:25		CC42121
Aroclor 1242	ND (0.0628)		8082A		1	03/24/14 11:25		CC42121
Aroclor 1248	ND (0.0628)		8082A		1	03/24/14 11:25		CC42121
Aroclor 1254	ND (0.0628)		8082A		1	03/24/14 11:25		CC42121
Aroclor 1260	ND (0.0628)		8082A		1	03/24/14 11:25		CC42121
Aroclor 1262	ND (0.0628)		8082A		1	03/24/14 11:25		CC42121
Aroclor 1268	ND (0.0628)		8082A		1	03/24/14 11:25		CC42121

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-35 36-48
Date Sampled: 03/20/14 08:45
Percent Solids: 87
Initial Volume: 20.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/22/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0552)		8082A		1	03/24/14 11:44		CC42121
Aroclor 1221	ND (0.0552)		8082A		1	03/24/14 11:44		CC42121
Aroclor 1232	ND (0.0552)		8082A		1	03/24/14 11:44		CC42121
Aroclor 1242	ND (0.0552)		8082A		1	03/24/14 11:44		CC42121
Aroclor 1248	**9.11** (0.552)		8082A		10	03/24/14 15:23		CC42121
Aroclor 1254	ND (0.0552)		8082A		1	03/24/14 11:44		CC42121
Aroclor 1260	ND (0.0552)		8082A		1	03/24/14 11:44		CC42121
Aroclor 1262	ND (0.0552)		8082A		1	03/24/14 11:44		CC42121
Aroclor 1268	ND (0.0552)		8082A		1	03/24/14 11:44		CC42121

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-35 60-72
Date Sampled: 03/20/14 08:50
Percent Solids: 84
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/22/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0582)		8082A		1	03/24/14 12:04		CC42121
Aroclor 1221	ND (0.0582)		8082A		1	03/24/14 12:04		CC42121
Aroclor 1232	ND (0.0582)		8082A		1	03/24/14 12:04		CC42121
Aroclor 1242	ND (0.0582)		8082A		1	03/24/14 12:04		CC42121
Aroclor 1248	**0.0778** (0.0582)		8082A		1	03/24/14 12:04		CC42121
Aroclor 1254	ND (0.0582)		8082A		1	03/24/14 12:04		CC42121
Aroclor 1260	ND (0.0582)		8082A		1	03/24/14 12:04		CC42121
Aroclor 1262	ND (0.0582)		8082A		1	03/24/14 12:04		CC42121
Aroclor 1268	ND (0.0582)		8082A		1	03/24/14 12:04		CC42121

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-34 12-24
Date Sampled: 03/20/14 08:55
Percent Solids: 94
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0545)		8082A		1	03/23/14 12:02		CC42121
Aroclor 1221	ND (0.0545)		8082A		1	03/23/14 12:02		CC42121
Aroclor 1232	ND (0.0545)		8082A		1	03/23/14 12:02		CC42121
Aroclor 1242	ND (0.0545)		8082A		1	03/23/14 12:02		CC42121
Aroclor 1248	**1.24** (0.273)		8082A		5	03/24/14 17:20		CC42121
Aroclor 1254	ND (0.0545)		8082A		1	03/23/14 12:02		CC42121
Aroclor 1260	**0.183** (0.0545)		8082A		1	03/23/14 12:02		CC42121
Aroclor 1262	ND (0.0545)		8082A		1	03/23/14 12:02		CC42121
Aroclor 1268	ND (0.0545)		8082A		1	03/23/14 12:02		CC42121

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-34 24-36
Date Sampled: 03/20/14 08:57
Percent Solids: 82
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0614)		8082A		1	03/23/14 12:21		CC42121
Aroclor 1221	ND (0.0614)		8082A		1	03/23/14 12:21		CC42121
Aroclor 1232	ND (0.0614)		8082A		1	03/23/14 12:21		CC42121
Aroclor 1242	ND (0.0614)		8082A		1	03/23/14 12:21		CC42121
Aroclor 1248	**1.34** (0.307)		8082A		5	03/24/14 17:39		CC42121
Aroclor 1254	ND (0.0614)		8082A		1	03/23/14 12:21		CC42121
Aroclor 1260	ND (0.0614)		8082A		1	03/23/14 12:21		CC42121
Aroclor 1262	ND (0.0614)		8082A		1	03/23/14 12:21		CC42121
Aroclor 1268	ND (0.0614)		8082A		1	03/23/14 12:21		CC42121

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*60 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-34 36-48
Date Sampled: 03/20/14 09:00
Percent Solids: 85
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0572)		8082A		1	03/23/14 13:18		CC42121
Aroclor 1221	ND (0.0572)		8082A		1	03/23/14 13:18		CC42121
Aroclor 1232	ND (0.0572)		8082A		1	03/23/14 13:18		CC42121
Aroclor 1242	ND (0.0572)		8082A		1	03/23/14 13:18		CC42121
Aroclor 1248	**0.102** (0.0572)		8082A		1	03/23/14 13:18		CC42121
Aroclor 1254	ND (0.0572)		8082A		1	03/23/14 13:18		CC42121
Aroclor 1260	ND (0.0572)		8082A		1	03/23/14 13:18		CC42121
Aroclor 1262	ND (0.0572)		8082A		1	03/23/14 13:18		CC42121
Aroclor 1268	ND (0.0572)		8082A		1	03/23/14 13:18		CC42121

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*105 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-34 60-72
Date Sampled: 03/20/14 09:07
Percent Solids: 82
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0597)		8082A		1	03/23/14 12:59		CC42121
Aroclor 1221	ND (0.0597)		8082A		1	03/23/14 12:59		CC42121
Aroclor 1232	ND (0.0597)		8082A		1	03/23/14 12:59		CC42121
Aroclor 1242	ND (0.0597)		8082A		1	03/23/14 12:59		CC42121
Aroclor 1248	**0.213** (0.0597)		8082A		1	03/23/14 12:59		CC42121
Aroclor 1254	ND (0.0597)		8082A		1	03/23/14 12:59		CC42121
Aroclor 1260	ND (0.0597)		8082A		1	03/23/14 12:59		CC42121
Aroclor 1262	ND (0.0597)		8082A		1	03/23/14 12:59		CC42121
Aroclor 1268	ND (0.0597)		8082A		1	03/23/14 12:59		CC42121

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Y-34 0-12
Date Sampled: 03/20/14 08:10
Percent Solids: 88
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0578)		8082A		1	03/23/14 12:40		CC42121
Aroclor 1221	ND (0.0578)		8082A		1	03/23/14 12:40		CC42121
Aroclor 1232	ND (0.0578)		8082A		1	03/23/14 12:40		CC42121
Aroclor 1242	ND (0.0578)		8082A		1	03/23/14 12:40		CC42121
Aroclor 1248	**2.16** (0.289)		8082A		5	03/24/14 17:58		CC42121
Aroclor 1254	ND (0.0578)		8082A		1	03/23/14 12:40		CC42121
Aroclor 1260	ND (0.0578)		8082A		1	03/23/14 12:40		CC42121
Aroclor 1262	ND (0.0578)		8082A		1	03/23/14 12:40		CC42121
Aroclor 1268	ND (0.0578)		8082A		1	03/23/14 12:40		CC42121

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-34 0-12
Date Sampled: 03/20/14 08:00
Percent Solids: 89
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/21/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (287)		8082A		5000	03/24/14 18:36		CC42121
Aroclor 1221	ND (287)		8082A		5000	03/24/14 18:36		CC42121
Aroclor 1232	ND (287)		8082A		5000	03/24/14 18:36		CC42121
Aroclor 1242	ND (287)		8082A		5000	03/24/14 18:36		CC42121
Aroclor 1248	**2390** (287)		8082A		5000	03/24/14 18:36		CC42121
Aroclor 1254	ND (287)		8082A		5000	03/24/14 18:36		CC42121
Aroclor 1260	ND (287)		8082A		5000	03/24/14 18:36		CC42121
Aroclor 1262	ND (287)		8082A		5000	03/24/14 18:36		CC42121
Aroclor 1268	ND (287)		8082A		5000	03/24/14 18:36		CC42121

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-30 24-36
Date Sampled: 03/20/14 09:40
Percent Solids: 81
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (6.17)		8082A		100	03/28/14 0:40		CC42440
Aroclor 1221	ND (6.17)		8082A		100	03/28/14 0:40		CC42440
Aroclor 1232	ND (6.17)		8082A		100	03/28/14 0:40		CC42440
Aroclor 1242	**55.4** (6.17)		8082A		100	03/28/14 0:40		CC42440
Aroclor 1248	ND (6.17)		8082A		100	03/28/14 0:40		CC42440
Aroclor 1254	ND (6.17)		8082A		100	03/28/14 0:40		CC42440
Aroclor 1260	ND (6.17)		8082A		100	03/28/14 0:40		CC42440
Aroclor 1262	ND (6.17)		8082A		100	03/28/14 0:40		CC42440
Aroclor 1268	ND (6.17)		8082A		100	03/28/14 0:40		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-31 36-48
Date Sampled: 03/20/14 09:35
Percent Solids: 84
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0590)		8082A		1	03/27/14 9:13		CC42440
Aroclor 1221	ND (0.0590)		8082A		1	03/27/14 9:13		CC42440
Aroclor 1232	ND (0.0590)		8082A		1	03/27/14 9:13		CC42440
Aroclor 1242	**3.85** (0.295)		8082A		5	03/28/14 3:49		CC42440
Aroclor 1248	ND (0.0590)		8082A		1	03/27/14 9:13		CC42440
Aroclor 1254	ND (0.0590)		8082A		1	03/27/14 9:13		CC42440
Aroclor 1260	ND (0.0590)		8082A		1	03/27/14 9:13		CC42440
Aroclor 1262	ND (0.0590)		8082A		1	03/27/14 9:13		CC42440
Aroclor 1268	ND (0.0590)		8082A		1	03/27/14 9:13		CC42440

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*115 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*161 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-37 34-36
Date Sampled: 03/19/14 09:06
Percent Solids: 84
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0586)		8082A		1	03/27/14 1:02		CC42440
Aroclor 1221	ND (0.0586)		8082A		1	03/27/14 1:02		CC42440
Aroclor 1232	ND (0.0586)		8082A		1	03/27/14 1:02		CC42440
Aroclor 1242	**0.153** (0.0586)		8082A		1	03/27/14 1:02		CC42440
Aroclor 1248	ND (0.0586)		8082A		1	03/27/14 1:02		CC42440
Aroclor 1254	ND (0.0586)		8082A		1	03/27/14 1:02		CC42440
Aroclor 1260	ND (0.0586)		8082A		1	03/27/14 1:02		CC42440
Aroclor 1262	ND (0.0586)		8082A		1	03/27/14 1:02		CC42440
Aroclor 1268	ND (0.0586)		8082A		1	03/27/14 1:02		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-34 24-30
Date Sampled: 03/20/14 09:15
Percent Solids: 86
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0585)		8082A		1	03/27/14 1:21		CC42440
Aroclor 1221	ND (0.0585)		8082A		1	03/27/14 1:21		CC42440
Aroclor 1232	ND (0.0585)		8082A		1	03/27/14 1:21		CC42440
Aroclor 1242	ND (0.0585)		8082A		1	03/27/14 1:21		CC42440
Aroclor 1248	**3.27** (0.293)		8082A		5	03/27/14 23:43		CC42440
Aroclor 1254	ND (0.0585)		8082A		1	03/27/14 1:21		CC42440
Aroclor 1260	ND (0.0585)		8082A		1	03/27/14 1:21		CC42440
Aroclor 1262	ND (0.0585)		8082A		1	03/27/14 1:21		CC42440
Aroclor 1268	ND (0.0585)		8082A		1	03/27/14 1:21		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*107 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-28 12-24
Date Sampled: 03/20/14 09:50
Percent Solids: 65
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-21
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0768)		8082A		1	03/27/14 1:40		CC42440
Aroclor 1221	ND (0.0768)		8082A		1	03/27/14 1:40		CC42440
Aroclor 1232	ND (0.0768)		8082A		1	03/27/14 1:40		CC42440
Aroclor 1242	ND (0.0768)		8082A		1	03/27/14 1:40		CC42440
Aroclor 1248	**2.29** (0.384)		8082A		5	03/28/14 0:02		CC42440
Aroclor 1254	ND (0.0768)		8082A		1	03/27/14 1:40		CC42440
Aroclor 1260	ND (0.0768)		8082A		1	03/27/14 1:40		CC42440
Aroclor 1262	ND (0.0768)		8082A		1	03/27/14 1:40		CC42440
Aroclor 1268	ND (0.0768)		8082A		1	03/27/14 1:40		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*105 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-41 60-72
Date Sampled: 03/20/14 10:59
Percent Solids: 15
Initial Volume: 29.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-22
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.223)		8082A		1	03/27/14 1:59		CC42440
Aroclor 1221	ND (0.223)		8082A		1	03/27/14 1:59		CC42440
Aroclor 1232	ND (0.223)		8082A		1	03/27/14 1:59		CC42440
Aroclor 1242	ND (0.223)		8082A		1	03/27/14 1:59		CC42440
Aroclor 1248	**0.905** (0.223)		8082A		1	03/27/14 1:59		CC42440
Aroclor 1254	ND (0.223)		8082A		1	03/27/14 1:59		CC42440
Aroclor 1260	ND (0.223)		8082A		1	03/27/14 1:59		CC42440
Aroclor 1262	ND (0.223)		8082A		1	03/27/14 1:59		CC42440
Aroclor 1268	ND (0.223)		8082A		1	03/27/14 1:59		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-32 24-36
Date Sampled: 03/20/14 09:25
Percent Solids: 87
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-23
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0559)		8082A		1	03/27/14 2:18		CC42440
Aroclor 1221	ND (0.0559)		8082A		1	03/27/14 2:18		CC42440
Aroclor 1232	ND (0.0559)		8082A		1	03/27/14 2:18		CC42440
Aroclor 1242	**0.178** (0.0559)		8082A		1	03/27/14 2:18		CC42440
Aroclor 1248	ND (0.0559)		8082A		1	03/27/14 2:18		CC42440
Aroclor 1254	ND (0.0559)		8082A		1	03/27/14 2:18		CC42440
Aroclor 1260	ND (0.0559)		8082A		1	03/27/14 2:18		CC42440
Aroclor 1262	ND (0.0559)		8082A		1	03/27/14 2:18		CC42440
Aroclor 1268	ND (0.0559)		8082A		1	03/27/14 2:18		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*106 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G-31 24-36
Date Sampled: 03/20/14 11:05
Percent Solids: 84
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-24
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0595)		8082A		1	03/27/14 2:37		CC42440
Aroclor 1221	ND (0.0595)		8082A		1	03/27/14 2:37		CC42440
Aroclor 1232	ND (0.0595)		8082A		1	03/27/14 2:37		CC42440
Aroclor 1242	ND (0.0595)		8082A		1	03/27/14 2:37		CC42440
Aroclor 1248	ND (0.0595)		8082A		1	03/27/14 2:37		CC42440
Aroclor 1254	ND (0.0595)		8082A		1	03/27/14 2:37		CC42440
Aroclor 1260	ND (0.0595)		8082A		1	03/27/14 2:37		CC42440
Aroclor 1262	ND (0.0595)		8082A		1	03/27/14 2:37		CC42440
Aroclor 1268	ND (0.0595)		8082A		1	03/27/14 2:37		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-29 24-36
Date Sampled: 03/20/14 09:45
Percent Solids: 81
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-25
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0621)		8082A		1	03/27/14 2:55		CC42440
Aroclor 1221	ND (0.0621)		8082A		1	03/27/14 2:55		CC42440
Aroclor 1232	ND (0.0621)		8082A		1	03/27/14 2:55		CC42440
Aroclor 1242	ND (0.0621)		8082A		1	03/27/14 2:55		CC42440
Aroclor 1248	**0.336** (0.0621)		8082A		1	03/27/14 2:55		CC42440
Aroclor 1254	ND (0.0621)		8082A		1	03/27/14 2:55		CC42440
Aroclor 1260	ND (0.0621)		8082A		1	03/27/14 2:55		CC42440
Aroclor 1262	ND (0.0621)		8082A		1	03/27/14 2:55		CC42440
Aroclor 1268	ND (0.0621)		8082A		1	03/27/14 2:55		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*101 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-33 24-36
Date Sampled: 03/20/14 09:27
Percent Solids: 86
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403349
ESS Laboratory Sample ID: 1403349-26
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0581)		8082A		1	03/27/14 3:14		CC42440
Aroclor 1221	ND (0.0581)		8082A		1	03/27/14 3:14		CC42440
Aroclor 1232	ND (0.0581)		8082A		1	03/27/14 3:14		CC42440
Aroclor 1242	ND (0.0581)		8082A		1	03/27/14 3:14		CC42440
Aroclor 1248	**0.112** (0.0581)		8082A		1	03/27/14 3:14		CC42440
Aroclor 1254	ND (0.0581)		8082A		1	03/27/14 3:14		CC42440
Aroclor 1260	ND (0.0581)		8082A		1	03/27/14 3:14		CC42440
Aroclor 1262	ND (0.0581)		8082A		1	03/27/14 3:14		CC42440
Aroclor 1268	ND (0.0581)		8082A		1	03/27/14 3:14		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403349

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42121 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403349

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42121 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403349

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42121 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0209*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
LCS										
Aroclor 1016	0.507	0.0500	mg/kg wet	0.5000		101	40-140			
Aroclor 1260	0.516	0.0500	mg/kg wet	0.5000		103	40-140			
Surrogate: Decachlorobiphenyl	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS Dup										
Aroclor 1016	0.543	0.0500	mg/kg wet	0.5000		109	40-140	7	30	
Aroclor 1260	0.550	0.0500	mg/kg wet	0.5000		110	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0266*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0271*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
Batch CC42440 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403349

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42440 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403349

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42440 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0242*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403349

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42440 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS										
Aroclor 1016	0.452	0.0500	mg/kg wet	0.5000		90	40-140			
Aroclor 1260	0.467	0.0500	mg/kg wet	0.5000		93	40-140			
Surrogate: Decachlorobiphenyl	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS Dup										
Aroclor 1016	0.441	0.0500	mg/kg wet	0.5000		88	40-140	2	30	
Aroclor 1260	0.473	0.0500	mg/kg wet	0.5000		95	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403349

Notes and Definitions

U	Analyte included in the analysis, but not detected
SM	Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403349

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030349
Date Project Due: 3/28/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: ~~5.0~~ * 1.6 eo 3/25/14
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes** / **No**
17. Were samples received intact? **Yes** / **No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

Extra samples added, previously not on COC

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP
21	Yes	4 oz Soil Jar	1	NP
22	Yes	4 oz Soil Jar	1	NP
23	Yes	4 oz Soil Jar	1	NP
24	Yes	4 oz Soil Jar	1	NP
25	Yes	4 oz Soil Jar	1	NP

Sample and Cooler Receipt Checklist

Client: Tighe & Bond

ESS Project ID: 14030349

26	Yes	4 oz Soil Jar	1	NP

Completed By: [signature] Date/Time: 3/24/14 1656

Reviewed By: MB Date/Time: 3/24/14 17:04

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030349
Date Project Due: 3/28/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **5.0**
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP

Completed By: [signature] Date/Time: 3/21/14 1250
Reviewed By: [signature] Date/Time: 3/21/14 1255

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403349

Turn Time X Standard Other _____

Regulatory State: (MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following: (please circle)
(MA-MCP) Navy USACE CT DEP Other TSCA

Reporting Limits - < 1 ppm

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond	Project #: W-1011	Project Name: Polyply	
Contact Person: Mike Martin	Address: 4 Barlows Landing Rd		
City: Pocasset	State: MA	Zip: 02559	PO #
Tel.	Fax.	email:	

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	Analysis: PCBs
01	3/20/14	0917	Grab	Soil	S-34 (24-36)	NP	1	Glass	4oz	X
02		0922			S-34 (36-48)					
03		0930			S-34 (60-72)					
04		0935			S-35 (12-24)					
05		0945			S-35 (60-72)					
06		0825			W-34 (0-12)					
~~07~~		~~0815~~			~~W-34 (0-12)~~					
~~07~~ 08		0840			T-35 (12-24)					
~~08~~ 09		0842			T-35 (24-36)					
~~09~~ 10		0845			T-35 (36-48)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6 +5.0 +2.0 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technician ____

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-____

Sampled by: Holly Lamb

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		Cooler 3/21/14 09:44	K. Callahan 3/21/14 09:44
K. Callahan 3/21/14 10:44	M. Mud 3/21/14 10:44		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

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www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403349

Turn Time _____ Standard Other _____

Reporting Limits - < 1 ppm

Regulatory State: (MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:(please circle)
(MA-MCP) Navy USACE CT DEP Other TSCA

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond
Contact Person: Mike Martin
Project #: D-1011
Project Name: Polyply
Address: 4 Barlows Landing
City: Pocasset
State: MA
Zip: 02559
PO #:
Tel.:
Fax.:
email:

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
10	3/20/14	0856	Grab	Soil	T-35 (60-72)	NP	1	Glass	4 oz	X
11 ~~12~~		0855			U-34 (12-24)					
12 ~~13~~		0857			U-34 (24-36)					
13 ~~14~~		0900			U-34 (36-48)					
14 ~~15~~		0907			U-34 (60-72)					
15 ~~16~~		0810			V-34 (0-12)					
16 ~~17~~		0800			V-34 (0-12)					
17	3/20/14	09:40			~~V-34~~ I-30 24-36					X*
18	3/20/14	09:35			~~V-34~~ I-31 36-48					X*
19	3/19/14	09:06			I-37 34-36					X*

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technician ___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: Holly Lamb

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		COOLER 3/21/14 09:44	3/21/14 09:44
3/21/14 10:44	3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

20. 3/20/14 09:15 I-34 24-30*
21. 3/20/14 09:50 I-28 12-24*
22. 3/20/14 10:59 M-41 60-72*
23. 3/20/14 09:25 I-32 24-36*
24. 3/20/14 11:05 G-31 24-36*
25. 3/20/14 09:45 I-29 24-36*
26. 3/20/14 09:27 I-33 24-36*

*added to COC per client's request - eo 3/25/14

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www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403349

Turn Time X Standard Other _____

Regulatory State: (MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following: (please circle)
(MA-MCP) Navy USACE CT DEP Other TSCA

Reporting Limits - < 1 ppm

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond	Project #: W-1011	Project Name: Polyply	
Contact Person: Mike Martin	Address: 4 Barlows Landing Rd		
City: Pocasset	State: MA	Zip: 02559	PO #
Tel.	Fax.	email:	

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	Analysis: PCBs
01	3/20/14	0917	Grab	Soil	S-34 (24-36)	NP	1	Glass	4oz	X
02		0922			S-34 (36-48)					
03		0930			S-34 (60-72)					
04		0935			S-35 (12-24)					
05		0945			S-35 (60-72)					
06		0825			W-34 (0-12)					
~~07~~		~~0815~~			~~W-34 (0-12)~~					
~~07~~ 08		0840			T-35 (12-24)					
~~08~~ 09		0842			T-35 (24-36)					
~~09~~ 10		0845			T-35 (36-48)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6 +5.0 +2.0 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technician ____

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-____

Sampled by: Holly Lamb

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		COOLER 3/21/14 09:44	K. Callahan 3/21/14 09:44
K. Callahan 3/21/14 10:44	M. Mud 3/21/14 10:44		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

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CHAIN OF CUSTODY

ESS Lab # 1403349

Turn Time _____ Standard Other _____

Reporting Limits - < 1 ppm

Regulatory State: (MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:(please circle)
(MA-MCP) Navy USACE CT DEP Other TSCA

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond
Contact Person: Mike Martin
Project #: N-1011
Project Name: Polyply
Address: 4 Barlows Landing
City: Pocasset
State: MA
Zip: 02559
PO #:
Tel.:
Fax.:
email:

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
10	3/20/14	0856	Grab	Soil	T-35 (60-72)	NP	1	Glass	4 oz	X
11 ~~12~~		0855			U-34 (12-24)					
12 ~~13~~		0857			U-34 (24-36)					
13 ~~14~~		0900			U-34 (36-48)					
14 ~~15~~		0907			U-34 (60-72)					
15 ~~16~~		0810			V-34 (0-12)					
16 ~~17~~		0800			V-34 (0-12)					
					~~W-34~~					
					~~W-34~~					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technician ____

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-____

Sampled by: Holly Lamb

Comments: TSCA Extraction

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14		COOLER 3/21/14 09:44	3/21/14 09:44
3/21/14 10:44	3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403379

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 11:14 am, Mar 31, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403379

SAMPLE RECEIPT

The following samples were received on March 24, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403379-01	L-42 48-60	Soil	8082A
1403379-02	L-43 48-60	Soil	8082A
1403379-03	L-44 48-60	Soil	8082A
1403379-04	M-42 68-72	Soil	8082A
1403379-05	M-43 68-72	Soil	8082A
1403379-06	M-44 48-60	Soil	8082A
1403379-07	N-42 48-60	Soil	8082A
1403379-08	N-43 48-60	Soil	8082A
1403379-09	N-44 48-60	Soil	8082A
1403379-10	O-42 36-48	Soil	8082A
1403379-11	W-31 0-12	Soil	8082A
1403379-12	W-32 12-24	Soil	8082A
1403379-13	X-31 0-12	Soil	8082A
1403379-14	X-32 12-24	Soil	8082A
1403379-15	X-33 12-24	Soil	8082A
1403379-16	Y-31 0-12	Soil	8082A
1403379-17	Y-32 0-12	Soil	8082A
1403379-18	Y-33 0-12	Soil	8082A
1403379-19	S-31 12-24	Soil	8082A
1403379-20	S-33 12-24	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403379

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403379-02 **Surrogate recovery(ies) above upper control limit (S+).**
Decachlorobiphenyl (154% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403379

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403379

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403379-01 through 1403379-20**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: March 31, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-42 48-60
Date Sampled: 03/21/14 13:31
Percent Solids: 18
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.273)		8082A		1	03/25/14 19:00		CC42404
Aroclor 1221	ND (0.273)		8082A		1	03/25/14 19:00		CC42404
Aroclor 1232	ND (0.273)		8082A		1	03/25/14 19:00		CC42404
Aroclor 1242	ND (0.273)		8082A		1	03/25/14 19:00		CC42404
Aroclor 1248	**4.71** (0.273)		8082A		1	03/25/14 19:00		CC42404
Aroclor 1254	ND (0.273)		8082A		1	03/25/14 19:00		CC42404
Aroclor 1260	ND (0.273)		8082A		1	03/25/14 19:00		CC42404
Aroclor 1262	ND (0.273)		8082A		1	03/25/14 19:00		CC42404
Aroclor 1268	ND (0.273)		8082A		1	03/25/14 19:00		CC42404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*146 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-43 48-60
Date Sampled: 03/21/14 14:15
Percent Solids: 11
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.451)		8082A		1	03/25/14 19:19		CC42404
Aroclor 1221	ND (0.451)		8082A		1	03/25/14 19:19		CC42404
Aroclor 1232	ND (0.451)		8082A		1	03/25/14 19:19		CC42404
Aroclor 1242	ND (0.451)		8082A		1	03/25/14 19:19		CC42404
Aroclor 1248	**0.477** (0.451)		8082A		1	03/25/14 19:19		CC42404
Aroclor 1254	ND (0.451)		8082A		1	03/25/14 19:19		CC42404
Aroclor 1260	ND (0.451)		8082A		1	03/25/14 19:19		CC42404
Aroclor 1262	ND (0.451)		8082A		1	03/25/14 19:19		CC42404
Aroclor 1268	ND (0.451)		8082A		1	03/25/14 19:19		CC42404

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*154 %*	*S+*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-44 48-60
Date Sampled: 03/21/14 14:50
Percent Solids: 23
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.217)		8082A		1	03/25/14 19:38		CC42404
Aroclor 1221	ND (0.217)		8082A		1	03/25/14 19:38		CC42404
Aroclor 1232	ND (0.217)		8082A		1	03/25/14 19:38		CC42404
Aroclor 1242	ND (0.217)		8082A		1	03/25/14 19:38		CC42404
Aroclor 1248	**4.83** (1.08)		8082A		5	03/26/14 15:56		CC42404
Aroclor 1254	ND (0.217)		8082A		1	03/25/14 19:38		CC42404
Aroclor 1260	ND (0.217)		8082A		1	03/25/14 19:38		CC42404
Aroclor 1262	ND (0.217)		8082A		1	03/25/14 19:38		CC42404
Aroclor 1268	ND (0.217)		8082A		1	03/25/14 19:38		CC42404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-42 68-72
Date Sampled: 03/21/14 13:27
Percent Solids: 85
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0581)		8082A		1	03/25/14 19:57		CC42404
Aroclor 1221	ND (0.0581)		8082A		1	03/25/14 19:57		CC42404
Aroclor 1232	ND (0.0581)		8082A		1	03/25/14 19:57		CC42404
Aroclor 1242	ND (0.0581)		8082A		1	03/25/14 19:57		CC42404
Aroclor 1248	**0.661** (0.0581)		8082A		1	03/25/14 19:57		CC42404
Aroclor 1254	ND (0.0581)		8082A		1	03/25/14 19:57		CC42404
Aroclor 1260	ND (0.0581)		8082A		1	03/25/14 19:57		CC42404
Aroclor 1262	ND (0.0581)		8082A		1	03/25/14 19:57		CC42404
Aroclor 1268	ND (0.0581)		8082A		1	03/25/14 19:57		CC42404

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*104 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-43 68-72
Date Sampled: 03/21/14 14:00
Percent Solids: 12
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0994)		8082A		1	03/27/14 22:27		CC42404
Aroclor 1221	ND (0.0994)		8082A		1	03/27/14 22:27		CC42404
Aroclor 1232	ND (0.0994)		8082A		1	03/27/14 22:27		CC42404
Aroclor 1242	ND (0.0994)		8082A		1	03/27/14 22:27		CC42404
Aroclor 1248	**0.126** (0.0994)		8082A		1	03/27/14 22:27		CC42404
Aroclor 1254	ND (0.0994)		8082A		1	03/27/14 22:27		CC42404
Aroclor 1260	ND (0.0994)		8082A		1	03/27/14 22:27		CC42404
Aroclor 1262	ND (0.0994)		8082A		1	03/27/14 22:27		CC42404
Aroclor 1268	ND (0.0994)		8082A		1	03/27/14 22:27		CC42404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*47 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*53 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-44 48-60
Date Sampled: 03/21/14 14:40
Percent Solids: 18
Initial Volume: 25.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.216)		8082A		1	03/27/14 19:38		CC42833
Aroclor 1221	ND (0.216)		8082A		1	03/27/14 19:38		CC42833
Aroclor 1232	ND (0.216)		8082A		1	03/27/14 19:38		CC42833
Aroclor 1242	ND (0.216)		8082A		1	03/27/14 19:38		CC42833
Aroclor 1248	**1.76** (0.216)		8082A		1	03/27/14 19:38		CC42833
Aroclor 1254	ND (0.216)		8082A		1	03/27/14 19:38		CC42833
Aroclor 1260	ND (0.216)		8082A		1	03/27/14 19:38		CC42833
Aroclor 1262	ND (0.216)		8082A		1	03/27/14 19:38		CC42833
Aroclor 1268	ND (0.216)		8082A		1	03/27/14 19:38		CC42833

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*64 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-42 48-60
Date Sampled: 03/21/14 13:15
Percent Solids: 38
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0663)		8082A		1	03/25/14 20:54		CC42404
Aroclor 1221	ND (0.0663)		8082A		1	03/25/14 20:54		CC42404
Aroclor 1232	ND (0.0663)		8082A		1	03/25/14 20:54		CC42404
Aroclor 1242	ND (0.0663)		8082A		1	03/25/14 20:54		CC42404
Aroclor 1248	**0.105** (0.0663)		8082A		1	03/25/14 20:54		CC42404
Aroclor 1254	ND (0.0663)		8082A		1	03/25/14 20:54		CC42404
Aroclor 1260	ND (0.0663)		8082A		1	03/25/14 20:54		CC42404
Aroclor 1262	ND (0.0663)		8082A		1	03/25/14 20:54		CC42404
Aroclor 1268	ND (0.0663)		8082A		1	03/25/14 20:54		CC42404

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-43 48-60
Date Sampled: 03/21/14 13:50
Percent Solids: 87
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0576)		8082A		1	03/25/14 21:13		CC42404
Aroclor 1221	ND (0.0576)		8082A		1	03/25/14 21:13		CC42404
Aroclor 1232	ND (0.0576)		8082A		1	03/25/14 21:13		CC42404
Aroclor 1242	ND (0.0576)		8082A		1	03/25/14 21:13		CC42404
Aroclor 1248	**0.273** (0.0576)		8082A		1	03/25/14 21:13		CC42404
Aroclor 1254	ND (0.0576)		8082A		1	03/25/14 21:13		CC42404
Aroclor 1260	ND (0.0576)		8082A		1	03/25/14 21:13		CC42404
Aroclor 1262	ND (0.0576)		8082A		1	03/25/14 21:13		CC42404
Aroclor 1268	ND (0.0576)		8082A		1	03/25/14 21:13		CC42404

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*108 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*107 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*101 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-44 48-60
Date Sampled: 03/21/14 14:30
Percent Solids: 89
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0564)		8082A		1	03/26/14 0:22		CC42404
Aroclor 1221	ND (0.0564)		8082A		1	03/26/14 0:22		CC42404
Aroclor 1232	ND (0.0564)		8082A		1	03/26/14 0:22		CC42404
Aroclor 1242	ND (0.0564)		8082A		1	03/26/14 0:22		CC42404
Aroclor 1248	**0.0616** (0.0564)		8082A		1	03/26/14 0:22		CC42404
Aroclor 1254	ND (0.0564)		8082A		1	03/26/14 0:22		CC42404
Aroclor 1260	ND (0.0564)		8082A		1	03/26/14 0:22		CC42404
Aroclor 1262	ND (0.0564)		8082A		1	03/26/14 0:22		CC42404
Aroclor 1268	ND (0.0564)		8082A		1	03/26/14 0:22		CC42404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-42 36-48
Date Sampled: 03/21/14 13:05
Percent Solids: 92
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0533)		8082A		1	03/26/14 0:41		CC42404
Aroclor 1221	ND (0.0533)		8082A		1	03/26/14 0:41		CC42404
Aroclor 1232	ND (0.0533)		8082A		1	03/26/14 0:41		CC42404
Aroclor 1242	ND (0.0533)		8082A		1	03/26/14 0:41		CC42404
Aroclor 1248	ND (0.0533)		8082A		1	03/26/14 0:41		CC42404
Aroclor 1254	ND (0.0533)		8082A		1	03/26/14 0:41		CC42404
Aroclor 1260	ND (0.0533)		8082A		1	03/26/14 0:41		CC42404
Aroclor 1262	ND (0.0533)		8082A		1	03/26/14 0:41		CC42404
Aroclor 1268	ND (0.0533)		8082A		1	03/26/14 0:41		CC42404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-31 0-12
Date Sampled: 03/21/14 11:15
Percent Solids: 94
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0540)		8082A		1	03/26/14 1:00		CC42404
Aroclor 1221	ND (0.0540)		8082A		1	03/26/14 1:00		CC42404
Aroclor 1232	ND (0.0540)		8082A		1	03/26/14 1:00		CC42404
Aroclor 1242	ND (0.0540)		8082A		1	03/26/14 1:00		CC42404
Aroclor 1248	ND (0.0540)		8082A		1	03/26/14 1:00		CC42404
Aroclor 1254	ND (0.0540)		8082A		1	03/26/14 1:00		CC42404
Aroclor 1260	ND (0.0540)		8082A		1	03/26/14 1:00		CC42404
Aroclor 1262	ND (0.0540)		8082A		1	03/26/14 1:00		CC42404
Aroclor 1268	ND (0.0540)		8082A		1	03/26/14 1:00		CC42404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-32 12-24
Date Sampled: 03/21/14 11:08
Percent Solids: 93
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0551)		8082A		1	03/26/14 1:19		CC42404
Aroclor 1221	ND (0.0551)		8082A		1	03/26/14 1:19		CC42404
Aroclor 1232	ND (0.0551)		8082A		1	03/26/14 1:19		CC42404
Aroclor 1242	ND (0.0551)		8082A		1	03/26/14 1:19		CC42404
Aroclor 1248	ND (0.0551)		8082A		1	03/26/14 1:19		CC42404
Aroclor 1254	ND (0.0551)		8082A		1	03/26/14 1:19		CC42404
Aroclor 1260	ND (0.0551)		8082A		1	03/26/14 1:19		CC42404
Aroclor 1262	ND (0.0551)		8082A		1	03/26/14 1:19		CC42404
Aroclor 1268	ND (0.0551)		8082A		1	03/26/14 1:19		CC42404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*105 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: X-31 0-12
Date Sampled: 03/21/14 11:25
Percent Solids: 95
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0511)		8082A		1	03/26/14 1:38		CC42404
Aroclor 1221	ND (0.0511)		8082A		1	03/26/14 1:38		CC42404
Aroclor 1232	ND (0.0511)		8082A		1	03/26/14 1:38		CC42404
Aroclor 1242	ND (0.0511)		8082A		1	03/26/14 1:38		CC42404
Aroclor 1248	ND (0.0511)		8082A		1	03/26/14 1:38		CC42404
Aroclor 1254	ND (0.0511)		8082A		1	03/26/14 1:38		CC42404
Aroclor 1260	ND (0.0511)		8082A		1	03/26/14 1:38		CC42404
Aroclor 1262	ND (0.0511)		8082A		1	03/26/14 1:38		CC42404
Aroclor 1268	ND (0.0511)		8082A		1	03/26/14 1:38		CC42404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: X-32 12-24
Date Sampled: 03/21/14 11:20
Percent Solids: 93
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0541)		8082A		1	03/25/14 16:22		CC42417
Aroclor 1221	ND (0.0541)		8082A		1	03/25/14 16:22		CC42417
Aroclor 1232	ND (0.0541)		8082A		1	03/25/14 16:22		CC42417
Aroclor 1242	ND (0.0541)		8082A		1	03/25/14 16:22		CC42417
Aroclor 1248	ND (0.0541)		8082A		1	03/25/14 16:22		CC42417
Aroclor 1254	ND (0.0541)		8082A		1	03/25/14 16:22		CC42417
Aroclor 1260	ND (0.0541)		8082A		1	03/25/14 16:22		CC42417
Aroclor 1262	ND (0.0541)		8082A		1	03/25/14 16:22		CC42417
Aroclor 1268	ND (0.0541)		8082A		1	03/25/14 16:22		CC42417

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*103 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: X-33 12-24
Date Sampled: 03/21/14 11:30
Percent Solids: 89
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0573)		8082A		1	03/25/14 16:41		CC42417
Aroclor 1221	ND (0.0573)		8082A		1	03/25/14 16:41		CC42417
Aroclor 1232	ND (0.0573)		8082A		1	03/25/14 16:41		CC42417
Aroclor 1242	ND (0.0573)		8082A		1	03/25/14 16:41		CC42417
Aroclor 1248	**0.892** (0.0573)		8082A		1	03/25/14 16:41		CC42417
Aroclor 1254	ND (0.0573)		8082A		1	03/25/14 16:41		CC42417
Aroclor 1260	ND (0.0573)		8082A		1	03/25/14 16:41		CC42417
Aroclor 1262	ND (0.0573)		8082A		1	03/25/14 16:41		CC42417
Aroclor 1268	ND (0.0573)		8082A		1	03/25/14 16:41		CC42417

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Y-31 0-12
Date Sampled: 03/21/14 11:40
Percent Solids: 96
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0526)		8082A		1	03/25/14 16:59		CC42417
Aroclor 1221	ND (0.0526)		8082A		1	03/25/14 16:59		CC42417
Aroclor 1232	ND (0.0526)		8082A		1	03/25/14 16:59		CC42417
Aroclor 1242	ND (0.0526)		8082A		1	03/25/14 16:59		CC42417
Aroclor 1248	ND (0.0526)		8082A		1	03/25/14 16:59		CC42417
Aroclor 1254	ND (0.0526)		8082A		1	03/25/14 16:59		CC42417
Aroclor 1260	ND (0.0526)		8082A		1	03/25/14 16:59		CC42417
Aroclor 1262	ND (0.0526)		8082A		1	03/25/14 16:59		CC42417
Aroclor 1268	ND (0.0526)		8082A		1	03/25/14 16:59		CC42417

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Y-32 0-12
Date Sampled: 03/21/14 11:35
Percent Solids: 96
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0523)		8082A		1	03/25/14 17:18		CC42417
Aroclor 1221	ND (0.0523)		8082A		1	03/25/14 17:18		CC42417
Aroclor 1232	ND (0.0523)		8082A		1	03/25/14 17:18		CC42417
Aroclor 1242	ND (0.0523)		8082A		1	03/25/14 17:18		CC42417
Aroclor 1248	**1.36** (0.261)		8082A		5	03/26/14 14:05		CC42417
Aroclor 1254	ND (0.0523)		8082A		1	03/25/14 17:18		CC42417
Aroclor 1260	ND (0.0523)		8082A		1	03/25/14 17:18		CC42417
Aroclor 1262	ND (0.0523)		8082A		1	03/25/14 17:18		CC42417
Aroclor 1268	ND (0.0523)		8082A		1	03/25/14 17:18		CC42417

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Y-33 0-12
Date Sampled: 03/21/14 11:45
Percent Solids: 92
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0541)		8082A		1	03/25/14 17:37		CC42417
Aroclor 1221	ND (0.0541)		8082A		1	03/25/14 17:37		CC42417
Aroclor 1232	ND (0.0541)		8082A		1	03/25/14 17:37		CC42417
Aroclor 1242	ND (0.0541)		8082A		1	03/25/14 17:37		CC42417
Aroclor 1248	**2.42** (0.270)		8082A		5	03/26/14 14:22		CC42417
Aroclor 1254	ND (0.0541)		8082A		1	03/25/14 17:37		CC42417
Aroclor 1260	ND (0.0541)		8082A		1	03/25/14 17:37		CC42417
Aroclor 1262	ND (0.0541)		8082A		1	03/25/14 17:37		CC42417
Aroclor 1268	ND (0.0541)		8082A		1	03/25/14 17:37		CC42417

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-31 12-24
Date Sampled: 03/21/14 10:15
Percent Solids: 94
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0538)		8082A		1	03/25/14 17:56		CC42417
Aroclor 1221	ND (0.0538)		8082A		1	03/25/14 17:56		CC42417
Aroclor 1232	ND (0.0538)		8082A		1	03/25/14 17:56		CC42417
Aroclor 1242	ND (0.0538)		8082A		1	03/25/14 17:56		CC42417
Aroclor 1248	ND (0.0538)		8082A		1	03/25/14 17:56		CC42417
Aroclor 1254	ND (0.0538)		8082A		1	03/25/14 17:56		CC42417
Aroclor 1260	ND (0.0538)		8082A		1	03/25/14 17:56		CC42417
Aroclor 1262	ND (0.0538)		8082A		1	03/25/14 17:56		CC42417
Aroclor 1268	ND (0.0538)		8082A		1	03/25/14 17:56		CC42417

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-33 12-24
Date Sampled: 03/21/14 09:18
Percent Solids: 95
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403379
ESS Laboratory Sample ID: 1403379-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0537)		8082A		1	03/25/14 18:52		CC42417
Aroclor 1221	ND (0.0537)		8082A		1	03/25/14 18:52		CC42417
Aroclor 1232	ND (0.0537)		8082A		1	03/25/14 18:52		CC42417
Aroclor 1242	ND (0.0537)		8082A		1	03/25/14 18:52		CC42417
Aroclor 1248	ND (0.0537)		8082A		1	03/25/14 18:52		CC42417
Aroclor 1254	ND (0.0537)		8082A		1	03/25/14 18:52		CC42417
Aroclor 1260	ND (0.0537)		8082A		1	03/25/14 18:52		CC42417
Aroclor 1262	ND (0.0537)		8082A		1	03/25/14 18:52		CC42417
Aroclor 1268	ND (0.0537)		8082A		1	03/25/14 18:52		CC42417

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403379

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42404 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403379

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42404 - 3540C										
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403379

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42404 - 3540C										
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS										
Aroclor 1016	0.440	0.0250	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.454	0.0250	mg/kg wet	0.5000		91	40-140			
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0257*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS Dup										
Aroclor 1016	0.448	0.0250	mg/kg wet	0.5000		90	40-140	2	30	
Aroclor 1260	0.471	0.0250	mg/kg wet	0.5000		94	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Batch CC42417 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403379

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42417 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42417 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0167*		mg/kg wet	*0.02500*		*67*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42417 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0182*		mg/kg wet	*0.02500*		*73*	*30-150*			
LCS										
Aroclor 1016	0.465	0.0500	mg/kg wet	0.5000		93	40-140			
Aroclor 1260	0.458	0.0500	mg/kg wet	0.5000		92	40-140			
Surrogate: Decachlorobiphenyl	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0259*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
LCS Dup										
Aroclor 1016	0.469	0.0500	mg/kg wet	0.5000		94	40-140	0.8	30	
Aroclor 1260	0.464	0.0500	mg/kg wet	0.5000		93	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0264*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0211*		mg/kg wet	*0.02500*		*85*	*30-150*			
Batch CC42833 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42833 - 3540C										
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42833 - 3540C										
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0186*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS										
Aroclor 1016	0.439	0.0500	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.429	0.0500	mg/kg wet	0.5000		86	40-140			
Surrogate: Decachlorobiphenyl	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS Dup										
Aroclor 1016	0.461	0.0500	mg/kg wet	0.5000		92	40-140	5	30	
Aroclor 1260	0.455	0.0500	mg/kg wet	0.5000		91	40-140	6	30	

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42833 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			

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Notes and Definitions

U	Analyte included in the analysis, but not detected
S+	Surrogate recovery(ies) above upper control limit (S+).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030379
Date Project Due: 3/31/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: ~~3.9~~ * 2.1 eo 3/25/14
   Iced With: **Ice**
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample Yes
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? Yes | No
17. Were samples received intact? Yes | No

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.
1403379-13 jar received empty; test cancelled eo 3/25/14

2 jars was received for sample 1403379-13, but one was empty and will be disposed of. eo 3/26/14

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: [signature] Date/Time: 3/24/14 1245
Reviewed By: [signature] Date/Time: 3/24/14 1311

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030379
Date Project Due: 3/31/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: ~~3.9~~ * 2.1 eo 3/25/14
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes | No**
17. Were samples received intact? **Yes | No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: [signature] Date/Time: 3/24/14 1245
Reviewed By: [signature] Date/Time: 3/24/14 1311

ESS Laboratory

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CHAIN OF CUSTODY

Page ~~1~~ 1 of ~~12~~ 2 US 3/24/14

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
(MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403379

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260	624	524.2	8021 MTBE/BTEX	8015 GRO	8100 TPH	8015 DRO	EPH	No Targets	8081 Pesticides	8082 PCB	608 Pesticides	608 PCB	8270	625	PAH only	RCRA5	RCRA8	PP13	TCLP8	TAL23	MCP	MCPw/Hg	NBC7
01	3/21/2014	1331		X	S	L-42 (48-60)	1	G											X													
02		1415				L-43 (48-60)																										
03		1450				L-44 (48-60)																										
04		1327				M-42 (68-72)																										
05		1400				M-43 (68-72)																										
06		1440				M-44 (48-60)																										
07		1315				N-42 (48-60)																										
08		1350				N-43 (48-60)																										
09		1430				N-44 (48-60)																										
10		1305				O-42 (36-48)																										

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp 2.1+3.9+3.8 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	K. Callahan	3/24/14 10:05
K. Callahan	3/24/14 10:59	[signature]	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

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www.esslaboratory.com

CHAIN OF CUSTODY

Page ~~2~~ of ~~12~~ 2 of 2 dt 3/24/14

Turn Time: X Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other ____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: 1403379
Electronic Deliverable: X Yes ___ No
Format: pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO EPH No Targets	8081 Pesticides 8082 PCB 608 Pesticides 608 PCB	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7
11	3/21/2014	1115		X	S	W-31 (0-12)	1	G				V			
12		1108				W-32 (12-24)									
13		1125				X-31 (0-12)									
14		1120				X-32 (12-24)									
15		1130				X-33 (12-24)									
16		1140				Y-31 (0-12)									
17		1135				Y-32 (0-12)									
18		1145				Y-33 (0-12)									
19		1015				S-31 (12-24)									
20		0918				~~S-33 (0918)~~ * SS-33 12-24									

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp: 2.1 + 3.9 + 3.8 ICE KH
Internal Use Only: [✓] Pickup [ ] Technicians ____

Comments: TSCA Extraction
Sampled by Holli Lamb
*eo 3/28/14 per sample jar

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	[signature]	3/24/14 10:05
[signature]	3/24/14 10:59	[signature]	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

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CHAIN OF CUSTODY

Page ~~1~~ of ~~12~~ 1 of 2 WS 3/24/14

Turn Time: X Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other ____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: 1403379
Electronic Deliverable: X Yes ___ No
Format: pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person: Michael Martin
Address: 4 Barlows Landing Rd, Unit 15
City: Pocasset State: MA Zip: 02559 PO#:
Telephone #: 508-564-7285 Fax #: 508-564-4298 Email Address: memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO EPH No Targets	8081 Pesticides 8082 PCB 608 Pesticides 608 PCB	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7
01	3/21/2014	1331		X	S	L-42 (48-60)	1	G				X			
02		1415				L-43 (48-60)									
03		1450				L-44 (48-60)									
04		1327				M-42 (68-72)									
05		1400				M-43 (68-72)									
06		1440				M-44 (48-60)									
07		1315				N-42 (48-60)									
08		1350				N-43 (48-60)									
09		1430				N-44 (48-60)									
10		1305				O-42 (36-48)									

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp: 2.1+3.9+3.8 ICE KH
Internal Use Only: [✓] Pickup [ ] Technicians ____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	K. Hallahan	3/24/14 10:05
K. Hallahan	3/24/14 10:59	[signature]	3/24/14 1105				

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CHAIN OF CUSTODY

Page ~~2~~ 2 of ~~12~~ 2 of 2 3/24/14

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
(MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403379

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH / No Targets	8081 Pesticides / 8082 PCB / 608 Pesticides / 608 PCB	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
11	3/21/2014	1115		X	S	W-31 (0-12)	1	G				V										
12		1108				W-32 (12-24)																
13		1125				X-31 (0-12)																
14		1120				X-32 (12-24)																
15		1130				X-33 (12-24)																
16		1140				Y-31 (0-12)																
17		1135				Y-32 (0-12)																
18		1145				Y-33 (0-12)																
19		1015				S-31 (12-24)																
20		0918				S-33 (0918)																

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp: 21 + 3.9 + 38 ICE KH

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	[signature]	3/24/14 10:05
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14 10:59	[signature]	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403380

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 11:17 am, Mar 31, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

SAMPLE RECEIPT

The following samples were received on March 24, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403380-01	T-14 0-12	Soil	8082A
1403380-02	T-14 24-36	Soil	8082A
1403380-03	T-31 12-24	Soil	8082A
1403380-04	T-31 24-36	Soil	8082A
1403380-05	T-32 36-48	Soil	8082A
1403380-06	T-33 36-48	Soil	8082A
1403380-07	T-33 60-72	Soil	8082A
1403380-08	U-14 24-36	Soil	8082A
1403380-09	U-31 12-24	Soil	8082A
1403380-10	U-32 12-24	Soil	8082A
1403380-11	U-32 24-36	Soil	8082A
1403380-12	V-31 0-12	Soil	8082A
1403380-13	V-32 12-24	Soil	8082A
1403380-14	R-14 24-36	Soil	8082A
1403380-15	R-33 0-12	Soil	8082A
1403380-16	S-14 0-12	Soil	8082A
1403380-17	S-14 24-36	Soil	8082A
1403380-18	IA-39 12-24	Soil	8082A
1403380-19	IA-40 0-12	Soil	8082A
1403380-20	C-48 12-24	Soil	8082A
1403380-21	E-43 24-36	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403380-01 through 1403380-21**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes (X) No ( )*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: March 31, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-14 0-12
Date Sampled: 03/21/14 12:38
Percent Solids: 95
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0545)		8082A		1	03/25/14 19:11		CC42417
Aroclor 1221	ND (0.0545)		8082A		1	03/25/14 19:11		CC42417
Aroclor 1232	ND (0.0545)		8082A		1	03/25/14 19:11		CC42417
Aroclor 1242	ND (0.0545)		8082A		1	03/25/14 19:11		CC42417
Aroclor 1248	ND (0.0545)		8082A		1	03/25/14 19:11		CC42417
Aroclor 1254	ND (0.0545)		8082A		1	03/25/14 19:11		CC42417
Aroclor 1260	ND (0.0545)		8082A		1	03/25/14 19:11		CC42417
Aroclor 1262	ND (0.0545)		8082A		1	03/25/14 19:11		CC42417
Aroclor 1268	ND (0.0545)		8082A		1	03/25/14 19:11		CC42417

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-14 24-36
Date Sampled: 03/21/14 12:40
Percent Solids: 85
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0598)		8082A		1	03/25/14 19:30		CC42417
Aroclor 1221	ND (0.0598)		8082A		1	03/25/14 19:30		CC42417
Aroclor 1232	ND (0.0598)		8082A		1	03/25/14 19:30		CC42417
Aroclor 1242	ND (0.0598)		8082A		1	03/25/14 19:30		CC42417
Aroclor 1248	ND (0.0598)		8082A		1	03/25/14 19:30		CC42417
Aroclor 1254	ND (0.0598)		8082A		1	03/25/14 19:30		CC42417
Aroclor 1260	ND (0.0598)		8082A		1	03/25/14 19:30		CC42417
Aroclor 1262	ND (0.0598)		8082A		1	03/25/14 19:30		CC42417
Aroclor 1268	ND (0.0598)		8082A		1	03/25/14 19:30		CC42417

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-31 12-24
Date Sampled: 03/21/14 10:00
Percent Solids: 94
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0541)		8082A		1	03/25/14 19:49		CC42417
Aroclor 1221	ND (0.0541)		8082A		1	03/25/14 19:49		CC42417
Aroclor 1232	ND (0.0541)		8082A		1	03/25/14 19:49		CC42417
Aroclor 1242	ND (0.0541)		8082A		1	03/25/14 19:49		CC42417
Aroclor 1248	ND (0.0541)		8082A		1	03/25/14 19:49		CC42417
Aroclor 1254	ND (0.0541)		8082A		1	03/25/14 19:49		CC42417
Aroclor 1260	ND (0.0541)		8082A		1	03/25/14 19:49		CC42417
Aroclor 1262	ND (0.0541)		8082A		1	03/25/14 19:49		CC42417
Aroclor 1268	ND (0.0541)		8082A		1	03/25/14 19:49		CC42417

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*91 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-31 24-36
Date Sampled: 03/21/14 10:02
Percent Solids: 94
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0518)		8082A		1	03/25/14 20:08		CC42417
Aroclor 1221	ND (0.0518)		8082A		1	03/25/14 20:08		CC42417
Aroclor 1232	ND (0.0518)		8082A		1	03/25/14 20:08		CC42417
Aroclor 1242	ND (0.0518)		8082A		1	03/25/14 20:08		CC42417
Aroclor 1248	ND (0.0518)		8082A		1	03/25/14 20:08		CC42417
Aroclor 1254	ND (0.0518)		8082A		1	03/25/14 20:08		CC42417
Aroclor 1260	ND (0.0518)		8082A		1	03/25/14 20:08		CC42417
Aroclor 1262	ND (0.0518)		8082A		1	03/25/14 20:08		CC42417
Aroclor 1268	ND (0.0518)		8082A		1	03/25/14 20:08		CC42417

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-32 36-48
Date Sampled: 03/21/14 09:55
Percent Solids: 96
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0512)		8082A		1	03/25/14 20:26		CC42417
Aroclor 1221	ND (0.0512)		8082A		1	03/25/14 20:26		CC42417
Aroclor 1232	ND (0.0512)		8082A		1	03/25/14 20:26		CC42417
Aroclor 1242	ND (0.0512)		8082A		1	03/25/14 20:26		CC42417
Aroclor 1248	ND (0.0512)		8082A		1	03/25/14 20:26		CC42417
Aroclor 1254	ND (0.0512)		8082A		1	03/25/14 20:26		CC42417
Aroclor 1260	ND (0.0512)		8082A		1	03/25/14 20:26		CC42417
Aroclor 1262	ND (0.0512)		8082A		1	03/25/14 20:26		CC42417
Aroclor 1268	ND (0.0512)		8082A		1	03/25/14 20:26		CC42417

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-33 36-48
Date Sampled: 03/21/14 09:45
Percent Solids: 95
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0542)		8082A		1	03/25/14 20:45		CC42417
Aroclor 1221	ND (0.0542)		8082A		1	03/25/14 20:45		CC42417
Aroclor 1232	ND (0.0542)		8082A		1	03/25/14 20:45		CC42417
Aroclor 1242	ND (0.0542)		8082A		1	03/25/14 20:45		CC42417
Aroclor 1248	ND (0.0542)		8082A		1	03/25/14 20:45		CC42417
Aroclor 1254	ND (0.0542)		8082A		1	03/25/14 20:45		CC42417
Aroclor 1260	ND (0.0542)		8082A		1	03/25/14 20:45		CC42417
Aroclor 1262	ND (0.0542)		8082A		1	03/25/14 20:45		CC42417
Aroclor 1268	ND (0.0542)		8082A		1	03/25/14 20:45		CC42417

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*104 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-33 60-72
Date Sampled: 03/21/14 09:52
Percent Solids: 84
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0580)		8082A		1	03/25/14 21:04		CC42417
Aroclor 1221	ND (0.0580)		8082A		1	03/25/14 21:04		CC42417
Aroclor 1232	ND (0.0580)		8082A		1	03/25/14 21:04		CC42417
Aroclor 1242	ND (0.0580)		8082A		1	03/25/14 21:04		CC42417
Aroclor 1248	ND (0.0580)		8082A		1	03/25/14 21:04		CC42417
Aroclor 1254	ND (0.0580)		8082A		1	03/25/14 21:04		CC42417
Aroclor 1260	ND (0.0580)		8082A		1	03/25/14 21:04		CC42417
Aroclor 1262	ND (0.0580)		8082A		1	03/25/14 21:04		CC42417
Aroclor 1268	ND (0.0580)		8082A		1	03/25/14 21:04		CC42417

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*104 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-14 24-36
Date Sampled: 03/21/14 12:45
Percent Solids: 83
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0602)		8082A		1	03/25/14 23:35		CC42417
Aroclor 1221	ND (0.0602)		8082A		1	03/25/14 23:35		CC42417
Aroclor 1232	ND (0.0602)		8082A		1	03/25/14 23:35		CC42417
Aroclor 1242	ND (0.0602)		8082A		1	03/25/14 23:35		CC42417
Aroclor 1248	ND (0.0602)		8082A		1	03/25/14 23:35		CC42417
Aroclor 1254	ND (0.0602)		8082A		1	03/25/14 23:35		CC42417
Aroclor 1260	ND (0.0602)		8082A		1	03/25/14 23:35		CC42417
Aroclor 1262	ND (0.0602)		8082A		1	03/25/14 23:35		CC42417
Aroclor 1268	ND (0.0602)		8082A		1	03/25/14 23:35		CC42417

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-31 12-24
Date Sampled: 03/21/14 10:40
Percent Solids: 93
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0526)		8082A		1	03/25/14 23:54		CC42417
Aroclor 1221	ND (0.0526)		8082A		1	03/25/14 23:54		CC42417
Aroclor 1232	ND (0.0526)		8082A		1	03/25/14 23:54		CC42417
Aroclor 1242	ND (0.0526)		8082A		1	03/25/14 23:54		CC42417
Aroclor 1248	ND (0.0526)		8082A		1	03/25/14 23:54		CC42417
Aroclor 1254	ND (0.0526)		8082A		1	03/25/14 23:54		CC42417
Aroclor 1260	ND (0.0526)		8082A		1	03/25/14 23:54		CC42417
Aroclor 1262	ND (0.0526)		8082A		1	03/25/14 23:54		CC42417
Aroclor 1268	ND (0.0526)		8082A		1	03/25/14 23:54		CC42417

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-32 12-24
Date Sampled: 03/21/14 10:20
Percent Solids: 96
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0533)		8082A		1	03/26/14 0:13		CC42417
Aroclor 1221	ND (0.0533)		8082A		1	03/26/14 0:13		CC42417
Aroclor 1232	ND (0.0533)		8082A		1	03/26/14 0:13		CC42417
Aroclor 1242	ND (0.0533)		8082A		1	03/26/14 0:13		CC42417
Aroclor 1248	**0.123** (0.0533)		8082A		1	03/26/14 0:13		CC42417
Aroclor 1254	ND (0.0533)		8082A		1	03/26/14 0:13		CC42417
Aroclor 1260	ND (0.0533)		8082A		1	03/26/14 0:13		CC42417
Aroclor 1262	ND (0.0533)		8082A		1	03/26/14 0:13		CC42417
Aroclor 1268	ND (0.0533)		8082A		1	03/26/14 0:13		CC42417

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*103 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-32 24-36
Date Sampled: 03/21/14 10:22
Percent Solids: 95
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0537)		8082A		1	03/26/14 0:31		CC42417
Aroclor 1221	ND (0.0537)		8082A		1	03/26/14 0:31		CC42417
Aroclor 1232	ND (0.0537)		8082A		1	03/26/14 0:31		CC42417
Aroclor 1242	ND (0.0537)		8082A		1	03/26/14 0:31		CC42417
Aroclor 1248	ND (0.0537)		8082A		1	03/26/14 0:31		CC42417
Aroclor 1254	ND (0.0537)		8082A		1	03/26/14 0:31		CC42417
Aroclor 1260	ND (0.0537)		8082A		1	03/26/14 0:31		CC42417
Aroclor 1262	ND (0.0537)		8082A		1	03/26/14 0:31		CC42417
Aroclor 1268	ND (0.0537)		8082A		1	03/26/14 0:31		CC42417

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*103 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-31 0-12
Date Sampled: 03/21/14 11:00
Percent Solids: 96
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0525)		8082A		1	03/26/14 0:50		CC42417
Aroclor 1221	ND (0.0525)		8082A		1	03/26/14 0:50		CC42417
Aroclor 1232	ND (0.0525)		8082A		1	03/26/14 0:50		CC42417
Aroclor 1242	ND (0.0525)		8082A		1	03/26/14 0:50		CC42417
Aroclor 1248	ND (0.0525)		8082A		1	03/26/14 0:50		CC42417
Aroclor 1254	ND (0.0525)		8082A		1	03/26/14 0:50		CC42417
Aroclor 1260	ND (0.0525)		8082A		1	03/26/14 0:50		CC42417
Aroclor 1262	ND (0.0525)		8082A		1	03/26/14 0:50		CC42417
Aroclor 1268	ND (0.0525)		8082A		1	03/26/14 0:50		CC42417

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-32 12-24
Date Sampled: 03/21/14 10:55
Percent Solids: 92
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0547)		8082A		1	03/26/14 1:09		CC42417
Aroclor 1221	ND (0.0547)		8082A		1	03/26/14 1:09		CC42417
Aroclor 1232	ND (0.0547)		8082A		1	03/26/14 1:09		CC42417
Aroclor 1242	ND (0.0547)		8082A		1	03/26/14 1:09		CC42417
Aroclor 1248	ND (0.0547)		8082A		1	03/26/14 1:09		CC42417
Aroclor 1254	ND (0.0547)		8082A		1	03/26/14 1:09		CC42417
Aroclor 1260	ND (0.0547)		8082A		1	03/26/14 1:09		CC42417
Aroclor 1262	ND (0.0547)		8082A		1	03/26/14 1:09		CC42417
Aroclor 1268	ND (0.0547)		8082A		1	03/26/14 1:09		CC42417

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*106 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-14 24-36
Date Sampled: 03/21/14 12:25
Percent Solids: 91
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0560)		8082A		1	03/26/14 2:24		CC42418
Aroclor 1221	ND (0.0560)		8082A		1	03/26/14 2:24		CC42418
Aroclor 1232	ND (0.0560)		8082A		1	03/26/14 2:24		CC42418
Aroclor 1242	ND (0.0560)		8082A		1	03/26/14 2:24		CC42418
Aroclor 1248	ND (0.0560)		8082A		1	03/26/14 2:24		CC42418
Aroclor 1254	ND (0.0560)		8082A		1	03/26/14 2:24		CC42418
Aroclor 1260	ND (0.0560)		8082A		1	03/26/14 2:24		CC42418
Aroclor 1262	ND (0.0560)		8082A		1	03/26/14 2:24		CC42418
Aroclor 1268	ND (0.0560)		8082A		1	03/26/14 2:24		CC42418

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*103 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-33 0-12
Date Sampled: 03/21/14 08:55
Percent Solids: 93
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0533)		8082A		1	03/26/14 2:43		CC42418
Aroclor 1221	ND (0.0533)		8082A		1	03/26/14 2:43		CC42418
Aroclor 1232	ND (0.0533)		8082A		1	03/26/14 2:43		CC42418
Aroclor 1242	ND (0.0533)		8082A		1	03/26/14 2:43		CC42418
Aroclor 1248	**0.0619** (0.0533)		8082A		1	03/26/14 2:43		CC42418
Aroclor 1254	ND (0.0533)		8082A		1	03/26/14 2:43		CC42418
Aroclor 1260	ND (0.0533)		8082A		1	03/26/14 2:43		CC42418
Aroclor 1262	ND (0.0533)		8082A		1	03/26/14 2:43		CC42418
Aroclor 1268	ND (0.0533)		8082A		1	03/26/14 2:43		CC42418

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-14 0-12
Date Sampled: 03/21/14 12:30
Percent Solids: 95
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0541)		8082A		1	03/26/14 3:02		CC42418
Aroclor 1221	ND (0.0541)		8082A		1	03/26/14 3:02		CC42418
Aroclor 1232	ND (0.0541)		8082A		1	03/26/14 3:02		CC42418
Aroclor 1242	ND (0.0541)		8082A		1	03/26/14 3:02		CC42418
Aroclor 1248	ND (0.0541)		8082A		1	03/26/14 3:02		CC42418
Aroclor 1254	ND (0.0541)		8082A		1	03/26/14 3:02		CC42418
Aroclor 1260	ND (0.0541)		8082A		1	03/26/14 3:02		CC42418
Aroclor 1262	ND (0.0541)		8082A		1	03/26/14 3:02		CC42418
Aroclor 1268	ND (0.0541)		8082A		1	03/26/14 3:02		CC42418

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*107 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*108 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-14 24-36
Date Sampled: 03/21/14 12:32
Percent Solids: 92
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0552)		8082A		1	03/26/14 3:21		CC42418
Aroclor 1221	ND (0.0552)		8082A		1	03/26/14 3:21		CC42418
Aroclor 1232	ND (0.0552)		8082A		1	03/26/14 3:21		CC42418
Aroclor 1242	ND (0.0552)		8082A		1	03/26/14 3:21		CC42418
Aroclor 1248	ND (0.0552)		8082A		1	03/26/14 3:21		CC42418
Aroclor 1254	ND (0.0552)		8082A		1	03/26/14 3:21		CC42418
Aroclor 1260	ND (0.0552)		8082A		1	03/26/14 3:21		CC42418
Aroclor 1262	ND (0.0552)		8082A		1	03/26/14 3:21		CC42418
Aroclor 1268	ND (0.0552)		8082A		1	03/26/14 3:21		CC42418

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IA-39 12-24
Date Sampled: 03/21/14 08:30
Percent Solids: 14
Initial Volume: 29.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.238)		8082A		1	03/27/14 19:56		CC42833
Aroclor 1221	ND (0.238)		8082A		1	03/27/14 19:56		CC42833
Aroclor 1232	ND (0.238)		8082A		1	03/27/14 19:56		CC42833
Aroclor 1242	ND (0.238)		8082A		1	03/27/14 19:56		CC42833
Aroclor 1248	**0.509** (0.238)		8082A		1	03/27/14 19:56		CC42833
Aroclor 1254	ND (0.238)		8082A		1	03/27/14 19:56		CC42833
Aroclor 1260	ND (0.238)		8082A		1	03/27/14 19:56		CC42833
Aroclor 1262	ND (0.238)		8082A		1	03/27/14 19:56		CC42833
Aroclor 1268	ND (0.238)		8082A		1	03/27/14 19:56		CC42833

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*59 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*34 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*33 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*35 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IA-40 0-12
Date Sampled: 03/21/14 08:40
Percent Solids: 13
Initial Volume: 30.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.257)		8082A		1	03/26/14 4:36		CC42418
Aroclor 1221	ND (0.257)		8082A		1	03/26/14 4:36		CC42418
Aroclor 1232	ND (0.257)		8082A		1	03/26/14 4:36		CC42418
Aroclor 1242	ND (0.257)		8082A		1	03/26/14 4:36		CC42418
Aroclor 1248	**12.2** (2.57)		8082A		10	03/26/14 14:41		CC42418
Aroclor 1254	ND (0.257)		8082A		1	03/26/14 4:36		CC42418
Aroclor 1260	ND (0.257)		8082A		1	03/26/14 4:36		CC42418
Aroclor 1262	ND (0.257)		8082A		1	03/26/14 4:36		CC42418
Aroclor 1268	ND (0.257)		8082A		1	03/26/14 4:36		CC42418

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*36 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*30 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*32 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-48 12-24
Date Sampled: 03/21/14 10:14
Percent Solids: 20
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.252)		8082A		1	03/27/14 21:12		CC42616
Aroclor 1221	ND (0.252)		8082A		1	03/27/14 21:12		CC42616
Aroclor 1232	ND (0.252)		8082A		1	03/27/14 21:12		CC42616
Aroclor 1242	ND (0.252)		8082A		1	03/27/14 21:12		CC42616
Aroclor 1248	**0.441** (0.252)		8082A		1	03/27/14 21:12		CC42616
Aroclor 1254	ND (0.252)		8082A		1	03/27/14 21:12		CC42616
Aroclor 1260	ND (0.252)		8082A		1	03/27/14 21:12		CC42616
Aroclor 1262	ND (0.252)		8082A		1	03/27/14 21:12		CC42616
Aroclor 1268	ND (0.252)		8082A		1	03/27/14 21:12		CC42616

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*138 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*53 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-43 24-36
Date Sampled: 03/21/14 09:20
Percent Solids: 13
Initial Volume: 20.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403380
ESS Laboratory Sample ID: 1403380-21
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.370)		8082A		1	03/27/14 21:31		CC42616
Aroclor 1221	ND (0.370)		8082A		1	03/27/14 21:31		CC42616
Aroclor 1232	ND (0.370)		8082A		1	03/27/14 21:31		CC42616
Aroclor 1242	ND (0.370)		8082A		1	03/27/14 21:31		CC42616
Aroclor 1248	**2.14** (0.370)		8082A		1	03/27/14 21:31		CC42616
Aroclor 1254	ND (0.370)		8082A		1	03/27/14 21:31		CC42616
Aroclor 1260	ND (0.370)		8082A		1	03/27/14 21:31		CC42616
Aroclor 1262	ND (0.370)		8082A		1	03/27/14 21:31		CC42616
Aroclor 1268	ND (0.370)		8082A		1	03/27/14 21:31		CC42616

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*64 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*36 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*33 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*35 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42417 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42417 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42417 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0167*		mg/kg wet	*0.02500*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0182*		mg/kg wet	*0.02500*		*73*	*30-150*			
LCS										
Aroclor 1016	0.465	0.0500	mg/kg wet	0.5000		93	40-140			
Aroclor 1260	0.458	0.0500	mg/kg wet	0.5000		92	40-140			
Surrogate: Decachlorobiphenyl	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0259*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
LCS Dup										
Aroclor 1016	0.469	0.0500	mg/kg wet	0.5000		94	40-140	0.8	30	
Aroclor 1260	0.464	0.0500	mg/kg wet	0.5000		93	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0264*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0211*		mg/kg wet	*0.02500*		*85*	*30-150*			
Batch CC42418 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42418 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42418 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42418 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS										
Aroclor 1016	0.499	0.0500	mg/kg wet	0.5000		100	40-140			
Aroclor 1260	0.483	0.0500	mg/kg wet	0.5000		97	40-140			
Surrogate: Decachlorobiphenyl	*0.0280*		mg/kg wet	*0.02500*		*112*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0277*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
LCS Dup										
Aroclor 1016	0.492	0.0500	mg/kg wet	0.5000		98	40-140	1	30	
Aroclor 1260	0.488	0.0500	mg/kg wet	0.5000		98	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0279*		mg/kg wet	*0.02500*		*112*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0276*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Batch CC42616 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42616 - 3540C										
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42616 - 3540C										
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0186*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS										
Aroclor 1016	0.439	0.0500	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.429	0.0500	mg/kg wet	0.5000		86	40-140			
Surrogate: Decachlorobiphenyl	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS Dup										
Aroclor 1016	0.461	0.0500	mg/kg wet	0.5000		92	40-140	5	30	
Aroclor 1260	0.455	0.0500	mg/kg wet	0.5000		91	40-140	6	30	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42616 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Batch CC42833 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42833 - 3540C										
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42833 - 3540C										
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0186*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS										
Aroclor 1016	0.439	0.0500	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.429	0.0500	mg/kg wet	0.5000		86	40-140			
Surrogate: Decachlorobiphenyl	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS Dup										
Aroclor 1016	0.461	0.0500	mg/kg wet	0.5000		92	40-140	5	30	
Aroclor 1260	0.455	0.0500	mg/kg wet	0.5000		91	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403380

Notes and Definitions

U	Analyte included in the analysis, but not detected
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403380

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030380
Date Project Due: 3/31/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **3.9**
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

Added samples 20 and 21 per client request.
(CB 12-24) (E-43 24-36)

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP
21	Yes	4 oz Soil Jar	1	NP

Completed By: HG Date/Time: 3/25/14 2136
Reviewed By: [signature] Date/Time: 3/26/14 0920

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030380
Date Project Due: 3/31/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: ~~3.9~~* 2.1 eo 3/25/14
   Iced With: **Ice**
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample Yes
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? Yes|No
17. Were samples received intact? Yes|No

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP

Completed By: [illegible] Date/Time: 3/24/14 1245
Reviewed By: [illegible] Date/Time: 3/24/14 1315

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

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Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
(MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403380

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / VPH	8100 TPH / 8015 DRO / 8015 GRO / EPH / No Targets	8081 Pesticides / 8082 PCB / 608 Pesticides / 608 PCB	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
	3/21/2014	~~0920~~		~~X~~	~~S~~	~~S-33 (24-36)~~	1	G				~~X~~										
01		1238				T-14 (0-12)																
02		1240				T-14 (24-36)																
03		1000				T-31 (12-24)																
04		1002				T-31 (24-36)																
05		0955				T-32 (36-48)																
06		0945				T-33 (36-48)																
07		0952				T-33 (60-72)																
08		1245				U-14 (24-36)																
09		1040				U-31 (12-24)																

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp: 2/+3.9+3.8 ICE

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	[signature]	3/24/14 10:05
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14 10:59	[signature]	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
(MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403380

Electronic Deliverable: X Yes ___ No

Format: pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH	8081 Pesticides / 8082 PCB / 608 Pesticides / No Targets	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
10	3/21/2014	1020		X	S	U-32 (12-24)	1	G				X										
11		1022				U-32 (24-36)																
12		1100				V-31 (0-12)																
13		1055				V-32 (12-24)																
14		1225				R-14 (24-36)																
15		0955				R-33 (0-12)																
16		1230				S-14 (~~1230~~ 0-12)																
17		1232				S-14 (24-36)																
18		0830				IA-39 (12-24)																
19		0840				IA-40 (0-12)																

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: 2.1 + 3.9 + 3.8 ICE HH

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb
#20 = C-48 12-24 @ 3/21/14 10:14 #21 = E-43 24-36 3/21/14 @ 0920. Add per client request.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	[signature]	3/24/14 10:05
Relinquished by: (Signature)	**Date/Time**	**Received by: (Signature)**	**Date/Time**	**Relinquished by: (Signature)**	**Date/Time**	**Received by: (Signature)**	**Date/Time**
[signature]	3/24/14 10:59	[signature]	3/24/14 1100				

ESS Add samples #20 and #21 per client request. See Comments etc. 3/25/14 @ ESS

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

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www.esslaboratory.com

CHAIN OF CUSTODY

Page ~~3~~ 1 of 2 of ~~3~~ 2

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403380

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name: Tighe & Bond
Project #: N-1011
Project Name (20 Char. or less): Polyply
Contact Person: Michael Martin
Address: 4 Barlows Landing Rd, Unit 15
City: Pocasset State: MA Zip: 02559
PO#:
Telephone #: 508-564-7285
Fax #: 508-564-4298
Email Address: memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260	624	524.2	8021 MTBE/BTEX	VPH	8100 TPH	8015 DRO	8015 GRO	EPH	8081 Pesticides	8082 PCB	608 Pesticides	608 PCB	No Targets	8270	625	PAH only	RCRA5	RCRA8	PP13	TAL23	TCLP8	MCP	MCPw/Hg	NBC7
	3/21/2014	~~0920~~		~~X~~	~~S~~	~~S-33 (24-36)~~	1	G											X														
01		1238				T-14 (0-12)																											
02		1240				T-14 (24-36)																											
03		1000				T-31 (12-24)																											
04		1002				T-31 (24-36)																											
05		0955				T-32 (36-48)																											
06		0945				T-33 (36-48)																											
07		0952				T-33 (60-72)																											
08		1245				U-14 (24-36)																											
09		1040				U-31 (12-24)																											

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp: 2/+3.9+3.8 ICE

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	[signature]	3/24/14 10:05
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14 10:59	[signature]	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

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www.esslaboratory.com

CHAIN OF CUSTODY

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
(MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403380

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO EPH No Targets	8081 Pesticides 8082 PCB 608 Pesticides 608 PCB	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7							
10	3/21/2014	1020		X	S	U-32 (12-24)	1	G				Y										
11		1022				U-32 (24-36)																
12		1100				V-31 (0-12)																
13		1055				V-32 (12-24)																
14		1225				R-14 (24-36)																
15		0955				R-33 (0-12)																
16		1230				S-14 (~~1230~~ 0-12)																
17		1232				S-14 (24-36)																
18		0830				1A-39 (12-24)																
19		0840				1A-40 (0-12)																

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp 2.1 + 3.9 + 3.8 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COURIER	3/24/14 10:05	[signature]	3/24/14 10:05
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14 10:59	[signature]	3/24/14 1100				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403381

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 3:13 pm, Mar 31, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

SAMPLE RECEIPT

The following samples were received on March 24, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403381-01	IA-41 0-12	Soil	8082A
1403381-02	IA-43 0-12	Soil	8082A
1403381-03	IA-44 0-12	Soil	8082A
1403381-04	IB-39 0-12	Soil	8082A
1403381-05	IB-40 0-12	Soil	8082A
1403381-06	A-38 0-12	Soil	8082A
1403381-07	A-39 12-24	Soil	8082A
1403381-08	A-40 12-24	Soil	8082A
1403381-09	A-41 12-24	Soil	8082A
1403381-10	A-42 12-24	Soil	8082A
1403381-11	A-43 12-24	Soil	8082A
1403381-12	B-38 0-12	Soil	8082A
1403381-13	B-39 12-24	Soil	8082A
1403381-14	B-40 12-24	Soil	8082A
1403381-15	B-41 12-24	Soil	8082A
1403381-16	B-41 24-36	Soil	8082A
1403381-17	B-42 12-24	Soil	8082A
1403381-18	C-38 0-12	Soil	8082A
1403381-19	C-38 12-24	Soil	8082A
1403381-20	C-40 12-24	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403381-15 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (189% @ 30-150%)

1403381-18 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (204% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403381-01 through 1403381-20**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: March 31, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IA-41 0-12
Date Sampled: 03/21/14 08:45
Percent Solids: 16
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.301)		8082A		1	03/26/14 4:55		CC42418
Aroclor 1221	ND (0.301)		8082A		1	03/26/14 4:55		CC42418
Aroclor 1232	ND (0.301)		8082A		1	03/26/14 4:55		CC42418
Aroclor 1242	ND (0.301)		8082A		1	03/26/14 4:55		CC42418
Aroclor 1248	**1.17** (0.301)		8082A		1	03/26/14 4:55		CC42418
Aroclor 1254	ND (0.301)		8082A		1	03/26/14 4:55		CC42418
Aroclor 1260	ND (0.301)		8082A		1	03/26/14 4:55		CC42418
Aroclor 1262	ND (0.301)		8082A		1	03/26/14 4:55		CC42418
Aroclor 1268	ND (0.301)		8082A		1	03/26/14 4:55		CC42418

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*47 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IA-43 0-12
Date Sampled: 03/21/14 08:50
Percent Solids: 15
Initial Volume: 30.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.219)		8082A		1	03/26/14 5:14		CC42418
Aroclor 1221	ND (0.219)		8082A		1	03/26/14 5:14		CC42418
Aroclor 1232	ND (0.219)		8082A		1	03/26/14 5:14		CC42418
Aroclor 1242	ND (0.219)		8082A		1	03/26/14 5:14		CC42418
Aroclor 1248	**0.594** (0.219)		8082A		1	03/26/14 5:14		CC42418
Aroclor 1254	ND (0.219)		8082A		1	03/26/14 5:14		CC42418
Aroclor 1260	ND (0.219)		8082A		1	03/26/14 5:14		CC42418
Aroclor 1262	ND (0.219)		8082A		1	03/26/14 5:14		CC42418
Aroclor 1268	ND (0.219)		8082A		1	03/26/14 5:14		CC42418

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*37 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*38 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IA-44 0-12
Date Sampled: 03/21/14 08:55
Percent Solids: 14
Initial Volume: 30.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0600)		8082A		1	03/27/14 22:46		CC42418
Aroclor 1221	ND (0.0600)		8082A		1	03/27/14 22:46		CC42418
Aroclor 1232	ND (0.0600)		8082A		1	03/27/14 22:46		CC42418
Aroclor 1242	ND (0.0600)		8082A		1	03/27/14 22:46		CC42418
Aroclor 1248	ND (0.0600)		8082A		1	03/27/14 22:46		CC42418
Aroclor 1254	ND (0.0600)		8082A		1	03/27/14 22:46		CC42418
Aroclor 1260	ND (0.0600)		8082A		1	03/27/14 22:46		CC42418
Aroclor 1262	ND (0.0600)		8082A		1	03/27/14 22:46		CC42418
Aroclor 1268	ND (0.0600)		8082A		1	03/27/14 22:46		CC42418

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*58 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IB-39 0-12
Date Sampled: 03/21/14 09:15
Percent Solids: 16
Initial Volume: 22.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.284)		8082A		1	03/27/14 20:15		CC42833
Aroclor 1221	ND (0.284)		8082A		1	03/27/14 20:15		CC42833
Aroclor 1232	ND (0.284)		8082A		1	03/27/14 20:15		CC42833
Aroclor 1242	ND (0.284)		8082A		1	03/27/14 20:15		CC42833
Aroclor 1248	**2.55** (0.284)		8082A		1	03/27/14 20:15		CC42833
Aroclor 1254	ND (0.284)		8082A		1	03/27/14 20:15		CC42833
Aroclor 1260	ND (0.284)		8082A		1	03/27/14 20:15		CC42833
Aroclor 1262	ND (0.284)		8082A		1	03/27/14 20:15		CC42833
Aroclor 1268	ND (0.284)		8082A		1	03/27/14 20:15		CC42833

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IB-40 0-12
Date Sampled: 03/21/14 09:20
Percent Solids: 14
Initial Volume: 30.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.242)		8082A		1	03/26/14 8:25		CC42418
Aroclor 1221	ND (0.242)		8082A		1	03/26/14 8:25		CC42418
Aroclor 1232	ND (0.242)		8082A		1	03/26/14 8:25		CC42418
Aroclor 1242	ND (0.242)		8082A		1	03/26/14 8:25		CC42418
Aroclor 1248	**3.03** (0.242)		8082A		1	03/26/14 8:25		CC42418
Aroclor 1254	ND (0.242)		8082A		1	03/26/14 8:25		CC42418
Aroclor 1260	ND (0.242)		8082A		1	03/26/14 8:25		CC42418
Aroclor 1262	ND (0.242)		8082A		1	03/26/14 8:25		CC42418
Aroclor 1268	ND (0.242)		8082A		1	03/26/14 8:25		CC42418

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*56 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-38 0-12
Date Sampled: 03/21/14 09:35
Percent Solids: 14
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.245)		8082A		1	03/26/14 8:44		CC42418
Aroclor 1221	ND (0.245)		8082A		1	03/26/14 8:44		CC42418
Aroclor 1232	ND (0.245)		8082A		1	03/26/14 8:44		CC42418
Aroclor 1242	ND (0.245)		8082A		1	03/26/14 8:44		CC42418
Aroclor 1248	**14.4** (2.45)		8082A		10	03/26/14 15:01		CC42418
Aroclor 1254	ND (0.245)		8082A		1	03/26/14 8:44		CC42418
Aroclor 1260	ND (0.245)		8082A		1	03/26/14 8:44		CC42418
Aroclor 1262	ND (0.245)		8082A		1	03/26/14 8:44		CC42418
Aroclor 1268	ND (0.245)		8082A		1	03/26/14 8:44		CC42418

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*40 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*39 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*40 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-39 12-24
Date Sampled: 03/21/14 09:40
Percent Solids: 13
Initial Volume: 30.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.250)		8082A		1	03/26/14 9:03		CC42418
Aroclor 1221	ND (0.250)		8082A		1	03/26/14 9:03		CC42418
Aroclor 1232	ND (0.250)		8082A		1	03/26/14 9:03		CC42418
Aroclor 1242	ND (0.250)		8082A		1	03/26/14 9:03		CC42418
Aroclor 1248	**24.4** (2.50)		8082A		10	03/26/14 15:20		CC42418
Aroclor 1254	ND (0.250)		8082A		1	03/26/14 9:03		CC42418
Aroclor 1260	ND (0.250)		8082A		1	03/26/14 9:03		CC42418
Aroclor 1262	ND (0.250)		8082A		1	03/26/14 9:03		CC42418
Aroclor 1268	ND (0.250)		8082A		1	03/26/14 9:03		CC42418

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*116 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-40 12-24
Date Sampled: 03/21/14 09:45
Percent Solids: 15
Initial Volume: 30.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.221)		8082A		1	03/26/14 9:22		CC42418
Aroclor 1221	ND (0.221)		8082A		1	03/26/14 9:22		CC42418
Aroclor 1232	ND (0.221)		8082A		1	03/26/14 9:22		CC42418
Aroclor 1242	ND (0.221)		8082A		1	03/26/14 9:22		CC42418
Aroclor 1248	**0.673** (0.221)		8082A		1	03/26/14 9:22		CC42418
Aroclor 1254	ND (0.221)		8082A		1	03/26/14 9:22		CC42418
Aroclor 1260	ND (0.221)		8082A		1	03/26/14 9:22		CC42418
Aroclor 1262	ND (0.221)		8082A		1	03/26/14 9:22		CC42418
Aroclor 1268	ND (0.221)		8082A		1	03/26/14 9:22		CC42418

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*50 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*30 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*32 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-41 12-24
Date Sampled: 03/21/14 10:45
Percent Solids: 11
Initial Volume: 29.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.311)		8082A		1	03/27/14 20:34		CC42833
Aroclor 1221	ND (0.311)		8082A		1	03/27/14 20:34		CC42833
Aroclor 1232	ND (0.311)		8082A		1	03/27/14 20:34		CC42833
Aroclor 1242	ND (0.311)		8082A		1	03/27/14 20:34		CC42833
Aroclor 1248	**0.690** (0.311)		8082A		1	03/27/14 20:34		CC42833
Aroclor 1254	ND (0.311)		8082A		1	03/27/14 20:34		CC42833
Aroclor 1260	ND (0.311)		8082A		1	03/27/14 20:34		CC42833
Aroclor 1262	ND (0.311)		8082A		1	03/27/14 20:34		CC42833
Aroclor 1268	ND (0.311)		8082A		1	03/27/14 20:34		CC42833

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*39 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*41 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-42 12-24
Date Sampled: 03/21/14 10:50
Percent Solids: 14
Initial Volume: 30.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.117)		8082A		1	03/27/14 23:05		CC42418
Aroclor 1221	ND (0.117)		8082A		1	03/27/14 23:05		CC42418
Aroclor 1232	ND (0.117)		8082A		1	03/27/14 23:05		CC42418
Aroclor 1242	ND (0.117)		8082A		1	03/27/14 23:05		CC42418
Aroclor 1248	**0.139** (0.117)		8082A		1	03/27/14 23:05		CC42418
Aroclor 1254	ND (0.117)		8082A		1	03/27/14 23:05		CC42418
Aroclor 1260	ND (0.117)		8082A		1	03/27/14 23:05		CC42418
Aroclor 1262	ND (0.117)		8082A		1	03/27/14 23:05		CC42418
Aroclor 1268	ND (0.117)		8082A		1	03/27/14 23:05		CC42418

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-43 12-24
Date Sampled: 03/21/14 11:00
Percent Solids: 16
Initial Volume: 30.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.213)		8082A		1	03/26/14 10:19		CC42418
Aroclor 1221	ND (0.213)		8082A		1	03/26/14 10:19		CC42418
Aroclor 1232	ND (0.213)		8082A		1	03/26/14 10:19		CC42418
Aroclor 1242	ND (0.213)		8082A		1	03/26/14 10:19		CC42418
Aroclor 1248	**1.45** (0.213)		8082A		1	03/26/14 10:19		CC42418
Aroclor 1254	ND (0.213)		8082A		1	03/26/14 10:19		CC42418
Aroclor 1260	ND (0.213)		8082A		1	03/26/14 10:19		CC42418
Aroclor 1262	ND (0.213)		8082A		1	03/26/14 10:19		CC42418
Aroclor 1268	ND (0.213)		8082A		1	03/26/14 10:19		CC42418

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*146 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*64 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-38 0-12
Date Sampled: 03/21/14 10:15
Percent Solids: 13
Initial Volume: 30.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.258)		8082A		1	03/26/14 10:38		CC42418
Aroclor 1221	ND (0.258)		8082A		1	03/26/14 10:38		CC42418
Aroclor 1232	ND (0.258)		8082A		1	03/26/14 10:38		CC42418
Aroclor 1242	ND (0.258)		8082A		1	03/26/14 10:38		CC42418
Aroclor 1248	**2.33** (0.258)		8082A		1	03/26/14 10:38		CC42418
Aroclor 1254	ND (0.258)		8082A		1	03/26/14 10:38		CC42418
Aroclor 1260	ND (0.258)		8082A		1	03/26/14 10:38		CC42418
Aroclor 1262	ND (0.258)		8082A		1	03/26/14 10:38		CC42418
Aroclor 1268	ND (0.258)		8082A		1	03/26/14 10:38		CC42418

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*109 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-39 12-24
Date Sampled: 03/21/14 10:20
Percent Solids: 12
Initial Volume: 30.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.271)		8082A		1	03/26/14 10:57		CC42418
Aroclor 1221	ND (0.271)		8082A		1	03/26/14 10:57		CC42418
Aroclor 1232	ND (0.271)		8082A		1	03/26/14 10:57		CC42418
Aroclor 1242	ND (0.271)		8082A		1	03/26/14 10:57		CC42418
Aroclor 1248	**1.03** (0.271)		8082A		1	03/26/14 10:57		CC42418
Aroclor 1254	ND (0.271)		8082A		1	03/26/14 10:57		CC42418
Aroclor 1260	ND (0.271)		8082A		1	03/26/14 10:57		CC42418
Aroclor 1262	ND (0.271)		8082A		1	03/26/14 10:57		CC42418
Aroclor 1268	ND (0.271)		8082A		1	03/26/14 10:57		CC42418

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-40 12-24
Date Sampled: 03/21/14 11:15
Percent Solids: 12
Initial Volume: 30.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.274)		8082A		1	03/26/14 11:16		CC42418
Aroclor 1221	ND (0.274)		8082A		1	03/26/14 11:16		CC42418
Aroclor 1232	ND (0.274)		8082A		1	03/26/14 11:16		CC42418
Aroclor 1242	ND (0.274)		8082A		1	03/26/14 11:16		CC42418
Aroclor 1248	**0.400** (0.274)		8082A		1	03/26/14 11:16		CC42418
Aroclor 1254	ND (0.274)		8082A		1	03/26/14 11:16		CC42418
Aroclor 1260	ND (0.274)		8082A		1	03/26/14 11:16		CC42418
Aroclor 1262	ND (0.274)		8082A		1	03/26/14 11:16		CC42418
Aroclor 1268	ND (0.274)		8082A		1	03/26/14 11:16		CC42418

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*120 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-41 12-24
Date Sampled: 03/21/14 11:30
Percent Solids: 13
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.249)		8082A		1	03/26/14 2:54		CC42419
Aroclor 1221	ND (0.249)		8082A		1	03/26/14 2:54		CC42419
Aroclor 1232	ND (0.249)		8082A		1	03/26/14 2:54		CC42419
Aroclor 1242	ND (0.249)		8082A		1	03/26/14 2:54		CC42419
Aroclor 1248	**4.87** (0.249)		8082A		1	03/26/14 2:54		CC42419
Aroclor 1254	ND (0.249)		8082A		1	03/26/14 2:54		CC42419
Aroclor 1260	ND (0.249)		8082A		1	03/26/14 2:54		CC42419
Aroclor 1262	ND (0.249)		8082A		1	03/26/14 2:54		CC42419
Aroclor 1268	ND (0.249)		8082A		1	03/26/14 2:54		CC42419

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*189 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-41 24-36
Date Sampled: 03/21/14 11:35
Percent Solids: 14
Initial Volume: 30.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.241)		8082A		1	03/26/14 3:13		CC42419
Aroclor 1221	ND (0.241)		8082A		1	03/26/14 3:13		CC42419
Aroclor 1232	ND (0.241)		8082A		1	03/26/14 3:13		CC42419
Aroclor 1242	ND (0.241)		8082A		1	03/26/14 3:13		CC42419
Aroclor 1248	**0.408** (0.241)		8082A		1	03/26/14 3:13		CC42419
Aroclor 1254	ND (0.241)		8082A		1	03/26/14 3:13		CC42419
Aroclor 1260	ND (0.241)		8082A		1	03/26/14 3:13		CC42419
Aroclor 1262	ND (0.241)		8082A		1	03/26/14 3:13		CC42419
Aroclor 1268	ND (0.241)		8082A		1	03/26/14 3:13		CC42419

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*110 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-42 12-24
Date Sampled: 03/21/14 11:40
Percent Solids: 14
Initial Volume: 30.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.230)		8082A		1	03/26/14 3:32		CC42419
Aroclor 1221	ND (0.230)		8082A		1	03/26/14 3:32		CC42419
Aroclor 1232	ND (0.230)		8082A		1	03/26/14 3:32		CC42419
Aroclor 1242	ND (0.230)		8082A		1	03/26/14 3:32		CC42419
Aroclor 1248	**0.880** (0.230)		8082A		1	03/26/14 3:32		CC42419
Aroclor 1254	ND (0.230)		8082A		1	03/26/14 3:32		CC42419
Aroclor 1260	ND (0.230)		8082A		1	03/26/14 3:32		CC42419
Aroclor 1262	ND (0.230)		8082A		1	03/26/14 3:32		CC42419
Aroclor 1268	ND (0.230)		8082A		1	03/26/14 3:32		CC42419

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*104 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*51 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-38 0-12
Date Sampled: 03/21/14 12:05
Percent Solids: 13
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.256)		8082A		1	03/26/14 3:51		CC42419
Aroclor 1221	ND (0.256)		8082A		1	03/26/14 3:51		CC42419
Aroclor 1232	ND (0.256)		8082A		1	03/26/14 3:51		CC42419
Aroclor 1242	ND (0.256)		8082A		1	03/26/14 3:51		CC42419
Aroclor 1248	**8.68** (1.28)		8082A		5	03/26/14 16:13		CC42419
Aroclor 1254	ND (0.256)		8082A		1	03/26/14 3:51		CC42419
Aroclor 1260	ND (0.256)		8082A		1	03/26/14 3:51		CC42419
Aroclor 1262	ND (0.256)		8082A		1	03/26/14 3:51		CC42419
Aroclor 1268	ND (0.256)		8082A		1	03/26/14 3:51		CC42419

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*204 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-38 12-24
Date Sampled: 03/21/14 12:20
Percent Solids: 14
Initial Volume: 30.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.228)		8082A		1	03/26/14 4:10		CC42419
Aroclor 1221	ND (0.228)		8082A		1	03/26/14 4:10		CC42419
Aroclor 1232	ND (0.228)		8082A		1	03/26/14 4:10		CC42419
Aroclor 1242	ND (0.228)		8082A		1	03/26/14 4:10		CC42419
Aroclor 1248	**0.422** (0.228)		8082A		1	03/26/14 4:10		CC42419
Aroclor 1254	ND (0.228)		8082A		1	03/26/14 4:10		CC42419
Aroclor 1260	ND (0.228)		8082A		1	03/26/14 4:10		CC42419
Aroclor 1262	ND (0.228)		8082A		1	03/26/14 4:10		CC42419
Aroclor 1268	ND (0.228)		8082A		1	03/26/14 4:10		CC42419

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*103 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*35 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*38 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-40 12-24
Date Sampled: 03/21/14 12:25
Percent Solids: 16
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403381
ESS Laboratory Sample ID: 1403381-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.207)		8082A		1	03/26/14 4:29		CC42419
Aroclor 1221	ND (0.207)		8082A		1	03/26/14 4:29		CC42419
Aroclor 1232	ND (0.207)		8082A		1	03/26/14 4:29		CC42419
Aroclor 1242	ND (0.207)		8082A		1	03/26/14 4:29		CC42419
Aroclor 1248	**1.12** (0.207)		8082A		1	03/26/14 4:29		CC42419
Aroclor 1254	ND (0.207)		8082A		1	03/26/14 4:29		CC42419
Aroclor 1260	ND (0.207)		8082A		1	03/26/14 4:29		CC42419
Aroclor 1262	ND (0.207)		8082A		1	03/26/14 4:29		CC42419
Aroclor 1268	ND (0.207)		8082A		1	03/26/14 4:29		CC42419

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*49 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42418 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42418 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42418 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS										
Aroclor 1016	0.499	0.0500	mg/kg wet	0.5000		100	40-140			
Aroclor 1260	0.483	0.0500	mg/kg wet	0.5000		97	40-140			
Surrogate: Decachlorobiphenyl	*0.0280*		mg/kg wet	*0.02500*		*112*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0277*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
LCS Dup										
Aroclor 1016	0.492	0.0500	mg/kg wet	0.5000		98	40-140	1	30	
Aroclor 1260	0.488	0.0500	mg/kg wet	0.5000		98	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0279*		mg/kg wet	*0.02500*		*112*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0276*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Batch CC42419 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42419 - 3540C										
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42419 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0275*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42419 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
LCS										
Aroclor 1016	0.519	0.0250	mg/kg wet	0.5000		104	40-140			
Aroclor 1260	0.535	0.0250	mg/kg wet	0.5000		107	40-140			
Surrogate: Decachlorobiphenyl	*0.0280*		mg/kg wet	*0.02500*		*112*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0278*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0242*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS Dup										
Aroclor 1016	0.525	0.0250	mg/kg wet	0.5000		105	40-140	1	30	
Aroclor 1260	0.548	0.0250	mg/kg wet	0.5000		110	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0285*		mg/kg wet	*0.02500*		*114*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0289*		mg/kg wet	*0.02500*		*116*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			
Batch CC42833 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42833 - 3540C										
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42833 - 3540C										
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0186*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS										
Aroclor 1016	0.439	0.0500	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.429	0.0500	mg/kg wet	0.5000		86	40-140			
Surrogate: Decachlorobiphenyl	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS Dup										
Aroclor 1016	0.461	0.0500	mg/kg wet	0.5000		92	40-140	5	30	
Aroclor 1260	0.455	0.0500	mg/kg wet	0.5000		91	40-140	6	30	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42833 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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ESS Laboratory Work Order: 1403381

Notes and Definitions

U	Analyte included in the analysis, but not detected
SM	Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403381

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030381
Date Project Due: 3/31/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: ~~3.9~~ * 2.1 eo 3/25/14
   Iced With: Ice
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample Yes
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? Yes|No
17. Were samples received intact? Yes|No

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: M. Meade Date/Time: 3/24/14 1300
Reviewed By: [signature] Date/Time: 3/24/14 1324

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

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Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
(MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403381

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH / No Targets	8081 Pesticides / (8082 PCB) / 608 Pesticides / 608 PCB	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
01	3/21/2014	0845		X	S	1A-41 (0-12)	1	G				X										
02		0850				1A-43 (0-12)																
03		0855				1A-44 (0-12)																
04		0915				1B-39 (0-12)																
05		0920				1B-40 (0-12)																
06		0935				A-38 (0-12)																
07		0940				A-39 (12-24)																
08		0945				A-40 (12-24)																
09		1045				A-41 (12-24)																
10		1050				A-42 (12-24)																

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp: 2/+38+3.9 Ice Kit

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	[signature]	3/24/14 10:05
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14 ~~10:05~~ 10:59	[signature]	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

. *Division of Thielsch Engineering, Inc.*
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
(MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403381

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH	8081 Pesticides / 8082 PCB / 608 Pesticides / 608 PCB / No Targets	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
11	3/21/2014	1100		X	S	A-43 (12-24)	1	G				X										
12		1015				B-38 (0-12)																
13		1020				B-39 (12-24)																
14		1115				B-40 (12-24)																
15		1130				B-41 (12-24)																
16		1135				B-41 (24-36)																
17		1140				B-42 (12-24)																
18		1205				C-38 (0-12)																
19		1220				C-39 (12-24)																
~~20~~		1225				C-40 (12-24)																

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp: 2.1 + 3.9 + 3.9 Ice KH

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			Cooler	3/24/14 10:05	[signature]	3/24/14 10:05
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14 10:59	[signature]	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403382

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 4:41 pm, Mar 31, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403382

SAMPLE RECEIPT

The following samples were received on March 24, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403382-01	C-40 24-36	Soil	8082A
1403382-02	C-42 12-24	Soil	8082A
1403382-03	C-42 24-36	Soil	8082A
1403382-04	D-38 0-12	Soil	8082A
1403382-05	D-39 12-24	Soil	8082A
1403382-06	D-40 12-24	Soil	8082A
1403382-07	D-41 12-24	Soil	8082A
1403382-08	D-41 24-36	Soil	8082A
1403382-09	D-42 12-24	Soil	8082A
1403382-10	E-38 0-12	Soil	8082A
1403382-11	E-39 0-12	Soil	8082A
1403382-12	E-40 24-36	Soil	8082A
1403382-13	E-41 24-36	Soil	8082A
1403382-14	E-42 24-36	Soil	8082A
1403382-15	IA-46 0-12	Soil	8082A
1403382-16	IA-47 0-12	Soil	8082A
1403382-17	IA-48 0-12	Soil	8082A
1403382-18	IA-49 0-12	Soil	8082A
1403382-19	A-43 12-24	Soil	8082A
1403382-20	A-44 0-12	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403382

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403382-04	**Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).** Tetrachloro-m-xylene (26% @ 30-150%), Tetrachloro-m-xylene [2C] (27% @ 30-150%)
1403382-04RE1	**Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).** Decachlorobiphenyl [2C] (26% @ 30-150%), Tetrachloro-m-xylene (21% @ 30-150%), Tetrachloro-m-xylene [2C] (22% @ 30-150%)
1403382-12	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).** Decachlorobiphenyl (165% @ 30-150%)
1403382-20	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).** Decachlorobiphenyl (158% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403382

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403382

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403382-01 through 1403382-20**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: March 31, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-40 24-36
Date Sampled: 03/21/14 12:30
Percent Solids: 15
Initial Volume: 29.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.222)		8082A		1	03/26/14 4:48		CC42419
Aroclor 1221	ND (0.222)		8082A		1	03/26/14 4:48		CC42419
Aroclor 1232	ND (0.222)		8082A		1	03/26/14 4:48		CC42419
Aroclor 1242	ND (0.222)		8082A		1	03/26/14 4:48		CC42419
Aroclor 1248	**0.742** (0.222)		8082A		1	03/26/14 4:48		CC42419
Aroclor 1254	ND (0.222)		8082A		1	03/26/14 4:48		CC42419
Aroclor 1260	ND (0.222)		8082A		1	03/26/14 4:48		CC42419
Aroclor 1262	ND (0.222)		8082A		1	03/26/14 4:48		CC42419
Aroclor 1268	ND (0.222)		8082A		1	03/26/14 4:48		CC42419

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*104 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*40 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*43 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-42 12-24
Date Sampled: 03/21/14 12:40
Percent Solids: 14
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.237)		8082A		1	03/26/14 5:07		CC42419
Aroclor 1221	ND (0.237)		8082A		1	03/26/14 5:07		CC42419
Aroclor 1232	ND (0.237)		8082A		1	03/26/14 5:07		CC42419
Aroclor 1242	ND (0.237)		8082A		1	03/26/14 5:07		CC42419
Aroclor 1248	**0.570** (0.237)		8082A		1	03/26/14 5:07		CC42419
Aroclor 1254	ND (0.237)		8082A		1	03/26/14 5:07		CC42419
Aroclor 1260	ND (0.237)		8082A		1	03/26/14 5:07		CC42419
Aroclor 1262	ND (0.237)		8082A		1	03/26/14 5:07		CC42419
Aroclor 1268	ND (0.237)		8082A		1	03/26/14 5:07		CC42419

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*57 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*36 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*31 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-42 24-36
Date Sampled: 03/21/14 12:45
Percent Solids: 13
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.124)		8082A		1	03/26/14 5:26		CC42419
Aroclor 1221	ND (0.124)		8082A		1	03/26/14 5:26		CC42419
Aroclor 1232	ND (0.124)		8082A		1	03/26/14 5:26		CC42419
Aroclor 1242	ND (0.124)		8082A		1	03/26/14 5:26		CC42419
Aroclor 1248	**0.194** (0.124)		8082A		1	03/26/14 5:26		CC42419
Aroclor 1254	ND (0.124)		8082A		1	03/26/14 5:26		CC42419
Aroclor 1260	ND (0.124)		8082A		1	03/26/14 5:26		CC42419
Aroclor 1262	ND (0.124)		8082A		1	03/26/14 5:26		CC42419
Aroclor 1268	ND (0.124)		8082A		1	03/26/14 5:26		CC42419

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*38 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*33 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-38 0-12
Date Sampled: 03/21/14 14:15
Percent Solids: 15
Initial Volume: 30.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.216)		8082A		1	03/26/14 5:45		CC42616
Aroclor 1221	ND (0.216)		8082A		1	03/26/14 5:45		CC42616
Aroclor 1232	ND (0.216)		8082A		1	03/26/14 5:45		CC42616
Aroclor 1242	ND (0.216)		8082A		1	03/26/14 5:45		CC42616
Aroclor 1248	**0.384** (0.216)		8082A		1	03/26/14 5:45		CC42616
Aroclor 1254	ND (0.216)		8082A		1	03/26/14 5:45		CC42616
Aroclor 1260	ND (0.216)		8082A		1	03/26/14 5:45		CC42616
Aroclor 1262	ND (0.216)		8082A		1	03/26/14 5:45		CC42616
Aroclor 1268	ND (0.216)		8082A		1	03/26/14 5:45		CC42616

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*33 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*26 %*	*SC*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*27 %*	*SC*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-38 0-12
Date Sampled: 03/21/14 14:15
Percent Solids: 15
Initial Volume: 30.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-04RE1
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.212)		8082A		1	03/27/14 20:53		CC42616
Aroclor 1221	ND (0.212)		8082A		1	03/27/14 20:53		CC42616
Aroclor 1232	ND (0.212)		8082A		1	03/27/14 20:53		CC42616
Aroclor 1242	ND (0.212)		8082A		1	03/27/14 20:53		CC42616
Aroclor 1248	**0.339** (0.212)		8082A		1	03/27/14 20:53		CC42616
Aroclor 1254	ND (0.212)		8082A		1	03/27/14 20:53		CC42616
Aroclor 1260	ND (0.212)		8082A		1	03/27/14 20:53		CC42616
Aroclor 1262	ND (0.212)		8082A		1	03/27/14 20:53		CC42616
Aroclor 1268	ND (0.212)		8082A		1	03/27/14 20:53		CC42616

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*26 %*	*SC*	*30-150*
Surrogate: Tetrachloro-m-xylene	*21 %*	*SC*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*22 %*	*SC*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-39 12-24
Date Sampled: 03/21/14 14:21
Percent Solids: 14
Initial Volume: 29.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.124)		8082A		1	03/26/14 8:16		CC42419
Aroclor 1221	ND (0.124)		8082A		1	03/26/14 8:16		CC42419
Aroclor 1232	ND (0.124)		8082A		1	03/26/14 8:16		CC42419
Aroclor 1242	ND (0.124)		8082A		1	03/26/14 8:16		CC42419
Aroclor 1248	**0.134** (0.124)		8082A		1	03/26/14 8:16		CC42419
Aroclor 1254	ND (0.124)		8082A		1	03/26/14 8:16		CC42419
Aroclor 1260	ND (0.124)		8082A		1	03/26/14 8:16		CC42419
Aroclor 1262	ND (0.124)		8082A		1	03/26/14 8:16		CC42419
Aroclor 1268	ND (0.124)		8082A		1	03/26/14 8:16		CC42419

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*140 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*40 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*44 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-40 12-24
Date Sampled: 03/21/14 14:19
Percent Solids: 16
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.104)		8082A		1	03/26/14 8:35		CC42419
Aroclor 1221	ND (0.104)		8082A		1	03/26/14 8:35		CC42419
Aroclor 1232	ND (0.104)		8082A		1	03/26/14 8:35		CC42419
Aroclor 1242	ND (0.104)		8082A		1	03/26/14 8:35		CC42419
Aroclor 1248	**0.149** (0.104)		8082A		1	03/26/14 8:35		CC42419
Aroclor 1254	ND (0.104)		8082A		1	03/26/14 8:35		CC42419
Aroclor 1260	ND (0.104)		8082A		1	03/26/14 8:35		CC42419
Aroclor 1262	ND (0.104)		8082A		1	03/26/14 8:35		CC42419
Aroclor 1268	ND (0.104)		8082A		1	03/26/14 8:35		CC42419

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*118 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*46 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*50 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-41 12-24
Date Sampled: 03/21/14 14:00
Percent Solids: 16
Initial Volume: 29.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.107)		8082A		1	03/26/14 8:54		CC42419
Aroclor 1221	ND (0.107)		8082A		1	03/26/14 8:54		CC42419
Aroclor 1232	ND (0.107)		8082A		1	03/26/14 8:54		CC42419
Aroclor 1242	ND (0.107)		8082A		1	03/26/14 8:54		CC42419
Aroclor 1248	**0.179** (0.107)		8082A		1	03/26/14 8:54		CC42419
Aroclor 1254	ND (0.107)		8082A		1	03/26/14 8:54		CC42419
Aroclor 1260	ND (0.107)		8082A		1	03/26/14 8:54		CC42419
Aroclor 1262	ND (0.107)		8082A		1	03/26/14 8:54		CC42419
Aroclor 1268	ND (0.107)		8082A		1	03/26/14 8:54		CC42419

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*126 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-41 24-36
Date Sampled: 03/21/14 14:10
Percent Solids: 15
Initial Volume: 29.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.226)		8082A		1	03/26/14 9:13		CC42419
Aroclor 1221	ND (0.226)		8082A		1	03/26/14 9:13		CC42419
Aroclor 1232	ND (0.226)		8082A		1	03/26/14 9:13		CC42419
Aroclor 1242	ND (0.226)		8082A		1	03/26/14 9:13		CC42419
Aroclor 1248	**0.452** (0.226)		8082A		1	03/26/14 9:13		CC42419
Aroclor 1254	ND (0.226)		8082A		1	03/26/14 9:13		CC42419
Aroclor 1260	ND (0.226)		8082A		1	03/26/14 9:13		CC42419
Aroclor 1262	ND (0.226)		8082A		1	03/26/14 9:13		CC42419
Aroclor 1268	ND (0.226)		8082A		1	03/26/14 9:13		CC42419

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*36 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*39 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-42 12-24
Date Sampled: 03/21/14 14:05
Percent Solids: 14
Initial Volume: 29.7
Final Volume: 5
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0587)		8082A		1	03/31/14 13:36		CC42419
Aroclor 1221	ND (0.0587)		8082A		1	03/31/14 13:36		CC42419
Aroclor 1232	ND (0.0587)		8082A		1	03/31/14 13:36		CC42419
Aroclor 1242	ND (0.0587)		8082A		1	03/31/14 13:36		CC42419
Aroclor 1248	ND (0.0587)		8082A		1	03/31/14 13:36		CC42419
Aroclor 1254	ND (0.0587)		8082A		1	03/31/14 13:36		CC42419
Aroclor 1260	ND (0.0587)		8082A		1	03/31/14 13:36		CC42419
Aroclor 1262	ND (0.0587)		8082A		1	03/31/14 13:36		CC42419
Aroclor 1268	ND (0.0587)		8082A		1	03/31/14 13:36		CC42419

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*61 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*51 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-38 0-12
Date Sampled: 03/21/14 14:25
Percent Solids: 15
Initial Volume: 29.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.218)		8082A		1	03/26/14 9:51		CC42419
Aroclor 1221	ND (0.218)		8082A		1	03/26/14 9:51		CC42419
Aroclor 1232	ND (0.218)		8082A		1	03/26/14 9:51		CC42419
Aroclor 1242	ND (0.218)		8082A		1	03/26/14 9:51		CC42419
Aroclor 1248	**3.49** (0.218)		8082A		1	03/26/14 9:51		CC42419
Aroclor 1254	ND (0.218)		8082A		1	03/26/14 9:51		CC42419
Aroclor 1260	ND (0.218)		8082A		1	03/26/14 9:51		CC42419
Aroclor 1262	ND (0.218)		8082A		1	03/26/14 9:51		CC42419
Aroclor 1268	ND (0.218)		8082A		1	03/26/14 9:51		CC42419

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*60 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-39 0-12
Date Sampled: 03/21/14 14:28
Percent Solids: 14
Initial Volume: 30.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.229)		8082A		1	03/26/14 10:29		CC42419
Aroclor 1221	ND (0.229)		8082A		1	03/26/14 10:29		CC42419
Aroclor 1232	ND (0.229)		8082A		1	03/26/14 10:29		CC42419
Aroclor 1242	ND (0.229)		8082A		1	03/26/14 10:29		CC42419
Aroclor 1248	**2.11** (0.229)		8082A		1	03/26/14 10:29		CC42419
Aroclor 1254	ND (0.229)		8082A		1	03/26/14 10:29		CC42419
Aroclor 1260	ND (0.229)		8082A		1	03/26/14 10:29		CC42419
Aroclor 1262	ND (0.229)		8082A		1	03/26/14 10:29		CC42419
Aroclor 1268	ND (0.229)		8082A		1	03/26/14 10:29		CC42419

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-40 24-36
Date Sampled: 03/21/14 14:30
Percent Solids: 16
Initial Volume: 29.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.107)		8082A		1	03/26/14 11:45		CC42419
Aroclor 1221	ND (0.107)		8082A		1	03/26/14 11:45		CC42419
Aroclor 1232	ND (0.107)		8082A		1	03/26/14 11:45		CC42419
Aroclor 1242	ND (0.107)		8082A		1	03/26/14 11:45		CC42419
Aroclor 1248	**0.185** (0.107)		8082A		1	03/26/14 11:45		CC42419
Aroclor 1254	ND (0.107)		8082A		1	03/26/14 11:45		CC42419
Aroclor 1260	ND (0.107)		8082A		1	03/26/14 11:45		CC42419
Aroclor 1262	ND (0.107)		8082A		1	03/26/14 11:45		CC42419
Aroclor 1268	ND (0.107)		8082A		1	03/26/14 11:45		CC42419

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*165 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-41 24-36
Date Sampled: 03/21/14 14:32
Percent Solids: 16
Initial Volume: 30.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 15:30
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.204)		8082A		1	03/27/14 10:27		CC42419
Aroclor 1221	ND (0.204)		8082A		1	03/27/14 10:27		CC42419
Aroclor 1232	ND (0.204)		8082A		1	03/27/14 10:27		CC42419
Aroclor 1242	ND (0.204)		8082A		1	03/27/14 10:27		CC42419
Aroclor 1248	**0.456** (0.204)		8082A		1	03/27/14 10:27		CC42419
Aroclor 1254	ND (0.204)		8082A		1	03/27/14 10:27		CC42419
Aroclor 1260	ND (0.204)		8082A		1	03/27/14 10:27		CC42419
Aroclor 1262	ND (0.204)		8082A		1	03/27/14 10:27		CC42419
Aroclor 1268	ND (0.204)		8082A		1	03/27/14 10:27		CC42419

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*117 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*37 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*38 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*41 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-42 24-36
Date Sampled: 03/21/14 14:35
Percent Solids: 13
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 15:30
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.257)		8082A		1	03/27/14 10:46		CC42419
Aroclor 1221	ND (0.257)		8082A		1	03/27/14 10:46		CC42419
Aroclor 1232	ND (0.257)		8082A		1	03/27/14 10:46		CC42419
Aroclor 1242	ND (0.257)		8082A		1	03/27/14 10:46		CC42419
Aroclor 1248	**1.25** (0.257)		8082A		1	03/27/14 10:46		CC42419
Aroclor 1254	ND (0.257)		8082A		1	03/27/14 10:46		CC42419
Aroclor 1260	ND (0.257)		8082A		1	03/27/14 10:46		CC42419
Aroclor 1262	ND (0.257)		8082A		1	03/27/14 10:46		CC42419
Aroclor 1268	ND (0.257)		8082A		1	03/27/14 10:46		CC42419

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*113 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*58 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IA-46 0-12
Date Sampled: 03/21/14 12:00
Percent Solids: 15
Initial Volume: 29.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.222)		8082A		1	03/26/14 16:32		CC42420
Aroclor 1221	ND (0.222)		8082A		1	03/26/14 16:32		CC42420
Aroclor 1232	ND (0.222)		8082A		1	03/26/14 16:32		CC42420
Aroclor 1242	ND (0.222)		8082A		1	03/26/14 16:32		CC42420
Aroclor 1248	**0.478** (0.222)		8082A		1	03/26/14 16:32		CC42420
Aroclor 1254	ND (0.222)		8082A		1	03/26/14 16:32		CC42420
Aroclor 1260	ND (0.222)		8082A		1	03/26/14 16:32		CC42420
Aroclor 1262	ND (0.222)		8082A		1	03/26/14 16:32		CC42420
Aroclor 1268	ND (0.222)		8082A		1	03/26/14 16:32		CC42420

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*120 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*36 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*33 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*35 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IA-47 0-12
Date Sampled: 03/21/14 12:03
Percent Solids: 17
Initial Volume: 30.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0990)		8082A		1	03/26/14 16:51		CC42420
Aroclor 1221	ND (0.0990)		8082A		1	03/26/14 16:51		CC42420
Aroclor 1232	ND (0.0990)		8082A		1	03/26/14 16:51		CC42420
Aroclor 1242	ND (0.0990)		8082A		1	03/26/14 16:51		CC42420
Aroclor 1248	ND (0.0990)		8082A		1	03/26/14 16:51		CC42420
Aroclor 1254	ND (0.0990)		8082A		1	03/26/14 16:51		CC42420
Aroclor 1260	ND (0.0990)		8082A		1	03/26/14 16:51		CC42420
Aroclor 1262	ND (0.0990)		8082A		1	03/26/14 16:51		CC42420
Aroclor 1268	ND (0.0990)		8082A		1	03/26/14 16:51		CC42420

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*82 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IA-48 0-12
Date Sampled: 03/21/14 12:08
Percent Solids: 17
Initial Volume: 30.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.194)		8082A		1	03/26/14 17:10		CC42420
Aroclor 1221	ND (0.194)		8082A		1	03/26/14 17:10		CC42420
Aroclor 1232	ND (0.194)		8082A		1	03/26/14 17:10		CC42420
Aroclor 1242	ND (0.194)		8082A		1	03/26/14 17:10		CC42420
Aroclor 1248	ND (0.194)		8082A		1	03/26/14 17:10		CC42420
Aroclor 1254	**0.428** (0.194)		8082A		1	03/26/14 17:10		CC42420
Aroclor 1260	ND (0.194)		8082A		1	03/26/14 17:10		CC42420
Aroclor 1262	ND (0.194)		8082A		1	03/26/14 17:10		CC42420
Aroclor 1268	ND (0.194)		8082A		1	03/26/14 17:10		CC42420

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*113 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*64 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IA-49 0-12
Date Sampled: 03/21/14 12:13
Percent Solids: 15
Initial Volume: 29.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.112)		8082A		1	03/26/14 17:29		CC42420
Aroclor 1221	ND (0.112)		8082A		1	03/26/14 17:29		CC42420
Aroclor 1232	ND (0.112)		8082A		1	03/26/14 17:29		CC42420
Aroclor 1242	ND (0.112)		8082A		1	03/26/14 17:29		CC42420
Aroclor 1248	ND (0.112)		8082A		1	03/26/14 17:29		CC42420
Aroclor 1254	ND (0.112)		8082A		1	03/26/14 17:29		CC42420
Aroclor 1260	ND (0.112)		8082A		1	03/26/14 17:29		CC42420
Aroclor 1262	ND (0.112)		8082A		1	03/26/14 17:29		CC42420
Aroclor 1268	ND (0.112)		8082A		1	03/26/14 17:29		CC42420

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*140 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*39 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*40 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-43 12-24
Date Sampled: 03/21/14 11:00
Percent Solids: 15
Initial Volume: 30.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.220)		8082A		1	03/29/14 16:55		CC42617
Aroclor 1221	ND (0.220)		8082A		1	03/29/14 16:55		CC42617
Aroclor 1232	ND (0.220)		8082A		1	03/29/14 16:55		CC42617
Aroclor 1242	ND (0.220)		8082A		1	03/29/14 16:55		CC42617
Aroclor 1248	**0.463** (0.220)		8082A		1	03/29/14 16:55		CC42617
Aroclor 1254	ND (0.220)		8082A		1	03/29/14 16:55		CC42617
Aroclor 1260	ND (0.220)		8082A		1	03/29/14 16:55		CC42617
Aroclor 1262	ND (0.220)		8082A		1	03/29/14 16:55		CC42617
Aroclor 1268	ND (0.220)		8082A		1	03/29/14 16:55		CC42617

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*133 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-44 0-12
Date Sampled: 03/21/14 11:03
Percent Solids: 14
Initial Volume: 29.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403382
ESS Laboratory Sample ID: 1403382-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.234)		8082A		1	03/26/14 18:06		CC42420
Aroclor 1221	ND (0.234)		8082A		1	03/26/14 18:06		CC42420
Aroclor 1232	ND (0.234)		8082A		1	03/26/14 18:06		CC42420
Aroclor 1242	ND (0.234)		8082A		1	03/26/14 18:06		CC42420
Aroclor 1248	**8.26** (1.17)		8082A		5	03/27/14 23:24		CC42420
Aroclor 1254	ND (0.234)		8082A		1	03/26/14 18:06		CC42420
Aroclor 1260	ND (0.234)		8082A		1	03/26/14 18:06		CC42420
Aroclor 1262	ND (0.234)		8082A		1	03/26/14 18:06		CC42420
Aroclor 1268	ND (0.234)		8082A		1	03/26/14 18:06		CC42420

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*158 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403382

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42419 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403382

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42419 - 3540C										
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403382

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42419 - 3540C										
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0275*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
LCS										
Aroclor 1016	0.519	0.0250	mg/kg wet	0.5000		104	40-140			
Aroclor 1260	0.535	0.0250	mg/kg wet	0.5000		107	40-140			
Surrogate: Decachlorobiphenyl	*0.0280*		mg/kg wet	*0.02500*		*112*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0278*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0242*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS Dup										
Aroclor 1016	0.525	0.0250	mg/kg wet	0.5000		105	40-140	1	30	
Aroclor 1260	0.548	0.0250	mg/kg wet	0.5000		110	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0285*		mg/kg wet	*0.02500*		*114*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0289*		mg/kg wet	*0.02500*		*116*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			
Batch CC42420 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403382

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42420 - 3540C										
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403382

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42420 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403382

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42420 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS										
Aroclor 1016	0.458	0.0250	mg/kg wet	0.5000		92	40-140			
Aroclor 1260	0.478	0.0250	mg/kg wet	0.5000		96	40-140			
Surrogate: Decachlorobiphenyl	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
LCS Dup										
Aroclor 1016	0.468	0.0250	mg/kg wet	0.5000		94	40-140	2	30	
Aroclor 1260	0.489	0.0250	mg/kg wet	0.5000		98	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Batch CC42616 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403382

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42616 - 3540C										
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42616 - 3540C										
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0186*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS										
Aroclor 1016	0.439	0.0500	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.429	0.0500	mg/kg wet	0.5000		86	40-140			
Surrogate: Decachlorobiphenyl	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS Dup										
Aroclor 1016	0.461	0.0500	mg/kg wet	0.5000		92	40-140	5	30	
Aroclor 1260	0.455	0.0500	mg/kg wet	0.5000		91	40-140	6	30	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403382

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42616 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Batch CC42617 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42617 - 3540C										
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42617 - 3540C										
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0256*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0211*		mg/kg wet	*0.02500*		*85*	*30-150*			
LCS										
Aroclor 1016	0.465	0.0500	mg/kg wet	0.5000		93	40-140			
Aroclor 1260	0.489	0.0500	mg/kg wet	0.5000		98	40-140			
Surrogate: Decachlorobiphenyl	*0.0259*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0211*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
LCS Dup										
Aroclor 1016	0.468	0.0500	mg/kg wet	0.5000		94	40-140	0.7	30	
Aroclor 1260	0.488	0.0500	mg/kg wet	0.5000		98	40-140	0.1	30	
Surrogate: Decachlorobiphenyl	*0.0257*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0259*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford ESS Laboratory Work Order: 1403382

Notes and Definitions

U	Analyte included in the analysis, but not detected
SM	Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
SC	Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403382

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030382
Date Project Due: 3/31/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: ~~3.8~~°C 2.1 EO
   Iced With: ~~Icepacks~~ 3/24/14 3/25/14
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample Yes
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? Yes|No
17. Were samples received intact? Yes|No

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

Sample 18, cap of jar reads IA-49 12-24. The label of sample 18 reads IA-49 0-12 with 12-24 crossed out by client.

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: M. [illegible] Date/Time: 3/24/14 1300
Reviewed By: [illegible] Date/Time: 3/24/14 1329

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030382
Date Project Due: 3/31/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: ~~3.8°C~~* 2.1 eo 3/25/14
   Iced With: ~~**Icepacks**~~ 3/24/14
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: M. [illegible] Date/Time: 3/24/14 1300
Reviewed By: [illegible] Date/Time: 3/24/14 1329

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

1 of 2 u

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
(MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403382

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH / No Targets	8081 Pesticides / 8082 PCB / 608 Pesticides / 608 PCB	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
1	3/21/2014	1230		X	S	C-40 (24-36)	1	G				X										
2	↓	1240		↓	↓	C-42 (12-24)						↓										
3		1245				C-42 (24-36)																
4		1415				D-38 (0-12)																
5		1421				D-39 (12-24)																
6		1419				D-40 (12-24)																
7		1400				D-41 (12-24)																
8		1410				D-41 (24-36)																
9		1405				D-42 (12-24)																
10	↓	1425		↓	↓	E-38 (0-12)						↓										

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp: 21+3.8+3.9 ICE PKT

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	[signature]	3/24/14 10:05
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14 10:59	M. Martin	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
(MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403382

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name: Tighe & Bond
Project #: N-1011
Project Name (20 Char. or less): Polyply
Contact Person: Michael Martin
Address: 4 Barlows Landing Rd, Unit 15
City: Pocasset State: MA Zip: 02559 PO#:
Telephone #: 508-564-7285 Fax #: 508-564-4298 Email Address: memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH	8081 Pesticides / 8082 PCB / No Targets	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7	608 Pesticides / 608 PCB						
11	3/21/2014	1428		X	S	E-39 (0-12)	1	G				X										
12		1430				E-40 (24-36)																
13		1432				E-41 (24-36)																
14		1435				E-42 (24-36)																
15		1200				1A-46 (0-12)																
16		1203				1A-47 (0-12)																
17		1208				1A-48 (0-12)																
18		1213				1A-49 (0-12)																
19		1100				A-43 (12-24)																
20		1103				A-44 (0-12)																

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp 2.1+3.8+3.9 Ice Kit

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	[signature]	3/24/14 10:05
[signature]	3/24/14 10:59	[signature]	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403383

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 5:39 pm, Mar 31, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403383

SAMPLE RECEIPT

The following samples were received on March 24, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403383-01	A-46 0-12	Soil	8082A
1403383-02	A-47 12-24	Soil	8082A
1403383-03	A-48 12-24	Soil	8082A
1403383-04	A-49 12-24	Soil	8082A
1403383-05	A-50 0-12	Soil	8082A
1403383-06	B-43 12-24	Soil	8082A
1403383-07	B-44 0-12	Soil	8082A
1403383-08	B-45 0-12	Soil	8082A
1403383-09	B-47 12-24	Soil	8082A
1403383-10	B-48 12-24	Soil	8082A
1403383-11	D-45 12-24	Soil	8082A
1403383-12	D-47 12-24	Soil	8082A
1403383-13	D-48 12-24	Soil	8082A
1403383-14	D-49 12-24	Soil	8082A
1403383-15	D-50 0-12	Soil	8082A
1403383-16	E-44 12-24	Soil	8082A
1403383-17	E-44 24-36	Soil	8082A
1403383-18	E-45 24-36	Soil	8082A
1403383-19	E-46 24-36	Soil	8082A
1403383-20	E-47 12-24	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403383

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403383-01	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1248
1403383-01	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (219% @ 30-150%)
1403383-02	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (260% @ 30-150%)
1403383-04	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (169% @ 30-150%)
1403383-05	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (161% @ 30-150%)
1403383-06	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (190% @ 30-150%)
1403383-09	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (156% @ 30-150%)
1403383-12	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (155% @ 30-150%)
1403383-13	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (183% @ 30-150%)
1403383-15	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (175% @ 30-150%)
1403383-19	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (183% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403383

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403383

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403383-01 through 1403383-20**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: March 31, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-46 0-12
Date Sampled: 03/21/14 11:05
Percent Solids: 18
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.188)		8082A		1	03/26/14 18:25		CC42420
Aroclor 1221	ND (0.188)		8082A		1	03/26/14 18:25		CC42420
Aroclor 1232	ND (0.188)		8082A		1	03/26/14 18:25		CC42420
Aroclor 1242	ND (0.188)		8082A		1	03/26/14 18:25		CC42420
Aroclor 1248	**P 0.386** (0.188)		8082A		1	03/26/14 18:25		CC42420
Aroclor 1254	ND (0.188)		8082A		1	03/26/14 18:25		CC42420
Aroclor 1260	ND (0.188)		8082A		1	03/26/14 18:25		CC42420
Aroclor 1262	ND (0.188)		8082A		1	03/26/14 18:25		CC42420
Aroclor 1268	ND (0.188)		8082A		1	03/26/14 18:25		CC42420

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*219 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*51 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-47 12-24
Date Sampled: 03/21/14 11:08
Percent Solids: 15
Initial Volume: 29.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.227)		8082A		1	03/26/14 18:44		CC42420
Aroclor 1221	ND (0.227)		8082A		1	03/26/14 18:44		CC42420
Aroclor 1232	ND (0.227)		8082A		1	03/26/14 18:44		CC42420
Aroclor 1242	ND (0.227)		8082A		1	03/26/14 18:44		CC42420
Aroclor 1248	**0.648** (0.227)		8082A		1	03/26/14 18:44		CC42420
Aroclor 1254	ND (0.227)		8082A		1	03/26/14 18:44		CC42420
Aroclor 1260	ND (0.227)		8082A		1	03/26/14 18:44		CC42420
Aroclor 1262	ND (0.227)		8082A		1	03/26/14 18:44		CC42420
Aroclor 1268	ND (0.227)		8082A		1	03/26/14 18:44		CC42420

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*260 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-48 12-24
Date Sampled: 03/21/14 11:10
Percent Solids: 19
Initial Volume: 29.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.177)		8082A		1	03/26/14 19:03		CC42420
Aroclor 1221	ND (0.177)		8082A		1	03/26/14 19:03		CC42420
Aroclor 1232	ND (0.177)		8082A		1	03/26/14 19:03		CC42420
Aroclor 1242	ND (0.177)		8082A		1	03/26/14 19:03		CC42420
Aroclor 1248	**0.213** (0.177)		8082A		1	03/26/14 19:03		CC42420
Aroclor 1254	ND (0.177)		8082A		1	03/26/14 19:03		CC42420
Aroclor 1260	ND (0.177)		8082A		1	03/26/14 19:03		CC42420
Aroclor 1262	ND (0.177)		8082A		1	03/26/14 19:03		CC42420
Aroclor 1268	ND (0.177)		8082A		1	03/26/14 19:03		CC42420

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*143 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*60 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-49 12-24
Date Sampled: 03/21/14 11:20
Percent Solids: 16
Initial Volume: 29.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.104)		8082A		1	03/26/14 19:22		CC42420
Aroclor 1221	ND (0.104)		8082A		1	03/26/14 19:22		CC42420
Aroclor 1232	ND (0.104)		8082A		1	03/26/14 19:22		CC42420
Aroclor 1242	ND (0.104)		8082A		1	03/26/14 19:22		CC42420
Aroclor 1248	ND (0.104)		8082A		1	03/26/14 19:22		CC42420
Aroclor 1254	**0.136** (0.104)		8082A		1	03/26/14 19:22		CC42420
Aroclor 1260	ND (0.104)		8082A		1	03/26/14 19:22		CC42420
Aroclor 1262	ND (0.104)		8082A		1	03/26/14 19:22		CC42420
Aroclor 1268	ND (0.104)		8082A		1	03/26/14 19:22		CC42420

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*169 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-50 0-12
Date Sampled: 03/21/14 11:27
Percent Solids: 14
Initial Volume: 29.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 3/27/14 18:20
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.121)		8082A		1	03/29/14 18:11		CC43126
Aroclor 1221	ND (0.121)		8082A		1	03/29/14 18:11		CC43126
Aroclor 1232	ND (0.121)		8082A		1	03/29/14 18:11		CC43126
Aroclor 1242	ND (0.121)		8082A		1	03/29/14 18:11		CC43126
Aroclor 1248	ND (0.121)		8082A		1	03/29/14 18:11		CC43126
Aroclor 1254	**0.233** (0.121)		8082A		1	03/29/14 18:11		CC43126
Aroclor 1260	ND (0.121)		8082A		1	03/29/14 18:11		CC43126
Aroclor 1262	ND (0.121)		8082A		1	03/29/14 18:11		CC43126
Aroclor 1268	ND (0.121)		8082A		1	03/29/14 18:11		CC43126

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*161 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-43 12-24
Date Sampled: 03/21/14 10:23
Percent Solids: 18
Initial Volume: 29.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.189)		8082A		1	03/26/14 20:00		CC42420
Aroclor 1221	ND (0.189)		8082A		1	03/26/14 20:00		CC42420
Aroclor 1232	ND (0.189)		8082A		1	03/26/14 20:00		CC42420
Aroclor 1242	ND (0.189)		8082A		1	03/26/14 20:00		CC42420
Aroclor 1248	**0.778** (0.189)		8082A		1	03/26/14 20:00		CC42420
Aroclor 1254	ND (0.189)		8082A		1	03/26/14 20:00		CC42420
Aroclor 1260	ND (0.189)		8082A		1	03/26/14 20:00		CC42420
Aroclor 1262	ND (0.189)		8082A		1	03/26/14 20:00		CC42420
Aroclor 1268	ND (0.189)		8082A		1	03/26/14 20:00		CC42420

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*190 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-44 0-12
Date Sampled: 03/21/14 10:53
Percent Solids: 11
Initial Volume: 29.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.309)		8082A		1	03/26/14 20:19		CC42420
Aroclor 1221	ND (0.309)		8082A		1	03/26/14 20:19		CC42420
Aroclor 1232	ND (0.309)		8082A		1	03/26/14 20:19		CC42420
Aroclor 1242	ND (0.309)		8082A		1	03/26/14 20:19		CC42420
Aroclor 1248	**3.61** (0.309)		8082A		1	03/26/14 20:19		CC42420
Aroclor 1254	ND (0.309)		8082A		1	03/26/14 20:19		CC42420
Aroclor 1260	ND (0.309)		8082A		1	03/26/14 20:19		CC42420
Aroclor 1262	ND (0.309)		8082A		1	03/26/14 20:19		CC42420
Aroclor 1268	ND (0.309)		8082A		1	03/26/14 20:19		CC42420

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*50 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-45 0-12
Date Sampled: 03/21/14 10:55
Percent Solids: 14
Initial Volume: 29.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 3/27/14 18:20
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.236)		8082A		1	03/29/14 18:30		CC43126
Aroclor 1221	ND (0.236)		8082A		1	03/29/14 18:30		CC43126
Aroclor 1232	ND (0.236)		8082A		1	03/29/14 18:30		CC43126
Aroclor 1242	ND (0.236)		8082A		1	03/29/14 18:30		CC43126
Aroclor 1248	**0.433** (0.236)		8082A		1	03/29/14 18:30		CC43126
Aroclor 1254	ND (0.236)		8082A		1	03/29/14 18:30		CC43126
Aroclor 1260	ND (0.236)		8082A		1	03/29/14 18:30		CC43126
Aroclor 1262	ND (0.236)		8082A		1	03/29/14 18:30		CC43126
Aroclor 1268	ND (0.236)		8082A		1	03/29/14 18:30		CC43126

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*144 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-47 12-24
Date Sampled: 03/21/14 10:40
Percent Solids: 18
Initial Volume: 29.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 3/27/14 18:20
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0963)		8082A		1	03/29/14 18:49		CC43126
Aroclor 1221	ND (0.0963)		8082A		1	03/29/14 18:49		CC43126
Aroclor 1232	ND (0.0963)		8082A		1	03/29/14 18:49		CC43126
Aroclor 1242	ND (0.0963)		8082A		1	03/29/14 18:49		CC43126
Aroclor 1248	**0.159** (0.0963)		8082A		1	03/29/14 18:49		CC43126
Aroclor 1254	ND (0.0963)		8082A		1	03/29/14 18:49		CC43126
Aroclor 1260	ND (0.0963)		8082A		1	03/29/14 18:49		CC43126
Aroclor 1262	ND (0.0963)		8082A		1	03/29/14 18:49		CC43126
Aroclor 1268	ND (0.0963)		8082A		1	03/29/14 18:49		CC43126

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*156 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*45 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-48 12-24
Date Sampled: 03/21/14 10:43
Percent Solids: 17
Initial Volume: 29.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.101)		8082A		1	03/26/14 21:15		CC42420
Aroclor 1221	ND (0.101)		8082A		1	03/26/14 21:15		CC42420
Aroclor 1232	ND (0.101)		8082A		1	03/26/14 21:15		CC42420
Aroclor 1242	ND (0.101)		8082A		1	03/26/14 21:15		CC42420
Aroclor 1248	**0.189** (0.101)		8082A		1	03/26/14 21:15		CC42420
Aroclor 1254	ND (0.101)		8082A		1	03/26/14 21:15		CC42420
Aroclor 1260	ND (0.101)		8082A		1	03/26/14 21:15		CC42420
Aroclor 1262	ND (0.101)		8082A		1	03/26/14 21:15		CC42420
Aroclor 1268	ND (0.101)		8082A		1	03/26/14 21:15		CC42420

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*138 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*46 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-45 12-24
Date Sampled: 03/21/14 09:43
Percent Solids: 15
Initial Volume: 29.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.231)		8082A		1	03/26/14 21:34		CC42420
Aroclor 1221	ND (0.231)		8082A		1	03/26/14 21:34		CC42420
Aroclor 1232	ND (0.231)		8082A		1	03/26/14 21:34		CC42420
Aroclor 1242	ND (0.231)		8082A		1	03/26/14 21:34		CC42420
Aroclor 1248	**1.23** (0.231)		8082A		1	03/26/14 21:34		CC42420
Aroclor 1254	ND (0.231)		8082A		1	03/26/14 21:34		CC42420
Aroclor 1260	ND (0.231)		8082A		1	03/26/14 21:34		CC42420
Aroclor 1262	ND (0.231)		8082A		1	03/26/14 21:34		CC42420
Aroclor 1268	ND (0.231)		8082A		1	03/26/14 21:34		CC42420

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*108 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-47 12-24
Date Sampled: 03/21/14 09:47
Percent Solids: 15
Initial Volume: 29.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.231)		8082A		1	03/26/14 21:53		CC42420
Aroclor 1221	ND (0.231)		8082A		1	03/26/14 21:53		CC42420
Aroclor 1232	ND (0.231)		8082A		1	03/26/14 21:53		CC42420
Aroclor 1242	ND (0.231)		8082A		1	03/26/14 21:53		CC42420
Aroclor 1248	**0.242** (0.231)		8082A		1	03/26/14 21:53		CC42420
Aroclor 1254	ND (0.231)		8082A		1	03/26/14 21:53		CC42420
Aroclor 1260	ND (0.231)		8082A		1	03/26/14 21:53		CC42420
Aroclor 1262	ND (0.231)		8082A		1	03/26/14 21:53		CC42420
Aroclor 1268	ND (0.231)		8082A		1	03/26/14 21:53		CC42420

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*155 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*46 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*48 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-48 12-24
Date Sampled: 03/21/14 09:52
Percent Solids: 16
Initial Volume: 29.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 3/27/14 18:20
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.215)		8082A		1	03/29/14 19:08		CC43126
Aroclor 1221	ND (0.215)		8082A		1	03/29/14 19:08		CC43126
Aroclor 1232	ND (0.215)		8082A		1	03/29/14 19:08		CC43126
Aroclor 1242	ND (0.215)		8082A		1	03/29/14 19:08		CC43126
Aroclor 1248	**0.569** (0.215)		8082A		1	03/29/14 19:08		CC43126
Aroclor 1254	ND (0.215)		8082A		1	03/29/14 19:08		CC43126
Aroclor 1260	ND (0.215)		8082A		1	03/29/14 19:08		CC43126
Aroclor 1262	ND (0.215)		8082A		1	03/29/14 19:08		CC43126
Aroclor 1268	ND (0.215)		8082A		1	03/29/14 19:08		CC43126

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*183 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-49 12-24
Date Sampled: 03/21/14 09:55
Percent Solids: 15
Initial Volume: 29.2
Final Volume: 5
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0573)		8082A		1	03/31/14 13:55		CC42420
Aroclor 1221	ND (0.0573)		8082A		1	03/31/14 13:55		CC42420
Aroclor 1232	ND (0.0573)		8082A		1	03/31/14 13:55		CC42420
Aroclor 1242	ND (0.0573)		8082A		1	03/31/14 13:55		CC42420
Aroclor 1248	ND (0.0573)		8082A		1	03/31/14 13:55		CC42420
Aroclor 1254	ND (0.0573)		8082A		1	03/31/14 13:55		CC42420
Aroclor 1260	ND (0.0573)		8082A		1	03/31/14 13:55		CC42420
Aroclor 1262	ND (0.0573)		8082A		1	03/31/14 13:55		CC42420
Aroclor 1268	ND (0.0573)		8082A		1	03/31/14 13:55		CC42420

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*30 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*32 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-50 0-12
Date Sampled: 03/21/14 09:58
Percent Solids: 17
Initial Volume: 30.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.100)		8082A		1	03/27/14 4:11		CC42440
Aroclor 1221	ND (0.100)		8082A		1	03/27/14 4:11		CC42440
Aroclor 1232	ND (0.100)		8082A		1	03/27/14 4:11		CC42440
Aroclor 1242	ND (0.100)		8082A		1	03/27/14 4:11		CC42440
Aroclor 1248	ND (0.100)		8082A		1	03/27/14 4:11		CC42440
Aroclor 1254	ND (0.100)		8082A		1	03/27/14 4:11		CC42440
Aroclor 1260	ND (0.100)		8082A		1	03/27/14 4:11		CC42440
Aroclor 1262	ND (0.100)		8082A		1	03/27/14 4:11		CC42440
Aroclor 1268	ND (0.100)		8082A		1	03/27/14 4:11		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*175 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*51 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-44 12-24
Date Sampled: 03/21/14 09:10
Percent Solids: 14
Initial Volume: 29.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.239)		8082A		1	03/27/14 4:30		CC42440
Aroclor 1221	ND (0.239)		8082A		1	03/27/14 4:30		CC42440
Aroclor 1232	ND (0.239)		8082A		1	03/27/14 4:30		CC42440
Aroclor 1242	ND (0.239)		8082A		1	03/27/14 4:30		CC42440
Aroclor 1248	**3.39** (0.239)		8082A		1	03/27/14 4:30		CC42440
Aroclor 1254	ND (0.239)		8082A		1	03/27/14 4:30		CC42440
Aroclor 1260	ND (0.239)		8082A		1	03/27/14 4:30		CC42440
Aroclor 1262	ND (0.239)		8082A		1	03/27/14 4:30		CC42440
Aroclor 1268	ND (0.239)		8082A		1	03/27/14 4:30		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*129 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*59 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-44 24-36
Date Sampled: 03/21/14 09:15
Percent Solids: 14
Initial Volume: 29.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.242)		8082A		1	03/27/14 4:49		CC42440
Aroclor 1221	ND (0.242)		8082A		1	03/27/14 4:49		CC42440
Aroclor 1232	ND (0.242)		8082A		1	03/27/14 4:49		CC42440
Aroclor 1242	ND (0.242)		8082A		1	03/27/14 4:49		CC42440
Aroclor 1248	**15.5** (2.42)		8082A		10	03/28/14 0:21		CC42440
Aroclor 1254	ND (0.242)		8082A		1	03/27/14 4:49		CC42440
Aroclor 1260	ND (0.242)		8082A		1	03/27/14 4:49		CC42440
Aroclor 1262	ND (0.242)		8082A		1	03/27/14 4:49		CC42440
Aroclor 1268	ND (0.242)		8082A		1	03/27/14 4:49		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*120 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*56 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-45 24-36
Date Sampled: 03/21/14 09:23
Percent Solids: 14
Initial Volume: 29.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.244)		8082A		1	03/27/14 5:08		CC42440
Aroclor 1221	ND (0.244)		8082A		1	03/27/14 5:08		CC42440
Aroclor 1232	ND (0.244)		8082A		1	03/27/14 5:08		CC42440
Aroclor 1242	ND (0.244)		8082A		1	03/27/14 5:08		CC42440
Aroclor 1248	**2.94** (0.244)		8082A		1	03/27/14 5:08		CC42440
Aroclor 1254	ND (0.244)		8082A		1	03/27/14 5:08		CC42440
Aroclor 1260	ND (0.244)		8082A		1	03/27/14 5:08		CC42440
Aroclor 1262	ND (0.244)		8082A		1	03/27/14 5:08		CC42440
Aroclor 1268	ND (0.244)		8082A		1	03/27/14 5:08		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*120 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-46 24-36
Date Sampled: 03/21/14 09:25
Percent Solids: 16
Initial Volume: 30.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 3/27/14 18:20
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.210)		8082A		1	03/29/14 19:27		CC43126
Aroclor 1221	ND (0.210)		8082A		1	03/29/14 19:27		CC43126
Aroclor 1232	ND (0.210)		8082A		1	03/29/14 19:27		CC43126
Aroclor 1242	ND (0.210)		8082A		1	03/29/14 19:27		CC43126
Aroclor 1248	**0.443** (0.210)		8082A		1	03/29/14 19:27		CC43126
Aroclor 1254	ND (0.210)		8082A		1	03/29/14 19:27		CC43126
Aroclor 1260	ND (0.210)		8082A		1	03/29/14 19:27		CC43126
Aroclor 1262	ND (0.210)		8082A		1	03/29/14 19:27		CC43126
Aroclor 1268	ND (0.210)		8082A		1	03/29/14 19:27		CC43126

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*183 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-47 12-24
Date Sampled: 03/21/14 09:27
Percent Solids: 13
Initial Volume: 29.4
Final Volume: 5
Extraction Method: 3540C

ESS Laboratory Work Order: 1403383
ESS Laboratory Sample ID: 1403383-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/24/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0651)		8082A		1	03/31/14 14:12		CC42440
Aroclor 1221	ND (0.0651)		8082A		1	03/31/14 14:12		CC42440
Aroclor 1232	ND (0.0651)		8082A		1	03/31/14 14:12		CC42440
Aroclor 1242	ND (0.0651)		8082A		1	03/31/14 14:12		CC42440
Aroclor 1248	**0.229** (0.0651)		8082A		1	03/31/14 14:12		CC42440
Aroclor 1254	ND (0.0651)		8082A		1	03/31/14 14:12		CC42440
Aroclor 1260	ND (0.0651)		8082A		1	03/31/14 14:12		CC42440
Aroclor 1262	ND (0.0651)		8082A		1	03/31/14 14:12		CC42440
Aroclor 1268	ND (0.0651)		8082A		1	03/31/14 14:12		CC42440

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*38 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*40 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*42 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403383

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42420 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403383

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42420 - 3540C										
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403383

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42420 - 3540C										
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS										
Aroclor 1016	0.458	0.0250	mg/kg wet	0.5000		92	40-140			
Aroclor 1260	0.478	0.0250	mg/kg wet	0.5000		96	40-140			
Surrogate: Decachlorobiphenyl	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
LCS Dup										
Aroclor 1016	0.468	0.0250	mg/kg wet	0.5000		94	40-140	2	30	
Aroclor 1260	0.489	0.0250	mg/kg wet	0.5000		98	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Batch CC42440 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403383

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42440 - 3540C										
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42440 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0242*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403383

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42440 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS										
Aroclor 1016	0.452	0.0250	mg/kg wet	0.5000		90	40-140			
Aroclor 1260	0.467	0.0250	mg/kg wet	0.5000		93	40-140			
Surrogate: Decachlorobiphenyl	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS Dup										
Aroclor 1016	0.441	0.0250	mg/kg wet	0.5000		88	40-140	2	30	
Aroclor 1260	0.473	0.0250	mg/kg wet	0.5000		95	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
Batch CC43126 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							

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Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC43126 - 3540C										
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							

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Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC43126 - 3540C										
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0196*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0204*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS										
Aroclor 1016	0.475	0.0250	mg/kg wet	0.5000		95	40-140			
Aroclor 1260	0.493	0.0250	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS Dup										
Aroclor 1016	0.473	0.0250	mg/kg wet	0.5000		95	40-140	0.4	30	
Aroclor 1260	0.503	0.0250	mg/kg wet	0.5000		101	40-140	2	30	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403383

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC43126 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0261*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403383

Notes and Definitions

U	Analyte included in the analysis, but not detected
SM	Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
P	Percent difference between primary and confirmation results exceeds 40% (P).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403383

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030383
Date Project Due: 3/31/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: ~~3.9~~ * 2.1 eo 3/25/14
   Iced With: Ice
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample Yes
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? Yes|No
17. Were samples received intact? Yes|No
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: [signature] Date/Time: 3/24/14 1300
Reviewed By: [signature] Date/Time: 3/24/14 1333

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page ~~9 of 12~~ 1 of 2

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403383

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name: Tighe & Bond
Project #: N-1011
Project Name (20 Char. or less): Polyply
Contact Person: Michael Martin
Address: 4 Barlows Landing Rd, Unit 15
City: Pocasset State: MA Zip: 02559
PO#:
Telephone #: 508-564-7285
Fax #: 508-564-4298
Email Address: memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH	8081 Pesticides / 8082 PCB / 608 Pesticides	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
01	3/21/2014	1105		X	S	A-46 (0-12)	1	G				X										
02		1108				A-47 (12-24)																
03		1110				A-48 (12-24)																
04		1120				A-49 (12-24)																
05		1127				A-50 (0-12)																
06		1023				B-43 (12-24)																
07		1053				B-44 (0-12)																
08		1055				B-45 (0-12)																
09		1040				B-47 (12-24)																
10		1043				B-48 (12-24)																

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp: 2.1+3.8+3.9 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/21/14			Cooler	3/24/14 10:05	[signature]	3/24/14 10:05
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14 10:59	[signature]	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
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www.esslaboratory.com

CHAIN OF CUSTODY

Page ~~1~~ 2 of ~~12~~ 2 of 2

Turn Time: X Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other ____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: 1403383
Electronic Deliverable: X Yes ___ No
Format: pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO EPH No Targets	8081 Pesticides 8082 PCB 608 Pesticides 608 PCB	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7
11	3/21/2014	0943		X	S	D-45 (12-24)	1	G				X			
12		0947				D-47 (12-24)									
13		0952				D-48 (12-24)									
14		0955				D-49 (12-24)									
15		0958				D-50 (0-12)									
16		0910				E-44 (12-24)									
17		0915				E-44 (24-36)									
18		0923				E-45 (24-36)									
19		0925				E-46 (24-36)									
20		0927				E-47 (12-24)									

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present: ✓ Yes ___ No
Seals Intact: ___ Yes ___ No NA: ✓
Cooler Temp: 2.1 +3.8 +3.9 ICE KH
Internal Use Only: [✓] Pickup [ ] Technicians ____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	[signature]	3/24/14 10:05
[signature]	3/24/14 10:59	[signature]	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403386

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 12:06 pm, Apr 21, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403386

SAMPLE RECEIPT

The following samples were received on April 14, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

These samples were originally received on hold on March 24, 2014.

Lab Number	Sample Name	Matrix	Analysis
1403386-01	C-47 24-36	Soil	8082A
1403386-03	Q-47 0-12	Soil	8082A
1403386-04	Q-48 0-12	Soil	8082A
1403386-07	C-43 12-24	Soil	8082A
1403386-08	C-44 12-24	Soil	8082A
1403386-09	C-45 12-24	Soil	8082A
1403386-10	C-46 12-24	Soil	8082A
1403386-13	D-43 12-24	Soil	8082A
1403386-14	D-44 12-24	Soil	8082A
1403386-17	N-47 12-24	Soil	8082A
1403386-18	N-48 12-24	Soil	8082A
1403386-24	U-32 48-60	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403386

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403386-13 **Surrogate recovery(ies) above upper control limit (S+).**
Decachlorobiphenyl (175% @ 30-150%)

1403386-24 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403386

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403386

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403386-01 through 1403386-24**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: April 21, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-47 24-36
Date Sampled: 03/21/14 10:12
Percent Solids: 17
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403386
ESS Laboratory Sample ID: 1403386-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.295)		8082A		1	04/16/14 19:45		CD41516
Aroclor 1221	ND (0.295)		8082A		1	04/16/14 19:45		CD41516
Aroclor 1232	ND (0.295)		8082A		1	04/16/14 19:45		CD41516
Aroclor 1242	ND (0.295)		8082A		1	04/16/14 19:45		CD41516
Aroclor 1248	ND (0.295)		8082A		1	04/16/14 19:45		CD41516
Aroclor 1254	ND (0.295)		8082A		1	04/16/14 19:45		CD41516
Aroclor 1260	ND (0.295)		8082A		1	04/16/14 19:45		CD41516
Aroclor 1262	ND (0.295)		8082A		1	04/16/14 19:45		CD41516
Aroclor 1268	ND (0.295)		8082A		1	04/16/14 19:45		CD41516

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*118 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*40 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*41 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-47 0-12
Date Sampled: 03/21/14 13:20
Percent Solids: 78
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403386
ESS Laboratory Sample ID: 1403386-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0637)		8082A		1	04/16/14 20:04		CD41516
Aroclor 1221	ND (0.0637)		8082A		1	04/16/14 20:04		CD41516
Aroclor 1232	ND (0.0637)		8082A		1	04/16/14 20:04		CD41516
Aroclor 1242	ND (0.0637)		8082A		1	04/16/14 20:04		CD41516
Aroclor 1248	**3.57** (0.637)		8082A		10	04/17/14 19:57		CD41516
Aroclor 1254	ND (0.0637)		8082A		1	04/16/14 20:04		CD41516
Aroclor 1260	ND (0.0637)		8082A		1	04/16/14 20:04		CD41516
Aroclor 1262	ND (0.0637)		8082A		1	04/16/14 20:04		CD41516
Aroclor 1268	ND (0.0637)		8082A		1	04/16/14 20:04		CD41516

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-48 0-12
Date Sampled: 03/21/14 13:22
Percent Solids: 19
Initial Volume: 20.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403386
ESS Laboratory Sample ID: 1403386-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.256)		8082A		1	04/16/14 22:17		CD41516
Aroclor 1221	ND (0.256)		8082A		1	04/16/14 22:17		CD41516
Aroclor 1232	ND (0.256)		8082A		1	04/16/14 22:17		CD41516
Aroclor 1242	ND (0.256)		8082A		1	04/16/14 22:17		CD41516
Aroclor 1248	**6.95** (1.28)		8082A		5	04/18/14 16:02		CD41516
Aroclor 1254	ND (0.256)		8082A		1	04/16/14 22:17		CD41516
Aroclor 1260	ND (0.256)		8082A		1	04/16/14 22:17		CD41516
Aroclor 1262	ND (0.256)		8082A		1	04/16/14 22:17		CD41516
Aroclor 1268	ND (0.256)		8082A		1	04/16/14 22:17		CD41516

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*114 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-43 12-24
Date Sampled: 03/21/14 10:03
Percent Solids: 16
Initial Volume: 20.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403386
ESS Laboratory Sample ID: 1403386-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.302)		8082A		1	04/16/14 22:35		CD41516
Aroclor 1221	ND (0.302)		8082A		1	04/16/14 22:35		CD41516
Aroclor 1232	ND (0.302)		8082A		1	04/16/14 22:35		CD41516
Aroclor 1242	ND (0.302)		8082A		1	04/16/14 22:35		CD41516
Aroclor 1248	**0.487** (0.302)		8082A		1	04/16/14 22:35		CD41516
Aroclor 1254	ND (0.302)		8082A		1	04/16/14 22:35		CD41516
Aroclor 1260	ND (0.302)		8082A		1	04/16/14 22:35		CD41516
Aroclor 1262	ND (0.302)		8082A		1	04/16/14 22:35		CD41516
Aroclor 1268	ND (0.302)		8082A		1	04/16/14 22:35		CD41516

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*36 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*36 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-44 12-24
Date Sampled: 03/21/14 10:03
Percent Solids: 17
Initial Volume: 19.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403386
ESS Laboratory Sample ID: 1403386-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/17/14 16:15
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.299)		8082A		1	04/18/14 11:37		CD41620
Aroclor 1221	ND (0.299)		8082A		1	04/18/14 11:37		CD41620
Aroclor 1232	ND (0.299)		8082A		1	04/18/14 11:37		CD41620
Aroclor 1242	ND (0.299)		8082A		1	04/18/14 11:37		CD41620
Aroclor 1248	ND (0.299)		8082A		1	04/18/14 11:37		CD41620
Aroclor 1254	ND (0.299)		8082A		1	04/18/14 11:37		CD41620
Aroclor 1260	ND (0.299)		8082A		1	04/18/14 11:37		CD41620
Aroclor 1262	ND (0.299)		8082A		1	04/18/14 11:37		CD41620
Aroclor 1268	ND (0.299)		8082A		1	04/18/14 11:37		CD41620

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*53 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*40 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*46 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-45 12-24
Date Sampled: 03/21/14 10:05
Percent Solids: 14
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403386
ESS Laboratory Sample ID: 1403386-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/17/14 16:15
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.376)		8082A		1	04/18/14 11:56		CD41620
Aroclor 1221	ND (0.376)		8082A		1	04/18/14 11:56		CD41620
Aroclor 1232	ND (0.376)		8082A		1	04/18/14 11:56		CD41620
Aroclor 1242	ND (0.376)		8082A		1	04/18/14 11:56		CD41620
Aroclor 1248	ND (0.376)		8082A		1	04/18/14 11:56		CD41620
Aroclor 1254	ND (0.376)		8082A		1	04/18/14 11:56		CD41620
Aroclor 1260	ND (0.376)		8082A		1	04/18/14 11:56		CD41620
Aroclor 1262	ND (0.376)		8082A		1	04/18/14 11:56		CD41620
Aroclor 1268	ND (0.376)		8082A		1	04/18/14 11:56		CD41620

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-46 12-24
Date Sampled: 03/21/14 10:08
Percent Solids: 14
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403386
ESS Laboratory Sample ID: 1403386-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.346)		8082A		1	04/16/14 23:32		CD41516
Aroclor 1221	ND (0.346)		8082A		1	04/16/14 23:32		CD41516
Aroclor 1232	ND (0.346)		8082A		1	04/16/14 23:32		CD41516
Aroclor 1242	ND (0.346)		8082A		1	04/16/14 23:32		CD41516
Aroclor 1248	ND (0.346)		8082A		1	04/16/14 23:32		CD41516
Aroclor 1254	ND (0.346)		8082A		1	04/16/14 23:32		CD41516
Aroclor 1260	ND (0.346)		8082A		1	04/16/14 23:32		CD41516
Aroclor 1262	ND (0.346)		8082A		1	04/16/14 23:32		CD41516
Aroclor 1268	ND (0.346)		8082A		1	04/16/14 23:32		CD41516

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*35 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*36 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*37 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-43 12-24
Date Sampled: 03/21/14 09:40
Percent Solids: 16
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403386
ESS Laboratory Sample ID: 1403386-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.313)		8082A		1	04/16/14 23:51		CD41516
Aroclor 1221	ND (0.313)		8082A		1	04/16/14 23:51		CD41516
Aroclor 1232	ND (0.313)		8082A		1	04/16/14 23:51		CD41516
Aroclor 1242	ND (0.313)		8082A		1	04/16/14 23:51		CD41516
Aroclor 1248	**8.41** (1.57)		8082A		5	04/17/14 20:16		CD41516
Aroclor 1254	ND (0.313)		8082A		1	04/16/14 23:51		CD41516
Aroclor 1260	ND (0.313)		8082A		1	04/16/14 23:51		CD41516
Aroclor 1262	ND (0.313)		8082A		1	04/16/14 23:51		CD41516
Aroclor 1268	ND (0.313)		8082A		1	04/16/14 23:51		CD41516

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*175 %*	*S+*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-44 12-24
Date Sampled: 03/21/14 09:43
Percent Solids: 18
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403386
ESS Laboratory Sample ID: 1403386-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.271)		8082A		1	04/17/14 0:10		CD41516
Aroclor 1221	ND (0.271)		8082A		1	04/17/14 0:10		CD41516
Aroclor 1232	ND (0.271)		8082A		1	04/17/14 0:10		CD41516
Aroclor 1242	ND (0.271)		8082A		1	04/17/14 0:10		CD41516
Aroclor 1248	**2.48** (0.271)		8082A		1	04/17/14 0:10		CD41516
Aroclor 1254	ND (0.271)		8082A		1	04/17/14 0:10		CD41516
Aroclor 1260	ND (0.271)		8082A		1	04/17/14 0:10		CD41516
Aroclor 1262	ND (0.271)		8082A		1	04/17/14 0:10		CD41516
Aroclor 1268	ND (0.271)		8082A		1	04/17/14 0:10		CD41516

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*32 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*32 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-47 12-24
Date Sampled: 03/21/14 13:00
Percent Solids: 17
Initial Volume: 20.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403386
ESS Laboratory Sample ID: 1403386-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.283)		8082A		1	04/17/14 0:28		CD41516
Aroclor 1221	ND (0.283)		8082A		1	04/17/14 0:28		CD41516
Aroclor 1232	ND (0.283)		8082A		1	04/17/14 0:28		CD41516
Aroclor 1242	ND (0.283)		8082A		1	04/17/14 0:28		CD41516
Aroclor 1248	**0.630** (0.283)		8082A		1	04/17/14 0:28		CD41516
Aroclor 1254	ND (0.283)		8082A		1	04/17/14 0:28		CD41516
Aroclor 1260	ND (0.283)		8082A		1	04/17/14 0:28		CD41516
Aroclor 1262	ND (0.283)		8082A		1	04/17/14 0:28		CD41516
Aroclor 1268	ND (0.283)		8082A		1	04/17/14 0:28		CD41516

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*127 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*48 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-48 12-24
Date Sampled: 03/21/14 13:05
Percent Solids: 13
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403386
ESS Laboratory Sample ID: 1403386-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.375)		8082A		1	04/17/14 0:47		CD41516
Aroclor 1221	ND (0.375)		8082A		1	04/17/14 0:47		CD41516
Aroclor 1232	ND (0.375)		8082A		1	04/17/14 0:47		CD41516
Aroclor 1242	ND (0.375)		8082A		1	04/17/14 0:47		CD41516
Aroclor 1248	**0.659** (0.375)		8082A		1	04/17/14 0:47		CD41516
Aroclor 1254	ND (0.375)		8082A		1	04/17/14 0:47		CD41516
Aroclor 1260	ND (0.375)		8082A		1	04/17/14 0:47		CD41516
Aroclor 1262	ND (0.375)		8082A		1	04/17/14 0:47		CD41516
Aroclor 1268	ND (0.375)		8082A		1	04/17/14 0:47		CD41516

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*103 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*37 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*43 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-32 48-60
Date Sampled: 03/21/14 10:26
Percent Solids: 97
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403386
ESS Laboratory Sample ID: 1403386-24
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (25.0)		8082A		500	04/17/14 20:35		CD41517
Aroclor 1221	ND (25.0)		8082A		500	04/17/14 20:35		CD41517
Aroclor 1232	ND (25.0)		8082A		500	04/17/14 20:35		CD41517
Aroclor 1242	ND (25.0)		8082A		500	04/17/14 20:35		CD41517
Aroclor 1248	**317** (25.0)		8082A		500	04/17/14 20:35		CD41517
Aroclor 1254	ND (25.0)		8082A		500	04/17/14 20:35		CD41517
Aroclor 1260	ND (25.0)		8082A		500	04/17/14 20:35		CD41517
Aroclor 1262	ND (25.0)		8082A		500	04/17/14 20:35		CD41517
Aroclor 1268	ND (25.0)		8082A		500	04/17/14 20:35		CD41517

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403386

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41516 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403386

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41516 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403386

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41516 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0176*		mg/kg wet	*0.02500*		*70*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0187*		mg/kg wet	*0.02500*		*75*	*30-150*			
LCS										
Aroclor 1016	0.431	0.0500	mg/kg wet	0.5000		86	40-140			
Aroclor 1260	0.438	0.0500	mg/kg wet	0.5000		88	40-140			
Surrogate: Decachlorobiphenyl	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0177*		mg/kg wet	*0.02500*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0176*		mg/kg wet	*0.02500*		*70*	*30-150*			
LCS Dup										
Aroclor 1016	0.466	0.0500	mg/kg wet	0.5000		93	40-140	8	30	
Aroclor 1260	0.456	0.0500	mg/kg wet	0.5000		91	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0236*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0185*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0187*		mg/kg wet	*0.02500*		*75*	*30-150*			
Batch CD41517 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403386

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41517 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41517 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0177*		mg/kg wet	*0.02500*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0168*		mg/kg wet	*0.02500*		*67*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41517 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0177*		mg/kg wet	*0.02500*		*71*	*30-150*			
LCS										
Aroclor 1016	0.435	0.0500	mg/kg wet	0.5000		87	40-140			
Aroclor 1260	0.426	0.0500	mg/kg wet	0.5000		85	40-140			
Surrogate: Decachlorobiphenyl	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0166*		mg/kg wet	*0.02500*		*66*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0170*		mg/kg wet	*0.02500*		*68*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0171*		mg/kg wet	*0.02500*		*68*	*30-150*			
LCS Dup										
Aroclor 1016	0.423	0.0500	mg/kg wet	0.5000		85	40-140	3	30	
Aroclor 1260	0.430	0.0500	mg/kg wet	0.5000		86	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0189*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0169*		mg/kg wet	*0.02500*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0170*		mg/kg wet	*0.02500*		*68*	*30-150*			
Batch CD41620 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41620 - 3540C										
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41620 - 3540C										
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
LCS										
Aroclor 1016	0.499	0.0500	mg/kg wet	0.5000		100	40-140			
Aroclor 1260	0.496	0.0500	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS Dup										
Aroclor 1016	0.513	0.0500	mg/kg wet	0.5000		103	40-140	3	30	
Aroclor 1260	0.519	0.0500	mg/kg wet	0.5000		104	40-140	5	30	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403386

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41620 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0209*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403386

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
S+	Surrogate recovery(ies) above upper control limit (S+).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403386

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030386
Date Project Due: ~~3/31/14~~ 4/21/14
Days For Project: ~~5 Day~~ 20 Days
eo 4/17/14

Items to be checked upon receipt:

1. Air Bill Manifest Present?	* No	10. Are the samples properly preserved?	Yes
Air No.:		11. Proper sample containers used?	Yes
2. Were Custody Seals Present?	No	12. Any air bubbles in the VOA vials?	N/A
3. Were Custody Seals Intact?	N/A	13. Holding times exceeded?	No
4. Is Radiation count < 100 CPM?	Yes	14. Sufficient sample volumes?	Yes
5. Is a cooler present?	Yes	15. Any Subcontracting needed?	No
Cooler Temp: **2.1**		16. Are ESS labels on correct containers?	Yes/No
Iced With: **Ice**		17. Were samples received intact?	~~Yes~~/No
6. Was COC included with samples?	Yes	ESS Sample IDs:	
7. Was COC signed and dated by client?	Yes	Sub Lab:	
8. Does the COC match the sample	Yes	Analysis:	
9. Is COC complete and correct?	Yes	TAT:	

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Samples still on Hold

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP
21	Yes	4 oz Soil Jar	1	NP
22	Yes	4 oz Soil Jar	1	NP
23	Yes	4 oz Soil Jar	1	NP
24	Yes	4 oz Soil Jar	1	NP
25	Yes	4 oz Soil Jar	1	NP

Sample and Cooler Receipt Checklist

Client: Tighe & Bond

ESS Project ID: 14030386

Completed By: [illegible] Date/Time: 4/15/14 0330

Reviewed By: [illegible] Date/Time: 4/15/14 1029

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page ~~5~~ 1 of 3 of ~~ur~~ 3/24/14

Turn Time: X Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other ____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: 1403386
Electronic Deliverable: X Yes ___ No
Format: pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

	ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260	624	524.2	8021 MTBE/BTEX	8015 GRO	8100 TPH	8015 DRO	EPH	No Targets	8081 Pesticides	8082 PCB	608 Pesticides	608 PCB	8270	625	PAH only	RCRA5	RCRA8	PP13	TAL23	TCLP8	MCP	MCPw/Hg	NBC7
1	1	3/21/2014	1012		X	S	C-47 (24-36)	1	G											✓													
	2		0929				E-47 (24-36)																										
1	3		1320				Q-47 (0-12)																										
1	4		1322				Q-48 (0-12)																										
	23	3/21/14	11:25				A-51 0.12 *																										
1	24	3/21/14	10:26				U-32 48-60*																										
	25	3/21/14	10:28				U-32 60-72*																										

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp: 2.1+3.8+3.9 Ice KH

Internal Use Only
[✓] Pickup
[ ] Technicians ____

Comments: TSCA Extraction
Sampled by Holli Lamb
HOLD SAMPLES
*hold per client 3/25/14 eo
① OK hold per client request. 4/15/14 ESS

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	K Hallahan	3/24/14 10:05
K Hallahan	3/24/14 10:59	[signature]	3/24/14 1059				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

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www.esslaboratory.com

CHAIN OF CUSTODY

Page ~~10~~ 2 of ~~12~~ 3 3/24/14

Turn Time: X Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other ____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: 1403386
Electronic Deliverable: X Yes ___ No
Format: pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO EPH No Targets	8081 Pesticides 8082 PCB 608 Pesticides 608 PCB	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7
5	3/21/2014	1048		X	S	B-49 (12-24)	1	G				✓			
6		1050				B-50 (0-12)									
(1) 7		1003				C-43 (12-24)									
(1) 8		1003				C-44 (12-24)									
(1) 9		1005				C-45 (12-24)									
(1) 10		1008				C-46 (12-24)									
11		1010				C-47 (12-24)									
12		1016				C-49 (12-24)									
(1) 13		0940				D-43 (12-24)									
(1) 14		0943				D-44 (12-24)									

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ____
Cooler Temp: 2.1+3.8+3.9 ICE KH
Internal Use Only: [✓] Pickup [ ] Technicians ____

Comments: TSCA Extraction
Sampled by Holli Lamb
HOLD SAMPLES

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			Cooler	3/24/14 10:05	[signature]	3/24/14 10:05
[signature]	3/24/14 10:59	[signature]	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

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CHAIN OF CUSTODY

Page ~~12~~ 3 of ~~12~~ 3 3/24/14

Turn Time: X Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other ____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: 1403386
Electronic Deliverable: X Yes ___ No
Format: pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO EPH No Targets	8081 Pesticides 8082 PCB 608 Pesticides 608 PCB	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7
15	3/21/2014	0931		X	S	E-49 (0-12)	1	G				X			
16		0935				E-50 (0-12)									
(1) 17		1300				N-47 (12-24)									
(1) 18		1305				N-48 (12-24)									
19		1310				N-49 (12-24)									
20		1312				N-50 (12-24)									
21		1315				O-51 (0-12)									
22		1318				P-50 (0-12)									

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp 2.1 + 3.8 + 3.9 ICE KH
Internal Use Only [✓] Pickup [ ] Technicians ____

Comments: TSCA Extraction
Sampled by Holli Lamb
HOLD SAMPLES

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	K. Hallahan	3/24/14 10:05
K. Hallahan	3/24/14 10:59	[signature]	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

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1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403387

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 12:41 pm, Apr 21, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403387

SAMPLE RECEIPT

The following samples were received on April 14, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

These samples were originally received on hold on March 24, 2014.

Lab Number	Sample Name	Matrix	Analysis
1403387-01	B-38 12-24	Soil	8082A
1403387-04	C-37 0-12	Soil	8082A
1403387-06	D-37 0-12	Soil	8082A
1403387-07	D-38 12-24	Soil	8082A
1403387-08	D-40 24-36	Soil	8082A
1403387-09	D-42 24-36	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403387

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403387

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403387

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403387-01 through 1403387-09**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes (X) No ( )*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: Laurel Stoddard
Date: April 21, 2014
Printed Name: Laurel Stoddard
Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-38 12-24
Date Sampled: 03/21/14 10:10
Percent Solids: 12
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403387
ESS Laboratory Sample ID: 1403387-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.406)		8082A		1	04/17/14 20:53		CD41517
Aroclor 1221	ND (0.406)		8082A		1	04/17/14 20:53		CD41517
Aroclor 1232	ND (0.406)		8082A		1	04/17/14 20:53		CD41517
Aroclor 1242	ND (0.406)		8082A		1	04/17/14 20:53		CD41517
Aroclor 1248	**2.43** (0.406)		8082A		1	04/17/14 20:53		CD41517
Aroclor 1254	ND (0.406)		8082A		1	04/17/14 20:53		CD41517
Aroclor 1260	ND (0.406)		8082A		1	04/17/14 20:53		CD41517
Aroclor 1262	ND (0.406)		8082A		1	04/17/14 20:53		CD41517
Aroclor 1268	ND (0.406)		8082A		1	04/17/14 20:53		CD41517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*37 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*40 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-37 0-12
Date Sampled: 03/21/14 12:00
Percent Solids: 13
Initial Volume: 20.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403387
ESS Laboratory Sample ID: 1403387-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.384)		8082A		1	04/17/14 21:12		CD41517
Aroclor 1221	ND (0.384)		8082A		1	04/17/14 21:12		CD41517
Aroclor 1232	ND (0.384)		8082A		1	04/17/14 21:12		CD41517
Aroclor 1242	ND (0.384)		8082A		1	04/17/14 21:12		CD41517
Aroclor 1248	**1.84** (0.384)		8082A		1	04/17/14 21:12		CD41517
Aroclor 1254	ND (0.384)		8082A		1	04/17/14 21:12		CD41517
Aroclor 1260	ND (0.384)		8082A		1	04/17/14 21:12		CD41517
Aroclor 1262	ND (0.384)		8082A		1	04/17/14 21:12		CD41517
Aroclor 1268	ND (0.384)		8082A		1	04/17/14 21:12		CD41517

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*131 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*47 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-37 0-12
Date Sampled: 03/21/14 14:17
Percent Solids: 13
Initial Volume: 20.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403387
ESS Laboratory Sample ID: 1403387-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.369)		8082A		1	04/17/14 3:36		CD41517
Aroclor 1221	ND (0.369)		8082A		1	04/17/14 3:36		CD41517
Aroclor 1232	ND (0.369)		8082A		1	04/17/14 3:36		CD41517
Aroclor 1242	ND (0.369)		8082A		1	04/17/14 3:36		CD41517
Aroclor 1248	**56.5** (3.69)		8082A		10	04/17/14 21:31		CD41517
Aroclor 1254	ND (0.369)		8082A		1	04/17/14 3:36		CD41517
Aroclor 1260	ND (0.369)		8082A		1	04/17/14 3:36		CD41517
Aroclor 1262	ND (0.369)		8082A		1	04/17/14 3:36		CD41517
Aroclor 1268	ND (0.369)		8082A		1	04/17/14 3:36		CD41517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-38 12-24
Date Sampled: 03/21/14 14:14
Percent Solids: 14
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403387
ESS Laboratory Sample ID: 1403387-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/17/14 16:15
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.369)		8082A		1	04/18/14 12:15		CD41620
Aroclor 1221	ND (0.369)		8082A		1	04/18/14 12:15		CD41620
Aroclor 1232	ND (0.369)		8082A		1	04/18/14 12:15		CD41620
Aroclor 1242	ND (0.369)		8082A		1	04/18/14 12:15		CD41620
Aroclor 1248	ND (0.369)		8082A		1	04/18/14 12:15		CD41620
Aroclor 1254	ND (0.369)		8082A		1	04/18/14 12:15		CD41620
Aroclor 1260	ND (0.369)		8082A		1	04/18/14 12:15		CD41620
Aroclor 1262	ND (0.369)		8082A		1	04/18/14 12:15		CD41620
Aroclor 1268	ND (0.369)		8082A		1	04/18/14 12:15		CD41620

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-40 24-36
Date Sampled: 03/21/14 14:13
Percent Solids: 11
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403387
ESS Laboratory Sample ID: 1403387-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.467)		8082A		1	04/17/14 4:15		CD41517
Aroclor 1221	ND (0.467)		8082A		1	04/17/14 4:15		CD41517
Aroclor 1232	ND (0.467)		8082A		1	04/17/14 4:15		CD41517
Aroclor 1242	ND (0.467)		8082A		1	04/17/14 4:15		CD41517
Aroclor 1248	**0.796** (0.467)		8082A		1	04/17/14 4:15		CD41517
Aroclor 1254	ND (0.467)		8082A		1	04/17/14 4:15		CD41517
Aroclor 1260	ND (0.467)		8082A		1	04/17/14 4:15		CD41517
Aroclor 1262	ND (0.467)		8082A		1	04/17/14 4:15		CD41517
Aroclor 1268	ND (0.467)		8082A		1	04/17/14 4:15		CD41517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*49 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: D-42 24-36
Date Sampled: 03/21/14 14:08
Percent Solids: 11
Initial Volume: 19.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403387
ESS Laboratory Sample ID: 1403387-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/17/14 16:15
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.460)		8082A		1	04/18/14 12:34		CD41620
Aroclor 1221	ND (0.460)		8082A		1	04/18/14 12:34		CD41620
Aroclor 1232	ND (0.460)		8082A		1	04/18/14 12:34		CD41620
Aroclor 1242	ND (0.460)		8082A		1	04/18/14 12:34		CD41620
Aroclor 1248	ND (0.460)		8082A		1	04/18/14 12:34		CD41620
Aroclor 1254	ND (0.460)		8082A		1	04/18/14 12:34		CD41620
Aroclor 1260	ND (0.460)		8082A		1	04/18/14 12:34		CD41620
Aroclor 1262	ND (0.460)		8082A		1	04/18/14 12:34		CD41620
Aroclor 1268	ND (0.460)		8082A		1	04/18/14 12:34		CD41620

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*62 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*64 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403387

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41517 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403387

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41517 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403387

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41517 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0177*		mg/kg wet	*0.02500*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0168*		mg/kg wet	*0.02500*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0177*		mg/kg wet	*0.02500*		*71*	*30-150*			
LCS										
Aroclor 1016	0.435	0.0500	mg/kg wet	0.5000		87	40-140			
Aroclor 1260	0.426	0.0500	mg/kg wet	0.5000		85	40-140			
Surrogate: Decachlorobiphenyl	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0166*		mg/kg wet	*0.02500*		*66*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0170*		mg/kg wet	*0.02500*		*68*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0171*		mg/kg wet	*0.02500*		*68*	*30-150*			
LCS Dup										
Aroclor 1016	0.423	0.0500	mg/kg wet	0.5000		85	40-140	3	30	
Aroclor 1260	0.430	0.0500	mg/kg wet	0.5000		86	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0189*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0169*		mg/kg wet	*0.02500*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0170*		mg/kg wet	*0.02500*		*68*	*30-150*			
Batch CD41620 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403387

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41620 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403387

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41620 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403387

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41620 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
LCS										
Aroclor 1016	0.499	0.0500	mg/kg wet	0.5000		100	40-140			
Aroclor 1260	0.496	0.0500	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS Dup										
Aroclor 1016	0.513	0.0500	mg/kg wet	0.5000		103	40-140	3	30	
Aroclor 1260	0.519	0.0500	mg/kg wet	0.5000		104	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0209*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403387

Notes and Definitions

U	Analyte included in the analysis, but not detected
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403387

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030387
Date Project Due: ~~3/31/14~~ 4/21/14
Days For Project: ~~5 Day~~ 20 days
eo 4/17/14

Items to be checked upon receipt:

1. Air Bill Manifest Present?	* No	10. Are the samples properly preserved?	Yes
Air No.:		11. Proper sample containers used?	Yes
2. Were Custody Seals Present?	No	12. Any air bubbles in the VOA vials?	N/A
3. Were Custody Seals Intact?	N/A	13. Holding times exceeded?	No
4. Is Radiation count < 100 CPM?	Yes	14. Sufficient sample volumes?	Yes
5. Is a cooler present?	Yes	15. Any Subcontracting needed?	No
Cooler Temp: **2.1**		16. Are ESS labels on correct containers?	Yes / No
Iced With: **Ice**		17. Were samples received intact?	Yes / No
6. Was COC included with samples?	Yes	ESS Sample IDs:	
7. Was COC signed and dated by client?	Yes	Sub Lab:	
8. Does the COC match the sample	Yes	Analysis:	
9. Is COC complete and correct?	Yes	TAT:	

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP

Samples Still on Hold

Completed By: JOG Date/Time: 4/15/14 0338
Reviewed By: [illegible] Date/Time: 4/15/14 1033

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page ~~3~~ 1 of ~~3~~ 2 3/24/14

Turn Time: X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403387

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / VPH	8100 TPH / 8015 DRO / 8015 GRO	8081 Pesticides / 8082 PCB / 608 Pesticides / 608 PCB	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
(1) 1	3/21/2014	1010		X	S	B-38 (12-24)	1	G				X										
2		1120				B-40 (24-36)																
3		1145				B-42 (24-36)																
(1) 4		1200				C-37 (0-12)																
5		1210				C-38 (12-24)																
(1) 6		1417				D-37 (0-12)																
(1) 7		1414				D-38 (12-24)																
(1) 8		1413				D-40 (24-36)																
(1) 9		1408				D-42 (24-36)																
10		1205				IA-47 (12-24)																

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp 2.1 + 3.9 + 3.8 ICE RH

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb
HOLD SAMPLES
(1) Samples off hold per client request. 4/15/14 (2) ESS

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	[signature]	3/24/14 10:05
[signature]	3/24/14 10:59	[signature]	3/24/14 1059				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page ~~4~~ 2 of ~~4~~ 2 3/24/14

Turn Time: X Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other ____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: 1403387
Electronic Deliverable: X Yes ___ No
Format: pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO EPH No Targets	8081 Pesticides 8082 PCB 608 Pesticides 608 PCB	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7							
11	3/21/2014	1210		X	S	1A-48 (12-24)	1	G														
12		1215				1A-49 (12-24)																
13		1115				1B-47 (0-12)																
14		1150				1B-48 (0-12)																
15		1155				1B-49 (0-12)																
16		1113				A-48 (24-36)																
17		1123				A-49 (24-36)																
18		1125				A-50 (12-24)																
~~19~~		~~1129~~				~~A-51 (0-12)~~																
19		1045				B-48 (24-36)																

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No ✓ Internal Use Only
Seals Intact ___ Yes ___ No NA: ____ [✓] Pickup
Cooler Temp: 2.1+3.8 & 3.9 ICE KLt [ ] Technicians ____

Comments: TSCA Extraction
Sampled by Holli Lamb
HOLD SAMPLES

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	K. Hallahan	3/24/14 10:05
K. Hallahan	3/24/14 10:59	[signature]	3/24/14 1059				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403388

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 2:59 pm, Apr 21, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403388

SAMPLE RECEIPT

The following samples were received on April 14, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

These samples were originally received on hold on March 24, 2014.

Lab Number	Sample Name	Matrix	Analysis
1403388-01	L-43 60-72	Soil	8082A
1403388-02	M-44 60-72	Soil	8082A
1403388-03	N-43 60-72	Soil	8082A
1403388-05	S-31 24-36	Soil	8082A
1403388-06	S-33 36-48	Soil	8082A
1403388-07	S-33 48-60	Soil	8082A
1403388-16	R-33 24-36	Soil	8082A
1403388-17	IB-38 0-12	Soil	8082A
1403388-18	IB-39 12-24	Soil	8082A
1403388-19	A-37 0-12	Soil	8082A
1403388-20	B-37 0-12	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403388

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403388-03 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403388-19 **Surrogate recovery(ies) above upper control limit (S+).**
Decachlorobiphenyl (193% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403388

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403388

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403388-01 through 1403388-20**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: April 21, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-43 60-72
Date Sampled: 03/21/14 14:20
Percent Solids: 22
Initial Volume: 19.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403388
ESS Laboratory Sample ID: 1403388-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/17/14 16:15
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.236)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1221	ND (0.236)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1232	ND (0.236)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1242	ND (0.236)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1248	**13.5** (2.36)		8082A		10	04/18/14 15:43		CD41620
Aroclor 1254	ND (0.236)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1260	ND (0.236)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1262	ND (0.236)		8082A		1	04/18/14 12:53		CD41620
Aroclor 1268	ND (0.236)		8082A		1	04/18/14 12:53		CD41620

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-44 60-72
Date Sampled: 03/21/14 14:45
Percent Solids: 18
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403388
ESS Laboratory Sample ID: 1403388-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/17/14 16:15
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.291)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1221	ND (0.291)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1232	ND (0.291)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1242	ND (0.291)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1248	ND (0.291)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1254	ND (0.291)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1260	ND (0.291)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1262	ND (0.291)		8082A		1	04/18/14 13:12		CD41620
Aroclor 1268	ND (0.291)		8082A		1	04/18/14 13:12		CD41620

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*38 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*39 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*44 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-43 60-72
Date Sampled: 03/21/14 13:55
Percent Solids: 42
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403388
ESS Laboratory Sample ID: 1403388-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.32)		8082A		20	04/18/14 0:21		CD41517
Aroclor 1221	ND (2.32)		8082A		20	04/18/14 0:21		CD41517
Aroclor 1232	ND (2.32)		8082A		20	04/18/14 0:21		CD41517
Aroclor 1242	ND (2.32)		8082A		20	04/18/14 0:21		CD41517
Aroclor 1248	**33.5** (2.32)		8082A		20	04/18/14 0:21		CD41517
Aroclor 1254	ND (2.32)		8082A		20	04/18/14 0:21		CD41517
Aroclor 1260	ND (2.32)		8082A		20	04/18/14 0:21		CD41517
Aroclor 1262	ND (2.32)		8082A		20	04/18/14 0:21		CD41517
Aroclor 1268	ND (2.32)		8082A		20	04/18/14 0:21		CD41517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-31 24-36
Date Sampled: 03/21/14 10:17
Percent Solids: 95
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403388
ESS Laboratory Sample ID: 1403388-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0526)		8082A		1	04/17/14 13:41		CD41517
Aroclor 1221	ND (0.0526)		8082A		1	04/17/14 13:41		CD41517
Aroclor 1232	ND (0.0526)		8082A		1	04/17/14 13:41		CD41517
Aroclor 1242	ND (0.0526)		8082A		1	04/17/14 13:41		CD41517
Aroclor 1248	ND (0.0526)		8082A		1	04/17/14 13:41		CD41517
Aroclor 1254	ND (0.0526)		8082A		1	04/17/14 13:41		CD41517
Aroclor 1260	ND (0.0526)		8082A		1	04/17/14 13:41		CD41517
Aroclor 1262	ND (0.0526)		8082A		1	04/17/14 13:41		CD41517
Aroclor 1268	ND (0.0526)		8082A		1	04/17/14 13:41		CD41517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-33 36-48
Date Sampled: 03/21/14 09:23
Percent Solids: 84
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403388
ESS Laboratory Sample ID: 1403388-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0587)		8082A		1	04/17/14 13:59		CD41517
Aroclor 1221	ND (0.0587)		8082A		1	04/17/14 13:59		CD41517
Aroclor 1232	ND (0.0587)		8082A		1	04/17/14 13:59		CD41517
Aroclor 1242	ND (0.0587)		8082A		1	04/17/14 13:59		CD41517
Aroclor 1248	**3.09** (0.293)		8082A		5	04/18/14 2:32		CD41517
Aroclor 1254	ND (0.0587)		8082A		1	04/17/14 13:59		CD41517
Aroclor 1260	ND (0.0587)		8082A		1	04/17/14 13:59		CD41517
Aroclor 1262	ND (0.0587)		8082A		1	04/17/14 13:59		CD41517
Aroclor 1268	ND (0.0587)		8082A		1	04/17/14 13:59		CD41517

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-33 48-60
Date Sampled: 03/21/14 09:27
Percent Solids: 90
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403388
ESS Laboratory Sample ID: 1403388-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0552)		8082A		1	04/17/14 14:18		CD41517
Aroclor 1221	ND (0.0552)		8082A		1	04/17/14 14:18		CD41517
Aroclor 1232	ND (0.0552)		8082A		1	04/17/14 14:18		CD41517
Aroclor 1242	ND (0.0552)		8082A		1	04/17/14 14:18		CD41517
Aroclor 1248	**0.0924** (0.0552)		8082A		1	04/17/14 14:18		CD41517
Aroclor 1254	ND (0.0552)		8082A		1	04/17/14 14:18		CD41517
Aroclor 1260	ND (0.0552)		8082A		1	04/17/14 14:18		CD41517
Aroclor 1262	ND (0.0552)		8082A		1	04/17/14 14:18		CD41517
Aroclor 1268	ND (0.0552)		8082A		1	04/17/14 14:18		CD41517

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-33 24-36
Date Sampled: 03/21/14 09:00
Percent Solids: 96
Initial Volume: 20.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403388
ESS Laboratory Sample ID: 1403388-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0499)		8082A		1	04/17/14 14:37		CD41517
Aroclor 1221	ND (0.0499)		8082A		1	04/17/14 14:37		CD41517
Aroclor 1232	ND (0.0499)		8082A		1	04/17/14 14:37		CD41517
Aroclor 1242	ND (0.0499)		8082A		1	04/17/14 14:37		CD41517
Aroclor 1248	ND (0.0499)		8082A		1	04/17/14 14:37		CD41517
Aroclor 1254	ND (0.0499)		8082A		1	04/17/14 14:37		CD41517
Aroclor 1260	ND (0.0499)		8082A		1	04/17/14 14:37		CD41517
Aroclor 1262	ND (0.0499)		8082A		1	04/17/14 14:37		CD41517
Aroclor 1268	ND (0.0499)		8082A		1	04/17/14 14:37		CD41517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*103 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IB-38 0-12
Date Sampled: 03/21/14 09:05
Percent Solids: 16
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403388
ESS Laboratory Sample ID: 1403388-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.311)		8082A		1	04/17/14 14:56		CD41517
Aroclor 1221	ND (0.311)		8082A		1	04/17/14 14:56		CD41517
Aroclor 1232	ND (0.311)		8082A		1	04/17/14 14:56		CD41517
Aroclor 1242	ND (0.311)		8082A		1	04/17/14 14:56		CD41517
Aroclor 1248	**1.22** (0.311)		8082A		1	04/17/14 14:56		CD41517
Aroclor 1254	ND (0.311)		8082A		1	04/17/14 14:56		CD41517
Aroclor 1260	ND (0.311)		8082A		1	04/17/14 14:56		CD41517
Aroclor 1262	ND (0.311)		8082A		1	04/17/14 14:56		CD41517
Aroclor 1268	ND (0.311)		8082A		1	04/17/14 14:56		CD41517

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*118 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*34 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*35 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: IB-39 12-24
Date Sampled: 03/21/14 09:10
Percent Solids: 16
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403388
ESS Laboratory Sample ID: 1403388-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.322)		8082A		1	04/17/14 15:15		CD41517
Aroclor 1221	ND (0.322)		8082A		1	04/17/14 15:15		CD41517
Aroclor 1232	ND (0.322)		8082A		1	04/17/14 15:15		CD41517
Aroclor 1242	ND (0.322)		8082A		1	04/17/14 15:15		CD41517
Aroclor 1248	ND (0.322)		8082A		1	04/17/14 15:15		CD41517
Aroclor 1254	ND (0.322)		8082A		1	04/17/14 15:15		CD41517
Aroclor 1260	ND (0.322)		8082A		1	04/17/14 15:15		CD41517
Aroclor 1262	ND (0.322)		8082A		1	04/17/14 15:15		CD41517
Aroclor 1268	ND (0.322)		8082A		1	04/17/14 15:15		CD41517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*124 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*44 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: A-37 0-12
Date Sampled: 03/21/14 09:50
Percent Solids: 13
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403388
ESS Laboratory Sample ID: 1403388-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.366)		8082A		1	04/17/14 15:34		CD41517
Aroclor 1221	ND (0.366)		8082A		1	04/17/14 15:34		CD41517
Aroclor 1232	ND (0.366)		8082A		1	04/17/14 15:34		CD41517
Aroclor 1242	ND (0.366)		8082A		1	04/17/14 15:34		CD41517
Aroclor 1248	**21.7** (1.83)		8082A		5	04/18/14 2:51		CD41517
Aroclor 1254	ND (0.366)		8082A		1	04/17/14 15:34		CD41517
Aroclor 1260	ND (0.366)		8082A		1	04/17/14 15:34		CD41517
Aroclor 1262	ND (0.366)		8082A		1	04/17/14 15:34		CD41517
Aroclor 1268	ND (0.366)		8082A		1	04/17/14 15:34		CD41517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*193 %*	*S+*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-37 0-12
Date Sampled: 03/21/14 10:00
Percent Solids: 14
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403388
ESS Laboratory Sample ID: 1403388-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/18/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.340)		8082A		1	04/21/14 11:43		CD41804
Aroclor 1221	ND (0.340)		8082A		1	04/21/14 11:43		CD41804
Aroclor 1232	ND (0.340)		8082A		1	04/21/14 11:43		CD41804
Aroclor 1242	ND (0.340)		8082A		1	04/21/14 11:43		CD41804
Aroclor 1248	**8.39** (1.70)		8082A		5	04/21/14 12:58		CD41804
Aroclor 1254	ND (0.340)		8082A		1	04/21/14 11:43		CD41804
Aroclor 1260	ND (0.340)		8082A		1	04/21/14 11:43		CD41804
Aroclor 1262	ND (0.340)		8082A		1	04/21/14 11:43		CD41804
Aroclor 1268	ND (0.340)		8082A		1	04/21/14 11:43		CD41804

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403388

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41517 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403388

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41517 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403388

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41517 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0177*		mg/kg wet	*0.02500*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0168*		mg/kg wet	*0.02500*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0177*		mg/kg wet	*0.02500*		*71*	*30-150*			
LCS										
Aroclor 1016	0.435	0.0500	mg/kg wet	0.5000		87	40-140			
Aroclor 1260	0.426	0.0500	mg/kg wet	0.5000		85	40-140			
Surrogate: Decachlorobiphenyl	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0166*		mg/kg wet	*0.02500*		*66*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0170*		mg/kg wet	*0.02500*		*68*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0171*		mg/kg wet	*0.02500*		*68*	*30-150*			
LCS Dup										
Aroclor 1016	0.423	0.0500	mg/kg wet	0.5000		85	40-140	3	30	
Aroclor 1260	0.430	0.0500	mg/kg wet	0.5000		86	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0189*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0169*		mg/kg wet	*0.02500*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0170*		mg/kg wet	*0.02500*		*68*	*30-150*			
Batch CD41620 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403388

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41620 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403388

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41620 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403388

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41620 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
LCS										
Aroclor 1016	0.499	0.0500	mg/kg wet	0.5000		100	40-140			
Aroclor 1260	0.496	0.0500	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS Dup										
Aroclor 1016	0.513	0.0500	mg/kg wet	0.5000		103	40-140	3	30	
Aroclor 1260	0.519	0.0500	mg/kg wet	0.5000		104	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0209*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Batch CD41804 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403388

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41804 - 3540C										
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403388

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41804 - 3540C										
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0179*		mg/kg wet	*0.02500*		*72*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS										
Aroclor 1016	0.425	0.0500	mg/kg wet	0.5000		85	40-140			
Aroclor 1260	0.404	0.0500	mg/kg wet	0.5000		81	40-140			
Surrogate: Decachlorobiphenyl	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
LCS Dup										
Aroclor 1016	0.436	0.0500	mg/kg wet	0.5000		87	40-140	3	30	
Aroclor 1260	0.416	0.0500	mg/kg wet	0.5000		83	40-140	3	30	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403388

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41804 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403388

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
S+	Surrogate recovery(ies) above upper control limit (S+).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403388

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030388
Date Project Due: ~~3/31/14~~ 4/21/14
Days For Project: ~~5 Day~~ 20 days
eo 4/17/14

Items to be checked upon receipt:

1. Air Bill Manifest Present?	* No	10. Are the samples properly preserved?	Yes
Air No.:		11. Proper sample containers used?	Yes
2. Were Custody Seals Present?	No	12. Any air bubbles in the VOA vials?	N/A
3. Were Custody Seals Intact?	N/A	13. Holding times exceeded?	No
4. Is Radiation count < 100 CPM?	Yes	14. Sufficient sample volumes?	Yes
5. Is a cooler present?	Yes	15. Any Subcontracting needed?	No
Cooler Temp: **2.1**		16. Are ESS labels on correct containers?	Yes | No
Iced With: **Ice**		17. Were samples received intact?	Yes | No
6. Was COC included with samples?	Yes	ESS Sample IDs: _____	
7. Was COC signed and dated by client?	Yes	Sub Lab: _____	
8. Does the COC match the sample	Yes	Analysis: _____	
9. Is COC complete and correct?	Yes	TAT: _____	

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Samples still on Hold ①

Completed By: [illegible] Date/Time: 4/15/14 0345
Reviewed By: [illegible] Date/Time: 4/15/14 1035

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 1 of 2 ar 3/24/14

Turn Time: X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: ~~1403379~~ 1403388
Electronic Deliverable: X Yes ___ No
Format: pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

	ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO EPH No Targets	8081 Pesticides 8082 PCB 608 Pesticides 608 PCB	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7							
1	1	3/21/2014	1420		X	S	L-43 (60-72)	1	G				X										
1	2		1445				M-44 (60-72)																
1	3		1355				N-43 (60-72)																
	4		1110				W-32 (24-36)																
1	5		1017				S-31 (24-36)																
1	6		0923				S-33 (36-48)																
1	7		0927				S-33 (48-60)																
	8		0930				S-33 (60-72)																
	9		1005				T-31 (36-48)																
	10		0950				T-33 (48-60)																

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: 2.1+3.9+3.8 KH ICE

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb
HOLD SAMPLES
OK hold per client request. 4/15/14 @ ESS

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COULER	3/24/14 10:05	[signature]	3/24/14 10:05
[signature]	3/24/14 10:59	[signature]	3/24/14 1059				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 2 of 2 wr 3/24/14

Turn Time: X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403388

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH	8081 Pesticides / 8082 PCB / 608 Pesticides	8270 / 625 / PAH only / 608 PCB	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7						
11	3/21/2014	1043		X	S	U-31 (24-30)	1	G				X									
12		1025				U-32 (36-48)															
13		1057				V-32 (24-36)															
14		1220				Q-14 (24-36)															
15		0857				R-33 (12-24)															
16		0900				R-33 (24-36)															
17		0905				1B-38 (0-12)															
18		0910				1B-39 (12-24)															
19		0950				A-37 (0-12)															
20		1000				B-37 (0-12)															

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: 2/13.9 & 3.8 ICE KH

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

HOLD SAMPLES

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			CARER	3/24/14 10:05	[signature]	3/24/14 10:05
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14 10:59	[signature]	3/24/14 1059				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403406

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 4:05 pm, Apr 01, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403406

SAMPLE RECEIPT

The following samples were received on March 25, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403406-01	C-48 12-24in	Soil	8082A
1403406-02	E-43 24-36in	Soil	8082A
1403406-03	G-31 12-24in	Soil	8082A
1403406-04	H-10 12-24in	Soil	8082A
1403406-05	H-10 24-36in	Soil	8082A
1403406-06	H-11 12-24in	Soil	8082A
1403406-07	H-11 24-36in	Soil	8082A
1403406-08	H-8 12-24in	Soil	8082A
1403406-09	H-8 24-36	Soil	8082A
1403406-10	H-9 12-24	Soil	8082A
1403406-11	H-9 24-36	Soil	8082A
1403406-12	I-11 12-24	Soil	8082A
1403406-13	I-11 24-36	Soil	8082A
1403406-14	I-8 12-24	Soil	8082A
1403406-15	I-8 24-36	Soil	8082A
1403406-16	J-11 12-24	Soil	8082A
1403406-17	J-11 24-36	Soil	8082A
1403406-18	J-36 48-60	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403406

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403406-12 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl [2C] (181% @ 30-150%)

1403406-18 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Tetrachloro-m-xylene (190% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403406

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403406

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403406-01 through 1403406-18**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: April 01, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-48 12-24in
Date Sampled: 03/24/14 12:18
Percent Solids: 14
Initial Volume: 29.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.123)		8082A		1	04/01/14 13:05		CC42517
Aroclor 1221	ND (0.0614)		8082A		1	04/01/14 13:05		CC42517
Aroclor 1232	ND (0.0614)		8082A		1	04/01/14 13:05		CC42517
Aroclor 1242	ND (0.0614)		8082A		1	04/01/14 13:05		CC42517
Aroclor 1248	ND (0.0614)		8082A		1	04/01/14 13:05		CC42517
Aroclor 1254	ND (0.0614)		8082A		1	04/01/14 13:05		CC42517
Aroclor 1260	ND (0.0614)		8082A		1	04/01/14 13:05		CC42517
Aroclor 1262	ND (0.0614)		8082A		1	04/01/14 13:05		CC42517
Aroclor 1268	ND (0.0614)		8082A		1	04/01/14 13:05		CC42517

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*36 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*50 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-43 24-36in
Date Sampled: 03/24/14 12:22
Percent Solids: 15
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/28/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.344)		8082A		1	03/31/14 20:54		CC42715
Aroclor 1221	ND (0.344)		8082A		1	03/31/14 20:54		CC42715
Aroclor 1232	ND (0.344)		8082A		1	03/31/14 20:54		CC42715
Aroclor 1242	ND (0.344)		8082A		1	03/31/14 20:54		CC42715
Aroclor 1248	**1.46** (0.344)		8082A		1	03/31/14 20:54		CC42715
Aroclor 1254	ND (0.344)		8082A		1	03/31/14 20:54		CC42715
Aroclor 1260	ND (0.344)		8082A		1	03/31/14 20:54		CC42715
Aroclor 1262	ND (0.344)		8082A		1	03/31/14 20:54		CC42715
Aroclor 1268	ND (0.344)		8082A		1	03/31/14 20:54		CC42715

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: G-31 12-24in
Date Sampled: 03/24/14 12:10
Percent Solids: 74
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0662)		8082A		1	03/28/14 6:10		CC42517
Aroclor 1221	ND (0.0662)		8082A		1	03/28/14 6:10		CC42517
Aroclor 1232	ND (0.0662)		8082A		1	03/28/14 6:10		CC42517
Aroclor 1242	ND (0.0662)		8082A		1	03/28/14 6:10		CC42517
Aroclor 1248	**4.19** (0.331)		8082A		5	03/28/14 23:18		CC42517
Aroclor 1254	ND (0.0662)		8082A		1	03/28/14 6:10		CC42517
Aroclor 1260	ND (0.0662)		8082A		1	03/28/14 6:10		CC42517
Aroclor 1262	ND (0.0662)		8082A		1	03/28/14 6:10		CC42517
Aroclor 1268	ND (0.0662)		8082A		1	03/28/14 6:10		CC42517

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-10 12-24in
Date Sampled: 03/24/14 08:05
Percent Solids: 84
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0593)		8082A		1	03/28/14 6:29		CC42517
Aroclor 1221	ND (0.0593)		8082A		1	03/28/14 6:29		CC42517
Aroclor 1232	ND (0.0593)		8082A		1	03/28/14 6:29		CC42517
Aroclor 1242	ND (0.0593)		8082A		1	03/28/14 6:29		CC42517
Aroclor 1248	ND (0.0593)		8082A		1	03/28/14 6:29		CC42517
Aroclor 1254	ND (0.0593)		8082A		1	03/28/14 6:29		CC42517
Aroclor 1260	ND (0.0593)		8082A		1	03/28/14 6:29		CC42517
Aroclor 1262	ND (0.0593)		8082A		1	03/28/14 6:29		CC42517
Aroclor 1268	ND (0.0593)		8082A		1	03/28/14 6:29		CC42517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*114 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-10 24-36in
Date Sampled: 03/24/14 08:07
Percent Solids: 87
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0574)		8082A		1	03/28/14 6:49		CC42517
Aroclor 1221	ND (0.0574)		8082A		1	03/28/14 6:49		CC42517
Aroclor 1232	ND (0.0574)		8082A		1	03/28/14 6:49		CC42517
Aroclor 1242	ND (0.0574)		8082A		1	03/28/14 6:49		CC42517
Aroclor 1248	ND (0.0574)		8082A		1	03/28/14 6:49		CC42517
Aroclor 1254	ND (0.0574)		8082A		1	03/28/14 6:49		CC42517
Aroclor 1260	ND (0.0574)		8082A		1	03/28/14 6:49		CC42517
Aroclor 1262	ND (0.0574)		8082A		1	03/28/14 6:49		CC42517
Aroclor 1268	ND (0.0574)		8082A		1	03/28/14 6:49		CC42517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*105 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-11 12-24in
Date Sampled: 03/24/14 08:10
Percent Solids: 89
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0577)		8082A		1	03/28/14 9:21		CC42517
Aroclor 1221	ND (0.0577)		8082A		1	03/28/14 9:21		CC42517
Aroclor 1232	ND (0.0577)		8082A		1	03/28/14 9:21		CC42517
Aroclor 1242	ND (0.0577)		8082A		1	03/28/14 9:21		CC42517
Aroclor 1248	ND (0.0577)		8082A		1	03/28/14 9:21		CC42517
Aroclor 1254	ND (0.0577)		8082A		1	03/28/14 9:21		CC42517
Aroclor 1260	ND (0.0577)		8082A		1	03/28/14 9:21		CC42517
Aroclor 1262	ND (0.0577)		8082A		1	03/28/14 9:21		CC42517
Aroclor 1268	ND (0.0577)		8082A		1	03/28/14 9:21		CC42517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*105 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-11 24-36in
Date Sampled: 03/24/14 08:13
Percent Solids: 87
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0589)		8082A		1	03/28/14 4:08		CC42518
Aroclor 1221	ND (0.0589)		8082A		1	03/28/14 4:08		CC42518
Aroclor 1232	ND (0.0589)		8082A		1	03/28/14 4:08		CC42518
Aroclor 1242	ND (0.0589)		8082A		1	03/28/14 4:08		CC42518
Aroclor 1248	ND (0.0589)		8082A		1	03/28/14 4:08		CC42518
Aroclor 1254	ND (0.0589)		8082A		1	03/28/14 4:08		CC42518
Aroclor 1260	ND (0.0589)		8082A		1	03/28/14 4:08		CC42518
Aroclor 1262	ND (0.0589)		8082A		1	03/28/14 4:08		CC42518
Aroclor 1268	ND (0.0589)		8082A		1	03/28/14 4:08		CC42518

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*103 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*118 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*104 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-8 12-24in
Date Sampled: 03/24/14 08:15
Percent Solids: 89
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0580)		8082A		1	03/28/14 5:05		CC42518
Aroclor 1221	ND (0.0580)		8082A		1	03/28/14 5:05		CC42518
Aroclor 1232	ND (0.0580)		8082A		1	03/28/14 5:05		CC42518
Aroclor 1242	ND (0.0580)		8082A		1	03/28/14 5:05		CC42518
Aroclor 1248	ND (0.0580)		8082A		1	03/28/14 5:05		CC42518
Aroclor 1254	ND (0.0580)		8082A		1	03/28/14 5:05		CC42518
Aroclor 1260	ND (0.0580)		8082A		1	03/28/14 5:05		CC42518
Aroclor 1262	ND (0.0580)		8082A		1	03/28/14 5:05		CC42518
Aroclor 1268	ND (0.0580)		8082A		1	03/28/14 5:05		CC42518

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*110 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*120 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*105 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*108 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-8 24-36
Date Sampled: 03/24/14 08:18
Percent Solids: 86
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0580)		8082A		1	03/28/14 5:24		CC42518
Aroclor 1221	ND (0.0580)		8082A		1	03/28/14 5:24		CC42518
Aroclor 1232	ND (0.0580)		8082A		1	03/28/14 5:24		CC42518
Aroclor 1242	ND (0.0580)		8082A		1	03/28/14 5:24		CC42518
Aroclor 1248	ND (0.0580)		8082A		1	03/28/14 5:24		CC42518
Aroclor 1254	**0.0687** (0.0580)		8082A		1	03/28/14 5:24		CC42518
Aroclor 1260	ND (0.0580)		8082A		1	03/28/14 5:24		CC42518
Aroclor 1262	ND (0.0580)		8082A		1	03/28/14 5:24		CC42518
Aroclor 1268	ND (0.0580)		8082A		1	03/28/14 5:24		CC42518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*107 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*123 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*105 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*107 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-9 12-24
Date Sampled: 03/24/14 08:00
Percent Solids: 82
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0596)		8082A		1	03/28/14 5:43		CC42518
Aroclor 1221	ND (0.0596)		8082A		1	03/28/14 5:43		CC42518
Aroclor 1232	ND (0.0596)		8082A		1	03/28/14 5:43		CC42518
Aroclor 1242	ND (0.0596)		8082A		1	03/28/14 5:43		CC42518
Aroclor 1248	**0.829** (0.0596)		8082A		1	03/28/14 5:43		CC42518
Aroclor 1254	ND (0.0596)		8082A		1	03/28/14 5:43		CC42518
Aroclor 1260	ND (0.0596)		8082A		1	03/28/14 5:43		CC42518
Aroclor 1262	ND (0.0596)		8082A		1	03/28/14 5:43		CC42518
Aroclor 1268	ND (0.0596)		8082A		1	03/28/14 5:43		CC42518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*115 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: H-9 24-36
Date Sampled: 03/24/14 08:03
Percent Solids: 86
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0601)		8082A		1	03/28/14 6:01		CC42518
Aroclor 1221	ND (0.0601)		8082A		1	03/28/14 6:01		CC42518
Aroclor 1232	ND (0.0601)		8082A		1	03/28/14 6:01		CC42518
Aroclor 1242	ND (0.0601)		8082A		1	03/28/14 6:01		CC42518
Aroclor 1248	ND (0.0601)		8082A		1	03/28/14 6:01		CC42518
Aroclor 1254	ND (0.0601)		8082A		1	03/28/14 6:01		CC42518
Aroclor 1260	ND (0.0601)		8082A		1	03/28/14 6:01		CC42518
Aroclor 1262	ND (0.0601)		8082A		1	03/28/14 6:01		CC42518
Aroclor 1268	ND (0.0601)		8082A		1	03/28/14 6:01		CC42518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*110 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*122 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*103 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-11 12-24
Date Sampled: 03/24/14 08:20
Percent Solids: 88
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0563)		8082A		1	03/28/14 6:20		CC42518
Aroclor 1221	ND (0.0563)		8082A		1	03/28/14 6:20		CC42518
Aroclor 1232	ND (0.0563)		8082A		1	03/28/14 6:20		CC42518
Aroclor 1242	ND (0.0563)		8082A		1	03/28/14 6:20		CC42518
Aroclor 1248	ND (0.0563)		8082A		1	03/28/14 6:20		CC42518
Aroclor 1254	ND (0.0563)		8082A		1	03/28/14 6:20		CC42518
Aroclor 1260	ND (0.0563)		8082A		1	03/28/14 6:20		CC42518
Aroclor 1262	ND (0.0563)		8082A		1	03/28/14 6:20		CC42518
Aroclor 1268	ND (0.0563)		8082A		1	03/28/14 6:20		CC42518

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*114 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*181 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-11 24-36
Date Sampled: 03/24/14 08:22
Percent Solids: 88
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0577)		8082A		1	03/28/14 6:39		CC42518
Aroclor 1221	ND (0.0577)		8082A		1	03/28/14 6:39		CC42518
Aroclor 1232	ND (0.0577)		8082A		1	03/28/14 6:39		CC42518
Aroclor 1242	ND (0.0577)		8082A		1	03/28/14 6:39		CC42518
Aroclor 1248	ND (0.0577)		8082A		1	03/28/14 6:39		CC42518
Aroclor 1254	ND (0.0577)		8082A		1	03/28/14 6:39		CC42518
Aroclor 1260	ND (0.0577)		8082A		1	03/28/14 6:39		CC42518
Aroclor 1262	ND (0.0577)		8082A		1	03/28/14 6:39		CC42518
Aroclor 1268	ND (0.0577)		8082A		1	03/28/14 6:39		CC42518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*106 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*119 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-8 12-24
Date Sampled: 03/24/14 08:25
Percent Solids: 96
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0538)		8082A		1	03/28/14 6:58		CC42518
Aroclor 1221	ND (0.0538)		8082A		1	03/28/14 6:58		CC42518
Aroclor 1232	ND (0.0538)		8082A		1	03/28/14 6:58		CC42518
Aroclor 1242	ND (0.0538)		8082A		1	03/28/14 6:58		CC42518
Aroclor 1248	ND (0.0538)		8082A		1	03/28/14 6:58		CC42518
Aroclor 1254	**0.0699** (0.0538)		8082A		1	03/28/14 6:58		CC42518
Aroclor 1260	ND (0.0538)		8082A		1	03/28/14 6:58		CC42518
Aroclor 1262	ND (0.0538)		8082A		1	03/28/14 6:58		CC42518
Aroclor 1268	ND (0.0538)		8082A		1	03/28/14 6:58		CC42518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*122 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*102 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: I-8 24-36
Date Sampled: 03/24/14 08:30
Percent Solids: 92
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0556)		8082A		1	03/28/14 7:17		CC42518
Aroclor 1221	ND (0.0556)		8082A		1	03/28/14 7:17		CC42518
Aroclor 1232	ND (0.0556)		8082A		1	03/28/14 7:17		CC42518
Aroclor 1242	ND (0.0556)		8082A		1	03/28/14 7:17		CC42518
Aroclor 1248	ND (0.0556)		8082A		1	03/28/14 7:17		CC42518
Aroclor 1254	**0.0636** (0.0556)		8082A		1	03/28/14 7:17		CC42518
Aroclor 1260	ND (0.0556)		8082A		1	03/28/14 7:17		CC42518
Aroclor 1262	ND (0.0556)		8082A		1	03/28/14 7:17		CC42518
Aroclor 1268	ND (0.0556)		8082A		1	03/28/14 7:17		CC42518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*104 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*119 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*103 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-11 12-24
Date Sampled: 03/24/14 08:33
Percent Solids: 90
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0562)		8082A		1	03/28/14 7:36		CC42518
Aroclor 1221	ND (0.0562)		8082A		1	03/28/14 7:36		CC42518
Aroclor 1232	ND (0.0562)		8082A		1	03/28/14 7:36		CC42518
Aroclor 1242	ND (0.0562)		8082A		1	03/28/14 7:36		CC42518
Aroclor 1248	ND (0.0562)		8082A		1	03/28/14 7:36		CC42518
Aroclor 1254	ND (0.0562)		8082A		1	03/28/14 7:36		CC42518
Aroclor 1260	ND (0.0562)		8082A		1	03/28/14 7:36		CC42518
Aroclor 1262	ND (0.0562)		8082A		1	03/28/14 7:36		CC42518
Aroclor 1268	ND (0.0562)		8082A		1	03/28/14 7:36		CC42518

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*119 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*100 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-11 24-36
Date Sampled: 03/24/14 08:35
Percent Solids: 89
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0580)		8082A		1	03/28/14 7:55		CC42518
Aroclor 1221	ND (0.0580)		8082A		1	03/28/14 7:55		CC42518
Aroclor 1232	ND (0.0580)		8082A		1	03/28/14 7:55		CC42518
Aroclor 1242	ND (0.0580)		8082A		1	03/28/14 7:55		CC42518
Aroclor 1248	ND (0.0580)		8082A		1	03/28/14 7:55		CC42518
Aroclor 1254	ND (0.0580)		8082A		1	03/28/14 7:55		CC42518
Aroclor 1260	ND (0.0580)		8082A		1	03/28/14 7:55		CC42518
Aroclor 1262	ND (0.0580)		8082A		1	03/28/14 7:55		CC42518
Aroclor 1268	ND (0.0580)		8082A		1	03/28/14 7:55		CC42518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*108 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*122 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*100 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-36 48-60
Date Sampled: 03/24/14 12:12
Percent Solids: 80
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403406
ESS Laboratory Sample ID: 1403406-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0627)		8082A		1	03/28/14 8:14		CC42518
Aroclor 1221	ND (0.0627)		8082A		1	03/28/14 8:14		CC42518
Aroclor 1232	ND (0.0627)		8082A		1	03/28/14 8:14		CC42518
Aroclor 1242	**5.00** (0.627)		8082A		10	03/29/14 20:43		CC42518
Aroclor 1248	ND (0.0627)		8082A		1	03/28/14 8:14		CC42518
Aroclor 1254	ND (0.0627)		8082A		1	03/28/14 8:14		CC42518
Aroclor 1260	ND (0.0627)		8082A		1	03/28/14 8:14		CC42518
Aroclor 1262	ND (0.0627)		8082A		1	03/28/14 8:14		CC42518
Aroclor 1268	ND (0.0627)		8082A		1	03/28/14 8:14		CC42518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*112 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*190 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*108 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403406

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42517 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403406

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42517 - 3540C										
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403406

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42517 - 3540C										
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0256*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0190*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0209*		mg/kg wet	*0.02500*		*83*	*30-150*			
LCS										
Aroclor 1016	0.457	0.0250	mg/kg wet	0.5000		91	40-140			
Aroclor 1260	0.459	0.0250	mg/kg wet	0.5000		92	40-140			
Surrogate: Decachlorobiphenyl	*0.0264*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0261*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
LCS Dup										
Aroclor 1016	0.481	0.0250	mg/kg wet	0.5000		96	40-140	5	30	
Aroclor 1260	0.466	0.0250	mg/kg wet	0.5000		93	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0268*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
Batch CC42518 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403406

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42518 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403406

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42518 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0264*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0302*		mg/kg wet	*0.02500*		*121*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403406

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42518 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0226*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS										
Aroclor 1016	0.507	0.0500	mg/kg wet	0.5000		101	40-140			
Aroclor 1260	0.529	0.0500	mg/kg wet	0.5000		106	40-140			
Surrogate: Decachlorobiphenyl	*0.0278*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0317*		mg/kg wet	*0.02500*		*127*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0244*		mg/kg wet	*0.02500*		*98*	*30-150*			
LCS Dup										
Aroclor 1016	0.519	0.0500	mg/kg wet	0.5000		104	40-140	2	30	
Aroclor 1260	0.535	0.0500	mg/kg wet	0.5000		107	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0277*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0313*		mg/kg wet	*0.02500*		*125*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Batch CC42715 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403406

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42715 - 3540C										
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403406

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42715 - 3540C										
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0196*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0204*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS										
Aroclor 1016	0.475	0.0500	mg/kg wet	0.5000		95	40-140			
Aroclor 1260	0.493	0.0500	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS Dup										
Aroclor 1016	0.473	0.0500	mg/kg wet	0.5000		95	40-140	0.4	30	
Aroclor 1260	0.503	0.0500	mg/kg wet	0.5000		101	40-140	2	30	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403406

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42715 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0261*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford ESS Laboratory Work Order: 1403406

Notes and Definitions

U	Analyte included in the analysis, but not detected
SM	Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403406

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030406
Date Project Due: 4/1/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **3.5**
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes | No**
17. Were samples received intact? **Yes | No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP

Completed By: M. Nick Date/Time: 3/25/14 1610
Reviewed By: MEK Date/Time: 3/25/14 1626

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 1 of 11 1 of 2 W 3/25/14

Turn Time: X Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____

State where samples were collected from: (MA) RI CT NH NJ NY ME Other ____

Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403406

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260	624	524.2	8021 MTBE/BTEX	8015 GRO VPH	8100 TPH	8015 DRO EPH	No Targets	8081 Pesticides	8082 PCB	608 Pesticides	608 PCB	8270	625	PAH only	RCRA5	RCRA8	PP13	TAL23	TCLP8	MCP	MCPw/Hg	NBC7
1	3/24/2014	1218		X	S	C-48 12-24"	1	G										X													
2		1222				E-43 24-36"																									
~~3~~		~~1205~~				~~F-45 24-36"~~																									
~~4~~		~~1208~~				~~F-46 24-36"~~																									
3		1210				G-31 12-24"																									
4		0805				H-10 12-24"																									
5		0807				H-10 24-36'																									
6		0810				H-11 12-24"																									
7		0813				H-11 24-36"																									
8		0815				H-8 12-24'																									

Container Type: P-Poly G-Glass S-Sterile V-VOA Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: ____
Cooler Temp: 3.5 + 1.8 ice n

Internal Use Only
[✓] Pickup
[ ] Technicians ____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30p	M. Mid	3/25/14 1330
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
M. Mid	3/25/14 1500	[signature]	3/25/14 1545				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 2 of ~~1~~ 2 MS 3/25/14

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: 1403406
Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name: Tighe & Bond
Project #: N-1011
Project Name (20 Char. or less): Polyply
Contact Person: Michael Martin
Address: 4 Barlows Landing Rd, Unit 15
City: Pocasset State: MA Zip: 02559 PO#:
Telephone #: 508-564-7285 Fax #: 508-564-4298 Email Address: memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH	8081 Pesticides / 8082 PCB / No Targets	8270 / 625 / 608 PCB	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
9	3/24/2014	0818		X	S	H-8 24-36	1	G				X										
10		0800				H-9 12-24																
11		0803				H-9 24-36																
12		0820				I-11 12-24																
13		0822				I-11 24-36																
14		0825				I-8 12-24																
15		0830				I-8 24-36																
16		0833				J-11 12-24																
17		0835				J-11 24-36																
18		1212				J-36 48-60																

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: 3.5 + 1.8 ice

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30	[signature]	3/25/14 1330
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1500	[signature]	3/25/14 1545				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

Page 2 of 3

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403416

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 4:40 pm, Apr 01, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403416

SAMPLE RECEIPT

The following samples were received on March 25, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403416-01	J-8 12-24in	Soil	8082A
1403416-02	J-8 24-36in	Soil	8082A
1403416-03	K-10 24-36in	Soil	8082A
1403416-04	K-11 12-24in	Soil	8082A
1403416-05	K-9 24-36in	Soil	8082A
1403416-06	L-10 24-36in	Soil	8082A
1403416-07	L-11 12-24in	Soil	8082A
1403416-08	L-35 36-48in	Soil	8082A
1403416-09	L-8 12-24in	Soil	8082A
1403416-10	L-9 24-36in	Soil	8082A
1403416-11	M-10 12-24in	Soil	8082A
1403416-12	M-11 12-24in	Soil	8082A
1403416-13	M-9 12-24in	Soil	8082A
1403416-14	N-46 24-36in	Soil	8082A
1403416-15	O-26 12-24in	Soil	8082A
1403416-16	O-28 12-24in	Soil	8082A
1403416-17	O-30 12-24in	Soil	8082A
1403416-18	O-4 0-12in	Soil	8082A
1403416-19	O-40 36-48in	Soil	8082A
1403416-20	O-46 12-24in	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403416

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403416-10 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403416-13 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403416

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403416

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403416-01 through 1403416-20**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: April 01, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-8 12-24in
Date Sampled: 03/24/14 08:38
Percent Solids: 90
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0567)		8082A		1	03/26/14 23:56		CC42516
Aroclor 1221	ND (0.0567)		8082A		1	03/26/14 23:56		CC42516
Aroclor 1232	ND (0.0567)		8082A		1	03/26/14 23:56		CC42516
Aroclor 1242	ND (0.0567)		8082A		1	03/26/14 23:56		CC42516
Aroclor 1248	ND (0.0567)		8082A		1	03/26/14 23:56		CC42516
Aroclor 1254	ND (0.0567)		8082A		1	03/26/14 23:56		CC42516
Aroclor 1260	ND (0.0567)		8082A		1	03/26/14 23:56		CC42516
Aroclor 1262	ND (0.0567)		8082A		1	03/26/14 23:56		CC42516
Aroclor 1268	ND (0.0567)		8082A		1	03/26/14 23:56		CC42516

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-8 24-36in
Date Sampled: 03/24/14 08:40
Percent Solids: 94
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0530)		8082A		1	03/27/14 0:15		CC42516
Aroclor 1221	ND (0.0530)		8082A		1	03/27/14 0:15		CC42516
Aroclor 1232	ND (0.0530)		8082A		1	03/27/14 0:15		CC42516
Aroclor 1242	ND (0.0530)		8082A		1	03/27/14 0:15		CC42516
Aroclor 1248	**0.0846** (0.0530)		8082A		1	03/27/14 0:15		CC42516
Aroclor 1254	ND (0.0530)		8082A		1	03/27/14 0:15		CC42516
Aroclor 1260	ND (0.0530)		8082A		1	03/27/14 0:15		CC42516
Aroclor 1262	ND (0.0530)		8082A		1	03/27/14 0:15		CC42516
Aroclor 1268	ND (0.0530)		8082A		1	03/27/14 0:15		CC42516

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-10 24-36in
Date Sampled: 03/24/14 08:43
Percent Solids: 89
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0560)		8082A		1	03/27/14 0:35		CC42516
Aroclor 1221	ND (0.0560)		8082A		1	03/27/14 0:35		CC42516
Aroclor 1232	ND (0.0560)		8082A		1	03/27/14 0:35		CC42516
Aroclor 1242	ND (0.0560)		8082A		1	03/27/14 0:35		CC42516
Aroclor 1248	ND (0.0560)		8082A		1	03/27/14 0:35		CC42516
Aroclor 1254	ND (0.0560)		8082A		1	03/27/14 0:35		CC42516
Aroclor 1260	ND (0.0560)		8082A		1	03/27/14 0:35		CC42516
Aroclor 1262	ND (0.0560)		8082A		1	03/27/14 0:35		CC42516
Aroclor 1268	ND (0.0560)		8082A		1	03/27/14 0:35		CC42516

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-11 12-24in
Date Sampled: 03/24/14 08:45
Percent Solids: 92
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0550)		8082A		1	03/27/14 0:54		CC42516
Aroclor 1221	ND (0.0550)		8082A		1	03/27/14 0:54		CC42516
Aroclor 1232	ND (0.0550)		8082A		1	03/27/14 0:54		CC42516
Aroclor 1242	ND (0.0550)		8082A		1	03/27/14 0:54		CC42516
Aroclor 1248	ND (0.0550)		8082A		1	03/27/14 0:54		CC42516
Aroclor 1254	ND (0.0550)		8082A		1	03/27/14 0:54		CC42516
Aroclor 1260	ND (0.0550)		8082A		1	03/27/14 0:54		CC42516
Aroclor 1262	ND (0.0550)		8082A		1	03/27/14 0:54		CC42516
Aroclor 1268	ND (0.0550)		8082A		1	03/27/14 0:54		CC42516

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-9 24-36in
Date Sampled: 03/24/14 08:48
Percent Solids: 80
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0600)		8082A		1	03/27/14 1:13		CC42516
Aroclor 1221	ND (0.0600)		8082A		1	03/27/14 1:13		CC42516
Aroclor 1232	ND (0.0600)		8082A		1	03/27/14 1:13		CC42516
Aroclor 1242	ND (0.0600)		8082A		1	03/27/14 1:13		CC42516
Aroclor 1248	**2.67** (0.300)		8082A		5	03/28/14 4:36		CC42516
Aroclor 1254	ND (0.0600)		8082A		1	03/27/14 1:13		CC42516
Aroclor 1260	ND (0.0600)		8082A		1	03/27/14 1:13		CC42516
Aroclor 1262	ND (0.0600)		8082A		1	03/27/14 1:13		CC42516
Aroclor 1268	ND (0.0600)		8082A		1	03/27/14 1:13		CC42516

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-10 24-36in
Date Sampled: 03/24/14 08:50
Percent Solids: 89
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0574)		8082A		1	03/27/14 1:32		CC42516
Aroclor 1221	ND (0.0574)		8082A		1	03/27/14 1:32		CC42516
Aroclor 1232	ND (0.0574)		8082A		1	03/27/14 1:32		CC42516
Aroclor 1242	ND (0.0574)		8082A		1	03/27/14 1:32		CC42516
Aroclor 1248	ND (0.0574)		8082A		1	03/27/14 1:32		CC42516
Aroclor 1254	ND (0.0574)		8082A		1	03/27/14 1:32		CC42516
Aroclor 1260	ND (0.0574)		8082A		1	03/27/14 1:32		CC42516
Aroclor 1262	ND (0.0574)		8082A		1	03/27/14 1:32		CC42516
Aroclor 1268	ND (0.0574)		8082A		1	03/27/14 1:32		CC42516

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*104 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-11 12-24in
Date Sampled: 03/24/14 08:52
Percent Solids: 92
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0550)		8082A		1	03/27/14 2:48		CC42517
Aroclor 1221	ND (0.0550)		8082A		1	03/27/14 2:48		CC42517
Aroclor 1232	ND (0.0550)		8082A		1	03/27/14 2:48		CC42517
Aroclor 1242	ND (0.0550)		8082A		1	03/27/14 2:48		CC42517
Aroclor 1248	ND (0.0550)		8082A		1	03/27/14 2:48		CC42517
Aroclor 1254	ND (0.0550)		8082A		1	03/27/14 2:48		CC42517
Aroclor 1260	ND (0.0550)		8082A		1	03/27/14 2:48		CC42517
Aroclor 1262	ND (0.0550)		8082A		1	03/27/14 2:48		CC42517
Aroclor 1268	ND (0.0550)		8082A		1	03/27/14 2:48		CC42517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-35 36-48in
Date Sampled: 03/24/14 13:00
Percent Solids: 74
Initial Volume: 30.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0445)		8082A		1	03/27/14 3:08		CC42517
Aroclor 1221	ND (0.0445)		8082A		1	03/27/14 3:08		CC42517
Aroclor 1232	ND (0.0445)		8082A		1	03/27/14 3:08		CC42517
Aroclor 1242	ND (0.0445)		8082A		1	03/27/14 3:08		CC42517
Aroclor 1248	**0.352** (0.0445)		8082A		1	03/27/14 3:08		CC42517
Aroclor 1254	ND (0.0445)		8082A		1	03/27/14 3:08		CC42517
Aroclor 1260	ND (0.0445)		8082A		1	03/27/14 3:08		CC42517
Aroclor 1262	ND (0.0445)		8082A		1	03/27/14 3:08		CC42517
Aroclor 1268	ND (0.0445)		8082A		1	03/27/14 3:08		CC42517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*91 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-8 12-24in
Date Sampled: 03/24/14 08:55
Percent Solids: 95
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0536)		8082A		1	03/27/14 3:27		CC42517
Aroclor 1221	ND (0.0536)		8082A		1	03/27/14 3:27		CC42517
Aroclor 1232	ND (0.0536)		8082A		1	03/27/14 3:27		CC42517
Aroclor 1242	ND (0.0536)		8082A		1	03/27/14 3:27		CC42517
Aroclor 1248	**1.00** (0.0536)		8082A		1	03/27/14 3:27		CC42517
Aroclor 1254	ND (0.0536)		8082A		1	03/27/14 3:27		CC42517
Aroclor 1260	ND (0.0536)		8082A		1	03/27/14 3:27		CC42517
Aroclor 1262	ND (0.0536)		8082A		1	03/27/14 3:27		CC42517
Aroclor 1268	ND (0.0536)		8082A		1	03/27/14 3:27		CC42517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*91 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-9 24-36in
Date Sampled: 03/24/14 08:58
Percent Solids: 53
Initial Volume: 29.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (63.5)		8082A		1000	03/28/14 5:14		CC42517
Aroclor 1221	ND (63.5)		8082A		1000	03/28/14 5:14		CC42517
Aroclor 1232	ND (63.5)		8082A		1000	03/28/14 5:14		CC42517
Aroclor 1242	ND (63.5)		8082A		1000	03/28/14 5:14		CC42517
Aroclor 1248	**433** (63.5)		8082A		1000	03/28/14 5:14		CC42517
Aroclor 1254	ND (63.5)		8082A		1000	03/28/14 5:14		CC42517
Aroclor 1260	ND (63.5)		8082A		1000	03/28/14 5:14		CC42517
Aroclor 1262	ND (63.5)		8082A		1000	03/28/14 5:14		CC42517
Aroclor 1268	ND (63.5)		8082A		1000	03/28/14 5:14		CC42517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-10 12-24in
Date Sampled: 03/24/14 09:05
Percent Solids: 91
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0563)		8082A		1	03/27/14 4:05		CC42517
Aroclor 1221	ND (0.0563)		8082A		1	03/27/14 4:05		CC42517
Aroclor 1232	ND (0.0563)		8082A		1	03/27/14 4:05		CC42517
Aroclor 1242	ND (0.0563)		8082A		1	03/27/14 4:05		CC42517
Aroclor 1248	ND (0.0563)		8082A		1	03/27/14 4:05		CC42517
Aroclor 1254	ND (0.0563)		8082A		1	03/27/14 4:05		CC42517
Aroclor 1260	ND (0.0563)		8082A		1	03/27/14 4:05		CC42517
Aroclor 1262	ND (0.0563)		8082A		1	03/27/14 4:05		CC42517
Aroclor 1268	ND (0.0563)		8082A		1	03/27/14 4:05		CC42517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*61 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-11 12-24in
Date Sampled: 03/24/14 09:03
Percent Solids: 91
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0536)		8082A		1	03/27/14 4:24		CC42517
Aroclor 1221	ND (0.0536)		8082A		1	03/27/14 4:24		CC42517
Aroclor 1232	ND (0.0536)		8082A		1	03/27/14 4:24		CC42517
Aroclor 1242	ND (0.0536)		8082A		1	03/27/14 4:24		CC42517
Aroclor 1248	ND (0.0536)		8082A		1	03/27/14 4:24		CC42517
Aroclor 1254	ND (0.0536)		8082A		1	03/27/14 4:24		CC42517
Aroclor 1260	ND (0.0536)		8082A		1	03/27/14 4:24		CC42517
Aroclor 1262	ND (0.0536)		8082A		1	03/27/14 4:24		CC42517
Aroclor 1268	ND (0.0536)		8082A		1	03/27/14 4:24		CC42517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*46 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*47 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: M-9 12-24in
Date Sampled: 03/24/14 09:00
Percent Solids: 92
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.75)		8082A		50	03/28/14 5:33		CC42517
Aroclor 1221	ND (2.75)		8082A		50	03/28/14 5:33		CC42517
Aroclor 1232	ND (2.75)		8082A		50	03/28/14 5:33		CC42517
Aroclor 1242	ND (2.75)		8082A		50	03/28/14 5:33		CC42517
Aroclor 1248	**39.0** (2.75)		8082A		50	03/28/14 5:33		CC42517
Aroclor 1254	ND (2.75)		8082A		50	03/28/14 5:33		CC42517
Aroclor 1260	ND (2.75)		8082A		50	03/28/14 5:33		CC42517
Aroclor 1262	ND (2.75)		8082A		50	03/28/14 5:33		CC42517
Aroclor 1268	ND (2.75)		8082A		50	03/28/14 5:33		CC42517

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-46 24-36in
Date Sampled: 03/24/14 13:10
Percent Solids: 14
Initial Volume: 29.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0608)		8082A		1	04/01/14 13:22		CC42517
Aroclor 1221	ND (0.0608)		8082A		1	04/01/14 13:22		CC42517
Aroclor 1232	ND (0.0608)		8082A		1	04/01/14 13:22		CC42517
Aroclor 1242	ND (0.0608)		8082A		1	04/01/14 13:22		CC42517
Aroclor 1248	**0.108** (0.0608)		8082A		1	04/01/14 13:22		CC42517
Aroclor 1254	ND (0.0608)		8082A		1	04/01/14 13:22		CC42517
Aroclor 1260	ND (0.0608)		8082A		1	04/01/14 13:22		CC42517
Aroclor 1262	ND (0.0608)		8082A		1	04/01/14 13:22		CC42517
Aroclor 1268	ND (0.0608)		8082A		1	04/01/14 13:22		CC42517

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*46 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*48 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-26 12-24in
Date Sampled: 03/24/14 11:13
Percent Solids: 93
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0524)		8082A		1	03/27/14 7:35		CC42517
Aroclor 1221	ND (0.0524)		8082A		1	03/27/14 7:35		CC42517
Aroclor 1232	ND (0.0524)		8082A		1	03/27/14 7:35		CC42517
Aroclor 1242	ND (0.0524)		8082A		1	03/27/14 7:35		CC42517
Aroclor 1248	ND (0.0524)		8082A		1	03/27/14 7:35		CC42517
Aroclor 1254	ND (0.0524)		8082A		1	03/27/14 7:35		CC42517
Aroclor 1260	ND (0.0524)		8082A		1	03/27/14 7:35		CC42517
Aroclor 1262	ND (0.0524)		8082A		1	03/27/14 7:35		CC42517
Aroclor 1268	ND (0.0524)		8082A		1	03/27/14 7:35		CC42517

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-28 12-24in
Date Sampled: 03/24/14 11:15
Percent Solids: 89
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0552)		8082A		1	03/27/14 7:54		CC42517
Aroclor 1221	ND (0.0552)		8082A		1	03/27/14 7:54		CC42517
Aroclor 1232	ND (0.0552)		8082A		1	03/27/14 7:54		CC42517
Aroclor 1242	ND (0.0552)		8082A		1	03/27/14 7:54		CC42517
Aroclor 1248	ND (0.0552)		8082A		1	03/27/14 7:54		CC42517
Aroclor 1254	ND (0.0552)		8082A		1	03/27/14 7:54		CC42517
Aroclor 1260	ND (0.0552)		8082A		1	03/27/14 7:54		CC42517
Aroclor 1262	ND (0.0552)		8082A		1	03/27/14 7:54		CC42517
Aroclor 1268	ND (0.0552)		8082A		1	03/27/14 7:54		CC42517

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-30 12-24in
Date Sampled: 03/24/14 11:17
Percent Solids: 91
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0561)		8082A		1	03/27/14 8:13		CC42517
Aroclor 1221	ND (0.0561)		8082A		1	03/27/14 8:13		CC42517
Aroclor 1232	ND (0.0561)		8082A		1	03/27/14 8:13		CC42517
Aroclor 1242	ND (0.0561)		8082A		1	03/27/14 8:13		CC42517
Aroclor 1248	ND (0.0561)		8082A		1	03/27/14 8:13		CC42517
Aroclor 1254	ND (0.0561)		8082A		1	03/27/14 8:13		CC42517
Aroclor 1260	ND (0.0561)		8082A		1	03/27/14 8:13		CC42517
Aroclor 1262	ND (0.0561)		8082A		1	03/27/14 8:13		CC42517
Aroclor 1268	ND (0.0561)		8082A		1	03/27/14 8:13		CC42517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*53 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-4 0-12in
Date Sampled: 03/24/14 09:03
Percent Solids: 83
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0607)		8082A		1	03/27/14 8:32		CC42517
Aroclor 1221	ND (0.0607)		8082A		1	03/27/14 8:32		CC42517
Aroclor 1232	ND (0.0607)		8082A		1	03/27/14 8:32		CC42517
Aroclor 1242	ND (0.0607)		8082A		1	03/27/14 8:32		CC42517
Aroclor 1248	ND (0.0607)		8082A		1	03/27/14 8:32		CC42517
Aroclor 1254	ND (0.0607)		8082A		1	03/27/14 8:32		CC42517
Aroclor 1260	ND (0.0607)		8082A		1	03/27/14 8:32		CC42517
Aroclor 1262	ND (0.0607)		8082A		1	03/27/14 8:32		CC42517
Aroclor 1268	ND (0.0607)		8082A		1	03/27/14 8:32		CC42517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*60 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-40 36-48in
Date Sampled: 03/24/14 09:05
Percent Solids: 94
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0543)		8082A		1	03/27/14 8:52		CC42517
Aroclor 1221	ND (0.0543)		8082A		1	03/27/14 8:52		CC42517
Aroclor 1232	ND (0.0543)		8082A		1	03/27/14 8:52		CC42517
Aroclor 1242	ND (0.0543)		8082A		1	03/27/14 8:52		CC42517
Aroclor 1248	**0.869** (0.0543)		8082A		1	03/27/14 8:52		CC42517
Aroclor 1254	ND (0.0543)		8082A		1	03/27/14 8:52		CC42517
Aroclor 1260	ND (0.0543)		8082A		1	03/27/14 8:52		CC42517
Aroclor 1262	ND (0.0543)		8082A		1	03/27/14 8:52		CC42517
Aroclor 1268	ND (0.0543)		8082A		1	03/27/14 8:52		CC42517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-46 12-24in
Date Sampled: 03/24/14 09:08
Percent Solids: 90
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403416
ESS Laboratory Sample ID: 1403416-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0569)		8082A		1	03/27/14 9:11		CC42517
Aroclor 1221	ND (0.0569)		8082A		1	03/27/14 9:11		CC42517
Aroclor 1232	ND (0.0569)		8082A		1	03/27/14 9:11		CC42517
Aroclor 1242	ND (0.0569)		8082A		1	03/27/14 9:11		CC42517
Aroclor 1248	**0.384** (0.0569)		8082A		1	03/27/14 9:11		CC42517
Aroclor 1254	ND (0.0569)		8082A		1	03/27/14 9:11		CC42517
Aroclor 1260	ND (0.0569)		8082A		1	03/27/14 9:11		CC42517
Aroclor 1262	ND (0.0569)		8082A		1	03/27/14 9:11		CC42517
Aroclor 1268	ND (0.0569)		8082A		1	03/27/14 9:11		CC42517

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403416

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42516 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403416

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42516 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403416

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42516 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0242*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
LCS										
Aroclor 1016	0.481	0.0500	mg/kg wet	0.5000		96	40-140			
Aroclor 1260	0.500	0.0500	mg/kg wet	0.5000		100	40-140			
Surrogate: Decachlorobiphenyl	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS Dup										
Aroclor 1016	0.490	0.0500	mg/kg wet	0.5000		98	40-140	2	30	
Aroclor 1260	0.497	0.0500	mg/kg wet	0.5000		99	40-140	0.5	30	
Surrogate: Decachlorobiphenyl	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Batch CC42517 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403416

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42517 - 3540C										
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403416

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42517 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0256*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0190*		mg/kg wet	*0.02500*		*76*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403416

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42517 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0209*		mg/kg wet	*0.02500*		*83*	*30-150*			
LCS										
Aroclor 1016	0.457	0.0250	mg/kg wet	0.5000		91	40-140			
Aroclor 1260	0.459	0.0250	mg/kg wet	0.5000		92	40-140			
Surrogate: Decachlorobiphenyl	*0.0264*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0261*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
LCS Dup										
Aroclor 1016	0.481	0.0250	mg/kg wet	0.5000		96	40-140	5	30	
Aroclor 1260	0.466	0.0250	mg/kg wet	0.5000		93	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0268*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403416

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403416

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030416
Date Project Due: 4/1/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: **3.5**
   Iced With: **Ice**
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample Yes
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: _____ Date/Time: 3/25/14 1600
Reviewed By: _____ Date/Time: 3/25/14 1616

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 3 of 11 (1 of 2) 3/25/14

Turn Time: X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403416

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH / No Targets	8081 Pesticides / 8082 PCB / 608 Pesticides / 608 PCB	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
1	3/24/2014	0838		X	S	J-8 12-24"	1	G				X										
2		0840				J-8 24-36"																
3		0843				K-10 24-36"																
4		0845				K-11 12-24"																
5		0848				K-9 24-36"																
6		0850				L-10 24-36"																
7		0852				L-11 12-24"																
8		1300				L-35 36-48"																
9		0855				L-8 12-24"																
10		0858				L-9 24-36"																

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: 3.5 + 1.8 ice

Internal Use Only
[✓ Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:34pm	M. Reid	3/25/14 1330
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
M. Reid	3/25/14 1500	[signature]	3/25/14 1545				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 4 of 11 2 of 2 3/25/14

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403416

State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____

Electronic Deliverable: X Yes ___ No Format pdf/excel

Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH / No Targets	8081 Pesticides / 8082 PCB / 608 Pesticides / 608 PCB	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
11	3/24/2014	0905		X	S	M-10 12-24"	1	G				X										
12		0903				M-11 12-24"																
13		0900				M-9 12-24"																
14		1310				N-46 24-36"																
15		1113				O-26 12-24"																
16		1115				O-28 12-24"																
17		1117				O-30 12-24"																
18		0903				O-4 0-12"																
19		0905				O-40 36-48"																
20		0908				O-46 12-24"																

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: 3.5 + 1.8 16 m

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30p	[signature]	3/25/14 1370
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1500	[signature]	3/25/14 1245				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403417

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 2:44 pm, Apr 02, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403417

SAMPLE RECEIPT

The following samples were received on March 25, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403417-01	O-46 24-36in	Soil	8082A
1403417-02	O-46 12-24in	Soil	8082A
1403417-03	O-47 12-24in	Soil	8082A
1403417-04	O-48 12-24in	Soil	8082A
1403417-05	O-49 12-24in	Soil	8082A
1403417-06	O-5 0-12in	Soil	8082A
1403417-07	O-6 0-12in	Soil	8082A
1403417-08	P-4 12-24in	Soil	8082A
1403417-09	P-48 0-12in	Soil	8082A
1403417-10	P-49 0-12in	Soil	8082A
1403417-11	P-5 12-24in	Soil	8082A
1403417-12	P-6 0-12in	Soil	8082A
1403417-13	Q-10 12-24in	Soil	8082A
1403417-14	Q-11 24-36in	Soil	8082A
1403417-15	Q-12 24-36in	Soil	8082A
1403417-16	Q-12 36-48in	Soil	8082A
1403417-17	Q-13 24-36in	Soil	8082A
1403417-18	Q-4 12-24in	Soil	8082A
1403417-19	Q-46 0-12in	Soil	8082A
1403417-20	Q-5 12-24in	Soil	8082A
1403417-21	O-46 36-48in	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403417

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403417-01 **Lower value is used due to matrix interferences (LC).**
Aroclor 1248

1403417-01 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1248

1403417-04 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (235% @ 30-150%)

1403417-13 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403417-19 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403417-21 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403417

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403417

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403417-01 through 1403417-21**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: April 02, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-46 24-36in
Date Sampled: 03/24/14 09:10
Percent Solids: 84
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0614)		8082A		1	03/28/14 14:14		CC42519
Aroclor 1221	ND (0.0614)		8082A		1	03/28/14 14:14		CC42519
Aroclor 1232	ND (0.0614)		8082A		1	03/28/14 14:14		CC42519
Aroclor 1242	ND (0.0614)		8082A		1	03/28/14 14:14		CC42519
Aroclor 1248	**LC, P 0.343** (0.0614)		8082A		1	03/28/14 14:14		CC42519
Aroclor 1254	ND (0.0614)		8082A		1	03/28/14 14:14		CC42519
Aroclor 1260	ND (0.0614)		8082A		1	03/28/14 14:14		CC42519
Aroclor 1262	ND (0.0614)		8082A		1	03/28/14 14:14		CC42519
Aroclor 1268	ND (0.0614)		8082A		1	03/28/14 14:14		CC42519

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*107 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*116 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*101 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-46 12-24in
Date Sampled: 03/24/14 09:12
Percent Solids: 85
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0592)		8082A		1	03/28/14 14:33		CC42519
Aroclor 1221	ND (0.0592)		8082A		1	03/28/14 14:33		CC42519
Aroclor 1232	ND (0.0592)		8082A		1	03/28/14 14:33		CC42519
Aroclor 1242	ND (0.0592)		8082A		1	03/28/14 14:33		CC42519
Aroclor 1248	**0.677** (0.0592)		8082A		1	03/28/14 14:33		CC42519
Aroclor 1254	ND (0.0592)		8082A		1	03/28/14 14:33		CC42519
Aroclor 1260	ND (0.0592)		8082A		1	03/28/14 14:33		CC42519
Aroclor 1262	ND (0.0592)		8082A		1	03/28/14 14:33		CC42519
Aroclor 1268	ND (0.0592)		8082A		1	03/28/14 14:33		CC42519

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*107 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*118 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*103 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-47 12-24in
Date Sampled: 03/24/14 09:14
Percent Solids: 22
Initial Volume: 29.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.152)		8082A		1	03/28/14 13:48		CC42519
Aroclor 1221	ND (0.152)		8082A		1	03/28/14 13:48		CC42519
Aroclor 1232	ND (0.152)		8082A		1	03/28/14 13:48		CC42519
Aroclor 1242	ND (0.152)		8082A		1	03/28/14 13:48		CC42519
Aroclor 1248	**1.01** (0.152)		8082A		1	03/28/14 13:48		CC42519
Aroclor 1254	ND (0.152)		8082A		1	03/28/14 13:48		CC42519
Aroclor 1260	ND (0.152)		8082A		1	03/28/14 13:48		CC42519
Aroclor 1262	ND (0.152)		8082A		1	03/28/14 13:48		CC42519
Aroclor 1268	ND (0.152)		8082A		1	03/28/14 13:48		CC42519

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*133 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-48 12-24in
Date Sampled: 03/24/14 09:16
Percent Solids: 16
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/1/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.209)		8082A		1	04/02/14 10:57		CD40111
Aroclor 1221	ND (0.209)		8082A		1	04/02/14 10:57		CD40111
Aroclor 1232	ND (0.209)		8082A		1	04/02/14 10:57		CD40111
Aroclor 1242	ND (0.209)		8082A		1	04/02/14 10:57		CD40111
Aroclor 1248	**0.308** (0.209)		8082A		1	04/02/14 10:57		CD40111
Aroclor 1254	ND (0.209)		8082A		1	04/02/14 10:57		CD40111
Aroclor 1260	ND (0.209)		8082A		1	04/02/14 10:57		CD40111
Aroclor 1262	ND (0.209)		8082A		1	04/02/14 10:57		CD40111
Aroclor 1268	ND (0.209)		8082A		1	04/02/14 10:57		CD40111

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*235 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*132 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*130 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*140 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-49 12-24in
Date Sampled: 03/24/14 09:18
Percent Solids: 19
Initial Volume: 29.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.180)		8082A		1	03/28/14 14:26		CC42519
Aroclor 1221	ND (0.180)		8082A		1	03/28/14 14:26		CC42519
Aroclor 1232	ND (0.180)		8082A		1	03/28/14 14:26		CC42519
Aroclor 1242	ND (0.180)		8082A		1	03/28/14 14:26		CC42519
Aroclor 1248	**0.812** (0.180)		8082A		1	03/28/14 14:26		CC42519
Aroclor 1254	ND (0.180)		8082A		1	03/28/14 14:26		CC42519
Aroclor 1260	ND (0.180)		8082A		1	03/28/14 14:26		CC42519
Aroclor 1262	ND (0.180)		8082A		1	03/28/14 14:26		CC42519
Aroclor 1268	ND (0.180)		8082A		1	03/28/14 14:26		CC42519

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*51 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*32 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-5 0-12in
Date Sampled: 03/24/14 10:00
Percent Solids: 85
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0568)		8082A		1	03/28/14 14:45		CC42519
Aroclor 1221	ND (0.0568)		8082A		1	03/28/14 14:45		CC42519
Aroclor 1232	ND (0.0568)		8082A		1	03/28/14 14:45		CC42519
Aroclor 1242	ND (0.0568)		8082A		1	03/28/14 14:45		CC42519
Aroclor 1248	**0.380** (0.0568)		8082A		1	03/28/14 14:45		CC42519
Aroclor 1254	ND (0.0568)		8082A		1	03/28/14 14:45		CC42519
Aroclor 1260	ND (0.0568)		8082A		1	03/28/14 14:45		CC42519
Aroclor 1262	ND (0.0568)		8082A		1	03/28/14 14:45		CC42519
Aroclor 1268	ND (0.0568)		8082A		1	03/28/14 14:45		CC42519

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-6 0-12in
Date Sampled: 03/24/14 10:03
Percent Solids: 80
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0612)		8082A		1	03/28/14 15:04		CC42519
Aroclor 1221	ND (0.0612)		8082A		1	03/28/14 15:04		CC42519
Aroclor 1232	ND (0.0612)		8082A		1	03/28/14 15:04		CC42519
Aroclor 1242	ND (0.0612)		8082A		1	03/28/14 15:04		CC42519
Aroclor 1248	ND (0.0612)		8082A		1	03/28/14 15:04		CC42519
Aroclor 1254	ND (0.0612)		8082A		1	03/28/14 15:04		CC42519
Aroclor 1260	ND (0.0612)		8082A		1	03/28/14 15:04		CC42519
Aroclor 1262	ND (0.0612)		8082A		1	03/28/14 15:04		CC42519
Aroclor 1268	ND (0.0612)		8082A		1	03/28/14 15:04		CC42519

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*58 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: P-4 12-24in
Date Sampled: 03/24/14 10:05
Percent Solids: 92
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0552)		8082A		1	03/28/14 15:23		CC42519
Aroclor 1221	ND (0.0552)		8082A		1	03/28/14 15:23		CC42519
Aroclor 1232	ND (0.0552)		8082A		1	03/28/14 15:23		CC42519
Aroclor 1242	ND (0.0552)		8082A		1	03/28/14 15:23		CC42519
Aroclor 1248	ND (0.0552)		8082A		1	03/28/14 15:23		CC42519
Aroclor 1254	ND (0.0552)		8082A		1	03/28/14 15:23		CC42519
Aroclor 1260	ND (0.0552)		8082A		1	03/28/14 15:23		CC42519
Aroclor 1262	ND (0.0552)		8082A		1	03/28/14 15:23		CC42519
Aroclor 1268	ND (0.0552)		8082A		1	03/28/14 15:23		CC42519

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*110 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*107 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: P-48 0-12in
Date Sampled: 03/24/14 11:34
Percent Solids: 14
Initial Volume: 30.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/28/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.231)		8082A		1	03/31/14 21:12		CC42715
Aroclor 1221	ND (0.231)		8082A		1	03/31/14 21:12		CC42715
Aroclor 1232	ND (0.231)		8082A		1	03/31/14 21:12		CC42715
Aroclor 1242	ND (0.231)		8082A		1	03/31/14 21:12		CC42715
Aroclor 1248	**2.10** (0.231)		8082A		1	03/31/14 21:12		CC42715
Aroclor 1254	ND (0.231)		8082A		1	03/31/14 21:12		CC42715
Aroclor 1260	ND (0.231)		8082A		1	03/31/14 21:12		CC42715
Aroclor 1262	ND (0.231)		8082A		1	03/31/14 21:12		CC42715
Aroclor 1268	ND (0.231)		8082A		1	03/31/14 21:12		CC42715

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*112 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*59 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: P-49 0-12in
Date Sampled: 03/24/14 11:36
Percent Solids: 16
Initial Volume: 29.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.208)		8082A		1	03/28/14 9:41		CC42519
Aroclor 1221	ND (0.208)		8082A		1	03/28/14 9:41		CC42519
Aroclor 1232	ND (0.208)		8082A		1	03/28/14 9:41		CC42519
Aroclor 1242	ND (0.208)		8082A		1	03/28/14 9:41		CC42519
Aroclor 1248	**0.930** (0.208)		8082A		1	03/28/14 9:41		CC42519
Aroclor 1254	ND (0.208)		8082A		1	03/28/14 9:41		CC42519
Aroclor 1260	ND (0.208)		8082A		1	03/28/14 9:41		CC42519
Aroclor 1262	ND (0.208)		8082A		1	03/28/14 9:41		CC42519
Aroclor 1268	ND (0.208)		8082A		1	03/28/14 9:41		CC42519

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*46 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: P-5 12-24in
Date Sampled: 03/24/14 10:13
Percent Solids: 88
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0579)		8082A		1	03/28/14 9:59		CC42519
Aroclor 1221	ND (0.0579)		8082A		1	03/28/14 9:59		CC42519
Aroclor 1232	ND (0.0579)		8082A		1	03/28/14 9:59		CC42519
Aroclor 1242	ND (0.0579)		8082A		1	03/28/14 9:59		CC42519
Aroclor 1248	**0.179** (0.0579)		8082A		1	03/28/14 9:59		CC42519
Aroclor 1254	ND (0.0579)		8082A		1	03/28/14 9:59		CC42519
Aroclor 1260	ND (0.0579)		8082A		1	03/28/14 9:59		CC42519
Aroclor 1262	ND (0.0579)		8082A		1	03/28/14 9:59		CC42519
Aroclor 1268	ND (0.0579)		8082A		1	03/28/14 9:59		CC42519

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: P-6 0-12in
Date Sampled: 03/24/14 10:15
Percent Solids: 89
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0569)		8082A		1	03/28/14 10:18		CC42519
Aroclor 1221	ND (0.0569)		8082A		1	03/28/14 10:18		CC42519
Aroclor 1232	ND (0.0569)		8082A		1	03/28/14 10:18		CC42519
Aroclor 1242	ND (0.0569)		8082A		1	03/28/14 10:18		CC42519
Aroclor 1248	ND (0.0569)		8082A		1	03/28/14 10:18		CC42519
Aroclor 1254	ND (0.0569)		8082A		1	03/28/14 10:18		CC42519
Aroclor 1260	ND (0.0569)		8082A		1	03/28/14 10:18		CC42519
Aroclor 1262	ND (0.0569)		8082A		1	03/28/14 10:18		CC42519
Aroclor 1268	ND (0.0569)		8082A		1	03/28/14 10:18		CC42519

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*106 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*108 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-10 12-24in
Date Sampled: 03/24/14 10:16
Percent Solids: 86
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (58.3)		8082A		1000	03/31/14 19:18		CC42519
Aroclor 1221	ND (58.3)		8082A		1000	03/31/14 19:18		CC42519
Aroclor 1232	ND (58.3)		8082A		1000	03/31/14 19:18		CC42519
Aroclor 1242	ND (58.3)		8082A		1000	03/31/14 19:18		CC42519
Aroclor 1248	**745** (58.3)		8082A		1000	03/31/14 19:18		CC42519
Aroclor 1254	ND (58.3)		8082A		1000	03/31/14 19:18		CC42519
Aroclor 1260	ND (58.3)		8082A		1000	03/31/14 19:18		CC42519
Aroclor 1262	ND (58.3)		8082A		1000	03/31/14 19:18		CC42519
Aroclor 1268	ND (58.3)		8082A		1000	03/31/14 19:18		CC42519

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-11 24-36in
Date Sampled: 03/24/14 10:18
Percent Solids: 93
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0552)		8082A		1	03/28/14 20:09		CC42519
Aroclor 1221	ND (0.0552)		8082A		1	03/28/14 20:09		CC42519
Aroclor 1232	ND (0.0552)		8082A		1	03/28/14 20:09		CC42519
Aroclor 1242	ND (0.0552)		8082A		1	03/28/14 20:09		CC42519
Aroclor 1248	**0.0939** (0.0552)		8082A		1	03/28/14 20:09		CC42519
Aroclor 1254	ND (0.0552)		8082A		1	03/28/14 20:09		CC42519
Aroclor 1260	ND (0.0552)		8082A		1	03/28/14 20:09		CC42519
Aroclor 1262	ND (0.0552)		8082A		1	03/28/14 20:09		CC42519
Aroclor 1268	ND (0.0552)		8082A		1	03/28/14 20:09		CC42519

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*108 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-12 24-36in
Date Sampled: 03/24/14 10:20
Percent Solids: 93
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0552)		8082A		1	03/28/14 20:28		CC42519
Aroclor 1221	ND (0.0552)		8082A		1	03/28/14 20:28		CC42519
Aroclor 1232	ND (0.0552)		8082A		1	03/28/14 20:28		CC42519
Aroclor 1242	ND (0.0552)		8082A		1	03/28/14 20:28		CC42519
Aroclor 1248	ND (0.0552)		8082A		1	03/28/14 20:28		CC42519
Aroclor 1254	ND (0.0552)		8082A		1	03/28/14 20:28		CC42519
Aroclor 1260	ND (0.0552)		8082A		1	03/28/14 20:28		CC42519
Aroclor 1262	ND (0.0552)		8082A		1	03/28/14 20:28		CC42519
Aroclor 1268	ND (0.0552)		8082A		1	03/28/14 20:28		CC42519

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*109 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*110 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-12 36-48in
Date Sampled: 03/24/14 10:21
Percent Solids: 91
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0557)		8082A		1	03/28/14 20:47		CC42519
Aroclor 1221	ND (0.0557)		8082A		1	03/28/14 20:47		CC42519
Aroclor 1232	ND (0.0557)		8082A		1	03/28/14 20:47		CC42519
Aroclor 1242	ND (0.0557)		8082A		1	03/28/14 20:47		CC42519
Aroclor 1248	**0.169** (0.0557)		8082A		1	03/28/14 20:47		CC42519
Aroclor 1254	ND (0.0557)		8082A		1	03/28/14 20:47		CC42519
Aroclor 1260	ND (0.0557)		8082A		1	03/28/14 20:47		CC42519
Aroclor 1262	ND (0.0557)		8082A		1	03/28/14 20:47		CC42519
Aroclor 1268	ND (0.0557)		8082A		1	03/28/14 20:47		CC42519

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*110 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*109 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-13 24-36in
Date Sampled: 03/24/14 10:23
Percent Solids: 99
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0517)		8082A		1	03/28/14 11:54		CC42519
Aroclor 1221	ND (0.0517)		8082A		1	03/28/14 11:54		CC42519
Aroclor 1232	ND (0.0517)		8082A		1	03/28/14 11:54		CC42519
Aroclor 1242	ND (0.0517)		8082A		1	03/28/14 11:54		CC42519
Aroclor 1248	ND (0.0517)		8082A		1	03/28/14 11:54		CC42519
Aroclor 1254	ND (0.0517)		8082A		1	03/28/14 11:54		CC42519
Aroclor 1260	ND (0.0517)		8082A		1	03/28/14 11:54		CC42519
Aroclor 1262	ND (0.0517)		8082A		1	03/28/14 11:54		CC42519
Aroclor 1268	ND (0.0517)		8082A		1	03/28/14 11:54		CC42519

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*46 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*50 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-4 12-24in
Date Sampled: 03/24/14 10:10
Percent Solids: 87
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0585)		8082A		1	03/28/14 12:13		CC42519
Aroclor 1221	ND (0.0585)		8082A		1	03/28/14 12:13		CC42519
Aroclor 1232	ND (0.0585)		8082A		1	03/28/14 12:13		CC42519
Aroclor 1242	ND (0.0585)		8082A		1	03/28/14 12:13		CC42519
Aroclor 1248	ND (0.0585)		8082A		1	03/28/14 12:13		CC42519
Aroclor 1254	ND (0.0585)		8082A		1	03/28/14 12:13		CC42519
Aroclor 1260	ND (0.0585)		8082A		1	03/28/14 12:13		CC42519
Aroclor 1262	ND (0.0585)		8082A		1	03/28/14 12:13		CC42519
Aroclor 1268	ND (0.0585)		8082A		1	03/28/14 12:13		CC42519

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-46 0-12in
Date Sampled: 03/24/14 11:40
Percent Solids: 86
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.17)		8082A		20	03/28/14 23:56		CC42519
Aroclor 1221	ND (1.17)		8082A		20	03/28/14 23:56		CC42519
Aroclor 1232	ND (1.17)		8082A		20	03/28/14 23:56		CC42519
Aroclor 1242	ND (1.17)		8082A		20	03/28/14 23:56		CC42519
Aroclor 1248	**11.1** (1.17)		8082A		20	03/28/14 23:56		CC42519
Aroclor 1254	ND (1.17)		8082A		20	03/28/14 23:56		CC42519
Aroclor 1260	ND (1.17)		8082A		20	03/28/14 23:56		CC42519
Aroclor 1262	ND (1.17)		8082A		20	03/28/14 23:56		CC42519
Aroclor 1268	ND (1.17)		8082A		20	03/28/14 23:56		CC42519

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-5 12-24in
Date Sampled: 03/24/14 10:12
Percent Solids: 90
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0573)		8082A		1	03/27/14 16:22		CC42520
Aroclor 1221	ND (0.0573)		8082A		1	03/27/14 16:22		CC42520
Aroclor 1232	ND (0.0573)		8082A		1	03/27/14 16:22		CC42520
Aroclor 1242	ND (0.0573)		8082A		1	03/27/14 16:22		CC42520
Aroclor 1248	ND (0.0573)		8082A		1	03/27/14 16:22		CC42520
Aroclor 1254	ND (0.0573)		8082A		1	03/27/14 16:22		CC42520
Aroclor 1260	ND (0.0573)		8082A		1	03/27/14 16:22		CC42520
Aroclor 1262	ND (0.0573)		8082A		1	03/27/14 16:22		CC42520
Aroclor 1268	ND (0.0573)		8082A		1	03/27/14 16:22		CC42520

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*105 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: O-46 36-48in
Date Sampled: 03/24/14 09:12
Percent Solids: 81
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403417
ESS Laboratory Sample ID: 1403417-21
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (3.09)		8082A		50	04/01/14 12:11		CC42617
Aroclor 1221	ND (3.09)		8082A		50	04/01/14 12:11		CC42617
Aroclor 1232	ND (3.09)		8082A		50	04/01/14 12:11		CC42617
Aroclor 1242	ND (3.09)		8082A		50	04/01/14 12:11		CC42617
Aroclor 1248	**14.4** (3.09)		8082A		50	04/01/14 12:11		CC42617
Aroclor 1254	ND (3.09)		8082A		50	04/01/14 12:11		CC42617
Aroclor 1260	ND (3.09)		8082A		50	04/01/14 12:11		CC42617
Aroclor 1262	ND (3.09)		8082A		50	04/01/14 12:11		CC42617
Aroclor 1268	ND (3.09)		8082A		50	04/01/14 12:11		CC42617

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403417

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42519 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403417

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42519 - 3540C										
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
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ESS Laboratory Work Order: 1403417

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42519 - 3540C										
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0251*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS										
Aroclor 1016	0.511	0.0250	mg/kg wet	0.5000		102	40-140			
Aroclor 1260	0.491	0.0250	mg/kg wet	0.5000		98	40-140			
Surrogate: Decachlorobiphenyl	*0.0269*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0261*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0231*		mg/kg wet	*0.02500*		*93*	*30-150*			
LCS Dup										
Aroclor 1016	0.515	0.0250	mg/kg wet	0.5000		103	40-140	0.7	30	
Aroclor 1260	0.488	0.0250	mg/kg wet	0.5000		98	40-140	0.7	30	
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			
Batch CC42520 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403417

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42520 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403417

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42520 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0304*		mg/kg wet	*0.02500*		*122*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0226*		mg/kg wet	*0.02500*		*90*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403417

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42520 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0231*		mg/kg wet	*0.02500*		*93*	*30-150*			
LCS										
Aroclor 1016	0.491	0.0500	mg/kg wet	0.5000		98	40-140			
Aroclor 1260	0.505	0.0500	mg/kg wet	0.5000		101	40-140			
Surrogate: Decachlorobiphenyl	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0301*		mg/kg wet	*0.02500*		*120*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
LCS Dup										
Aroclor 1016	0.479	0.0500	mg/kg wet	0.5000		96	40-140	2	30	
Aroclor 1260	0.514	0.0500	mg/kg wet	0.5000		103	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0268*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0303*		mg/kg wet	*0.02500*		*121*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Batch CC42617 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42617 - 3540C										
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							

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Client Name: Tighe & Bond
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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42617 - 3540C										
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0256*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0211*		mg/kg wet	*0.02500*		*85*	*30-150*			
LCS										
Aroclor 1016	0.465	0.0500	mg/kg wet	0.5000		93	40-140			
Aroclor 1260	0.489	0.0500	mg/kg wet	0.5000		98	40-140			
Surrogate: Decachlorobiphenyl	*0.0259*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0211*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
LCS Dup										
Aroclor 1016	0.468	0.0500	mg/kg wet	0.5000		94	40-140	0.7	30	
Aroclor 1260	0.488	0.0500	mg/kg wet	0.5000		98	40-140	0.1	30	

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42617 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0257*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0259*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Batch CC42715 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42715 - 3540C										
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42715 - 3540C										
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0196*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0204*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS										
Aroclor 1016	0.475	0.0500	mg/kg wet	0.5000		95	40-140			
Aroclor 1260	0.493	0.0500	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS Dup										
Aroclor 1016	0.473	0.0500	mg/kg wet	0.5000		95	40-140	0.4	30	
Aroclor 1260	0.503	0.0500	mg/kg wet	0.5000		101	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0261*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Batch CD40111 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD40111 - 3540C										
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403417

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD40111 - 3540C										
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403417

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD40111 - 3540C										
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0194*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0173*		mg/kg wet	*0.02500*		*69*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0186*		mg/kg wet	*0.02500*		*74*	*30-150*			
LCS										
Aroclor 1016	0.445	0.0500	mg/kg wet	0.5000		89	40-140			
Aroclor 1260	0.426	0.0500	mg/kg wet	0.5000		85	40-140			
Surrogate: Decachlorobiphenyl	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0188*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0196*		mg/kg wet	*0.02500*		*78*	*30-150*			
LCS Dup										
Aroclor 1016	0.464	0.0500	mg/kg wet	0.5000		93	40-140	4	30	
Aroclor 1260	0.443	0.0500	mg/kg wet	0.5000		89	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0199*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford ESS Laboratory Work Order: 1403417

Notes and Definitions

U	Analyte included in the analysis, but not detected
SM	Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
SD	Surrogate recovery(ies) diluted below the MRL (SD).
P	Percent difference between primary and confirmation results exceeds 40% (P).
LC	Lower value is used due to matrix interferences (LC).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403417

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030417
Date Project Due: 4/1/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? * No
   Air No.:
2. Were Custody Seals Present? No
3. Were Custody Seals Intact? N/A
4. Is Radiation count < 100 CPM? Yes
5. Is a cooler present? Yes
   Cooler Temp: **3.5**
   Iced With: **Ice**
6. Was COC included with samples? Yes
7. Was COC signed and dated by client? Yes
8. Does the COC match the sample Yes
9. Is COC complete and correct? Yes
10. Are the samples properly preserved? Yes
11. Proper sample containers used? Yes
12. Any air bubbles in the VOA vials? N/A
13. Holding times exceeded? No
14. Sufficient sample volumes? Yes
15. Any Subcontracting needed? No
16. Are ESS labels on correct containers? Yes No
17. Were samples received intact? Yes No
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

Sample on hold identified by client and added as sample 21.
CJT 3/27/14

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP
21	Yes	4 oz Soil Jar	1	NP

Completed By: _____ Date/Time: 3/27/14 1032
Reviewed By: _____ Date/Time: 3/27/14 1142

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030417
Date Project Due: 4/1/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**

Cooler Temp: **3.5**
Iced With: **Ice**

6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample ~~#~~ **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

2 jars received for sample 2. Lids on both jars read 0-46 36-48"; Both labels have the same time, but one jar has no depth. as 3/25/14

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	~~1~~ 2 mr 3/25/14	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: [signature] Date/Time: 3/25/14 1605
Reviewed By: [signature] Date/Time: 3/25/14 1650

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 5 of 11 1 of 2 W 3/25/14

Turn Time: X Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other ____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: 1403417
Electronic Deliverable: X Yes ___ No
Format: pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person: Michael Martin
Address: 4 Barlows Landing Rd, Unit 15
City: Pocasset State: MA Zip: 02559 PO#:
Telephone #: 508-564-7285 Fax #: 508-564-4298 Email Address: memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO EPH No Targets	8081 Pesticides (8082) PCB 608 Pesticides 608 PCB	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7
1	3/24/2014	0910		X	S	O-46 24-36"	1	G				X			
2		0912				~~O-46 36-48"~~ *O-46 12-24									
3		0914				O-47 12-24"									
4		0916				O-48 12-24"									
5		0918				O-49 12-24"									
6		1000				O-5 0-12"									
7		1003				O-6 0-12"									
8		1005				P-4 12-24"									
9		1134				P-48 0-12"									
10		1136				P-49 0-12"									

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ____
Cooler Temp: 3.5 + 1.814 ~
Internal Use Only: [✓] Pickup [ ] Technicians ____

Comments: TSCA Extraction
Sampled by Holli Lamb *per client eo 3/27/14

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30pm	M. Martin	3/25/14 1330
M. Martin	3/25/14 1500	[signature]	3/25/14 1545				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
(MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403417

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH / No Targets	8081 Pesticides / 8082 PCB / 608 Pesticides / 608 PCB	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7						
11	3/24/2014	1013		X	S	P-5 12-24"	1	G				X									
12		1015				P-6 0-12"															
13		1016				Q-10 12-24"															
14		1018				Q-11 24-36"															
15		1020				Q-12 24-36"															
16		1021				Q-12 36-48"															
17		1023				Q-13 24-36"															
18		1010				Q-4 12-24"															
19		1140				Q-4B 0-12"															
20		1012				Q-5 12-24"															

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: 3.5 & 1.8 ia

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb
*21. 3/24/14 09:12 0-46 36-48
*added per client eo 3/27/14

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30p	[signature]	3/25/14 1330
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1500	[signature]	3/25/14 1545				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

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www.esslaboratory.com

CHAIN OF CUSTODY

Page 5 of 11 (1 of 2) 3/25/14

Turn Time: X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: 1403417
Electronic Deliverable: X Yes ___ No
Format: pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260	624	524.2	8021 MTBE/BTEX	VPH	8100 TPH	8015 GRO	8015 DRO	EPH	No Targets	8081 Pesticides	8082 PCB	608 Pesticides	608 PCB	8270	625	PAH only	RCRA5	RCRA8	PP13	TAL23	TCLP8	MCP	MCPw/Hg	NBC7
1	3/24/2014	0910		X	S	O-46 24-36"	1	G												X													
2		0912				O-46 36-48"																											
3		0914				O-47 12-24"																											
4		0916				O-48 12-24"																											
5		0918				O-49 12-24"																											
6		1000				O-5 0-12"																											
7		1003				O-6 0-12"																											
8		1005				P-4 12-24"																											
9		1134				P-48 0-12"																											
10		1136				P-49 0-12"																											

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present: Yes ___ No
Seals Intact: ___ Yes ___ No NA: _____
Cooler Temp: 3.5 + 1.8 14 m

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30pm	[signature]	3/25/14 1330
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1500	[signature]	3/25/14 1545				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 6 of 11 (2 of 2) 3/25/14

Turn Time: X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403417

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH / No Targets	8081 Pesticides / 8082 PCB / 608 Pesticides / 608 PCB	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7						
11	3/24/2014	1013		X	S	P-5 12-24"	1	G				X									
12		1015				P-6 0-12"															
13		1016				Q-10 12-24"															
14		1018				Q-11 24-36"															
15		1020				Q-12 24-36"															
16		1021				Q-12 36-48"															
17		1023				Q-13 24-36"															
18		1010				Q-4 12-24"															
19		1140				Q-4B 0-12"															
20		1012				Q-5 12-24"															

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present: ✓ Yes ___ No
Seals Intact: ___ Yes ___ No NA: _____
Cooler Temp: 3.5 & 1.8 ia

Internal Use Only: [✓] Pickup [ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30p	[signature]	3/25/14 1330
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1500	[signature]	3/25/14 1545				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403418

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 4:58 pm, Apr 01, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403418

SAMPLE RECEIPT

The following samples were received on March 25, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403418-01	Q-6 0-12in	Soil	8082A
1403418-02	Q-9 12-24in	Soil	8082A
1403418-03	R-11 24-36in	Soil	8082A
1403418-04	R-11 36-48in	Soil	8082A
1403418-05	R-12 24-36in	Soil	8082A
1403418-06	R-13 24-36in	Soil	8082A
1403418-07	R-13 36-48in	Soil	8082A
1403418-08	R-4 0-12in	Soil	8082A
1403418-09	R-5 0-12in	Soil	8082A
1403418-10	R-6 0-12in	Soil	8082A
1403418-11	R-9 12-24in	Soil	8082A
1403418-12	S-11 24-36in	Soil	8082A
1403418-13	S-12 24-36in	Soil	8082A
1403418-14	S-12 36-48in	Soil	8082A
1403418-15	S-13 24-36in	Soil	8082A
1403418-16	S-13 36-48in	Soil	8082A
1403418-17	S-9 12-24in	Soil	8082A
1403418-18	T-11 24-36in	Soil	8082A
1403418-19	T-12 24-36in	Soil	8082A
1403418-20	T-13 24-36in	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403418

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403418-02 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403418-11 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403418-17 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403418

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403418

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403418-01 through 1403418-20**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: April 01, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-6 0-12in
Date Sampled: 03/24/14 10:08
Percent Solids: 87
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0594)		8082A		1	03/27/14 17:17		CC42520
Aroclor 1221	ND (0.0594)		8082A		1	03/27/14 17:17		CC42520
Aroclor 1232	ND (0.0594)		8082A		1	03/27/14 17:17		CC42520
Aroclor 1242	ND (0.0594)		8082A		1	03/27/14 17:17		CC42520
Aroclor 1248	ND (0.0594)		8082A		1	03/27/14 17:17		CC42520
Aroclor 1254	ND (0.0594)		8082A		1	03/27/14 17:17		CC42520
Aroclor 1260	ND (0.0594)		8082A		1	03/27/14 17:17		CC42520
Aroclor 1262	ND (0.0594)		8082A		1	03/27/14 17:17		CC42520
Aroclor 1268	ND (0.0594)		8082A		1	03/27/14 17:17		CC42520

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-9 12-24in
Date Sampled: 03/24/14 10:27
Percent Solids: 90
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (575)		8082A		10000	03/31/14 18:01		CC42520
Aroclor 1221	ND (575)		8082A		10000	03/31/14 18:01		CC42520
Aroclor 1232	ND (575)		8082A		10000	03/31/14 18:01		CC42520
Aroclor 1242	ND (575)		8082A		10000	03/31/14 18:01		CC42520
Aroclor 1248	**4640** (575)		8082A		10000	03/31/14 18:01		CC42520
Aroclor 1254	ND (575)		8082A		10000	03/31/14 18:01		CC42520
Aroclor 1260	ND (575)		8082A		10000	03/31/14 18:01		CC42520
Aroclor 1262	ND (575)		8082A		10000	03/31/14 18:01		CC42520
Aroclor 1268	ND (575)		8082A		10000	03/31/14 18:01		CC42520

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-11 24-36in
Date Sampled: 03/24/14 10:52
Percent Solids: 93
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0544)		8082A		1	03/28/14 17:58		CC42520
Aroclor 1221	ND (0.0544)		8082A		1	03/28/14 17:58		CC42520
Aroclor 1232	ND (0.0544)		8082A		1	03/28/14 17:58		CC42520
Aroclor 1242	ND (0.0544)		8082A		1	03/28/14 17:58		CC42520
Aroclor 1248	**0.0719** (0.0544)		8082A		1	03/28/14 17:58		CC42520
Aroclor 1254	ND (0.0544)		8082A		1	03/28/14 17:58		CC42520
Aroclor 1260	ND (0.0544)		8082A		1	03/28/14 17:58		CC42520
Aroclor 1262	ND (0.0544)		8082A		1	03/28/14 17:58		CC42520
Aroclor 1268	ND (0.0544)		8082A		1	03/28/14 17:58		CC42520

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*109 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*109 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-11 36-48in
Date Sampled: 03/24/14 10:54
Percent Solids: 92
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0550)		8082A		1	03/28/14 18:16		CC42520
Aroclor 1221	ND (0.0550)		8082A		1	03/28/14 18:16		CC42520
Aroclor 1232	ND (0.0550)		8082A		1	03/28/14 18:16		CC42520
Aroclor 1242	ND (0.0550)		8082A		1	03/28/14 18:16		CC42520
Aroclor 1248	**0.422** (0.0550)		8082A		1	03/28/14 18:16		CC42520
Aroclor 1254	ND (0.0550)		8082A		1	03/28/14 18:16		CC42520
Aroclor 1260	ND (0.0550)		8082A		1	03/28/14 18:16		CC42520
Aroclor 1262	ND (0.0550)		8082A		1	03/28/14 18:16		CC42520
Aroclor 1268	ND (0.0550)		8082A		1	03/28/14 18:16		CC42520

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*106 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*106 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-12 24-36in
Date Sampled: 03/24/14 10:56
Percent Solids: 93
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0531)		8082A		1	03/28/14 18:35		CC42520
Aroclor 1221	ND (0.0531)		8082A		1	03/28/14 18:35		CC42520
Aroclor 1232	ND (0.0531)		8082A		1	03/28/14 18:35		CC42520
Aroclor 1242	ND (0.0531)		8082A		1	03/28/14 18:35		CC42520
Aroclor 1248	ND (0.0531)		8082A		1	03/28/14 18:35		CC42520
Aroclor 1254	ND (0.0531)		8082A		1	03/28/14 18:35		CC42520
Aroclor 1260	ND (0.0531)		8082A		1	03/28/14 18:35		CC42520
Aroclor 1262	ND (0.0531)		8082A		1	03/28/14 18:35		CC42520
Aroclor 1268	ND (0.0531)		8082A		1	03/28/14 18:35		CC42520

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*108 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*107 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-13 24-36in
Date Sampled: 03/24/14 10:58
Percent Solids: 91
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0545)		8082A		1	03/28/14 18:54		CC42520
Aroclor 1221	ND (0.0545)		8082A		1	03/28/14 18:54		CC42520
Aroclor 1232	ND (0.0545)		8082A		1	03/28/14 18:54		CC42520
Aroclor 1242	ND (0.0545)		8082A		1	03/28/14 18:54		CC42520
Aroclor 1248	ND (0.0545)		8082A		1	03/28/14 18:54		CC42520
Aroclor 1254	ND (0.0545)		8082A		1	03/28/14 18:54		CC42520
Aroclor 1260	ND (0.0545)		8082A		1	03/28/14 18:54		CC42520
Aroclor 1262	ND (0.0545)		8082A		1	03/28/14 18:54		CC42520
Aroclor 1268	ND (0.0545)		8082A		1	03/28/14 18:54		CC42520

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-13 36-48in
Date Sampled: 03/24/14 11:00
Percent Solids: 89
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0575)		8082A		1	03/27/14 19:11		CC42520
Aroclor 1221	ND (0.0575)		8082A		1	03/27/14 19:11		CC42520
Aroclor 1232	ND (0.0575)		8082A		1	03/27/14 19:11		CC42520
Aroclor 1242	ND (0.0575)		8082A		1	03/27/14 19:11		CC42520
Aroclor 1248	**0.318** (0.0575)		8082A		1	03/27/14 19:11		CC42520
Aroclor 1254	ND (0.0575)		8082A		1	03/27/14 19:11		CC42520
Aroclor 1260	ND (0.0575)		8082A		1	03/27/14 19:11		CC42520
Aroclor 1262	ND (0.0575)		8082A		1	03/27/14 19:11		CC42520
Aroclor 1268	ND (0.0575)		8082A		1	03/27/14 19:11		CC42520

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*113 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-4 0-12in
Date Sampled: 03/24/14 10:29
Percent Solids: 91
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0561)		8082A		1	03/27/14 19:29		CC42520
Aroclor 1221	ND (0.0561)		8082A		1	03/27/14 19:29		CC42520
Aroclor 1232	ND (0.0561)		8082A		1	03/27/14 19:29		CC42520
Aroclor 1242	ND (0.0561)		8082A		1	03/27/14 19:29		CC42520
Aroclor 1248	**0.0783** (0.0561)		8082A		1	03/27/14 19:29		CC42520
Aroclor 1254	ND (0.0561)		8082A		1	03/27/14 19:29		CC42520
Aroclor 1260	ND (0.0561)		8082A		1	03/27/14 19:29		CC42520
Aroclor 1262	ND (0.0561)		8082A		1	03/27/14 19:29		CC42520
Aroclor 1268	ND (0.0561)		8082A		1	03/27/14 19:29		CC42520

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*115 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-5 0-12in
Date Sampled: 03/24/14 10:30
Percent Solids: 89
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0581)		8082A		1	03/27/14 19:48		CC42520
Aroclor 1221	ND (0.0581)		8082A		1	03/27/14 19:48		CC42520
Aroclor 1232	ND (0.0581)		8082A		1	03/27/14 19:48		CC42520
Aroclor 1242	ND (0.0581)		8082A		1	03/27/14 19:48		CC42520
Aroclor 1248	ND (0.0581)		8082A		1	03/27/14 19:48		CC42520
Aroclor 1254	ND (0.0581)		8082A		1	03/27/14 19:48		CC42520
Aroclor 1260	ND (0.0581)		8082A		1	03/27/14 19:48		CC42520
Aroclor 1262	ND (0.0581)		8082A		1	03/27/14 19:48		CC42520
Aroclor 1268	ND (0.0581)		8082A		1	03/27/14 19:48		CC42520

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-6 0-12in
Date Sampled: 03/24/14 10:31
Percent Solids: 80
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0634)		8082A		1	03/27/14 20:07		CC42520
Aroclor 1221	ND (0.0634)		8082A		1	03/27/14 20:07		CC42520
Aroclor 1232	ND (0.0634)		8082A		1	03/27/14 20:07		CC42520
Aroclor 1242	ND (0.0634)		8082A		1	03/27/14 20:07		CC42520
Aroclor 1248	**0.176** (0.0634)		8082A		1	03/27/14 20:07		CC42520
Aroclor 1254	ND (0.0634)		8082A		1	03/27/14 20:07		CC42520
Aroclor 1260	ND (0.0634)		8082A		1	03/27/14 20:07		CC42520
Aroclor 1262	ND (0.0634)		8082A		1	03/27/14 20:07		CC42520
Aroclor 1268	ND (0.0634)		8082A		1	03/27/14 20:07		CC42520

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: R-9 12-24in
Date Sampled: 03/24/14 10:33
Percent Solids: 92
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2720)		8082A		50000	03/31/14 18:40		CC42520
Aroclor 1221	ND (2720)		8082A		50000	03/31/14 18:40		CC42520
Aroclor 1232	ND (2720)		8082A		50000	03/31/14 18:40		CC42520
Aroclor 1242	ND (2720)		8082A		50000	03/31/14 18:40		CC42520
Aroclor 1248	**13100** (2720)		8082A		50000	03/31/14 18:40		CC42520
Aroclor 1254	ND (2720)		8082A		50000	03/31/14 18:40		CC42520
Aroclor 1260	ND (2720)		8082A		50000	03/31/14 18:40		CC42520
Aroclor 1262	ND (2720)		8082A		50000	03/31/14 18:40		CC42520
Aroclor 1268	ND (2720)		8082A		50000	03/31/14 18:40		CC42520

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-11 24-36in
Date Sampled: 03/24/14 10:35
Percent Solids: 87
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0588)		8082A		1	03/28/14 19:12		CC42520
Aroclor 1221	ND (0.0588)		8082A		1	03/28/14 19:12		CC42520
Aroclor 1232	ND (0.0588)		8082A		1	03/28/14 19:12		CC42520
Aroclor 1242	ND (0.0588)		8082A		1	03/28/14 19:12		CC42520
Aroclor 1248	**0.933** (0.0588)		8082A		1	03/28/14 19:12		CC42520
Aroclor 1254	ND (0.0588)		8082A		1	03/28/14 19:12		CC42520
Aroclor 1260	ND (0.0588)		8082A		1	03/28/14 19:12		CC42520
Aroclor 1262	ND (0.0588)		8082A		1	03/28/14 19:12		CC42520
Aroclor 1268	ND (0.0588)		8082A		1	03/28/14 19:12		CC42520

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*110 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*107 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-12 24-36in
Date Sampled: 03/24/14 10:45
Percent Solids: 92
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0557)		8082A		1	03/28/14 19:31		CC42520
Aroclor 1221	ND (0.0557)		8082A		1	03/28/14 19:31		CC42520
Aroclor 1232	ND (0.0557)		8082A		1	03/28/14 19:31		CC42520
Aroclor 1242	ND (0.0557)		8082A		1	03/28/14 19:31		CC42520
Aroclor 1248	**0.305** (0.0557)		8082A		1	03/28/14 19:31		CC42520
Aroclor 1254	ND (0.0557)		8082A		1	03/28/14 19:31		CC42520
Aroclor 1260	ND (0.0557)		8082A		1	03/28/14 19:31		CC42520
Aroclor 1262	ND (0.0557)		8082A		1	03/28/14 19:31		CC42520
Aroclor 1268	ND (0.0557)		8082A		1	03/28/14 19:31		CC42520

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*106 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*101 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-12 36-48in
Date Sampled: 03/24/14 10:47
Percent Solids: 96
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0539)		8082A		1	03/28/14 19:50		CC42520
Aroclor 1221	ND (0.0539)		8082A		1	03/28/14 19:50		CC42520
Aroclor 1232	ND (0.0539)		8082A		1	03/28/14 19:50		CC42520
Aroclor 1242	ND (0.0539)		8082A		1	03/28/14 19:50		CC42520
Aroclor 1248	ND (0.0539)		8082A		1	03/28/14 19:50		CC42520
Aroclor 1254	ND (0.0539)		8082A		1	03/28/14 19:50		CC42520
Aroclor 1260	ND (0.0539)		8082A		1	03/28/14 19:50		CC42520
Aroclor 1262	ND (0.0539)		8082A		1	03/28/14 19:50		CC42520
Aroclor 1268	ND (0.0539)		8082A		1	03/28/14 19:50		CC42520

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-13 24-36in
Date Sampled: 03/24/14 10:49
Percent Solids: 91
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0533)		8082A		1	03/27/14 21:41		CC42520
Aroclor 1221	ND (0.0533)		8082A		1	03/27/14 21:41		CC42520
Aroclor 1232	ND (0.0533)		8082A		1	03/27/14 21:41		CC42520
Aroclor 1242	ND (0.0533)		8082A		1	03/27/14 21:41		CC42520
Aroclor 1248	ND (0.0533)		8082A		1	03/27/14 21:41		CC42520
Aroclor 1254	ND (0.0533)		8082A		1	03/27/14 21:41		CC42520
Aroclor 1260	ND (0.0533)		8082A		1	03/27/14 21:41		CC42520
Aroclor 1262	ND (0.0533)		8082A		1	03/27/14 21:41		CC42520
Aroclor 1268	ND (0.0533)		8082A		1	03/27/14 21:41		CC42520

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*108 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-13 36-48in
Date Sampled: 03/24/14 10:51
Percent Solids: 90
Initial Volume: 20.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0544)		8082A		1	03/27/14 22:00		CC42520
Aroclor 1221	ND (0.0544)		8082A		1	03/27/14 22:00		CC42520
Aroclor 1232	ND (0.0544)		8082A		1	03/27/14 22:00		CC42520
Aroclor 1242	ND (0.0544)		8082A		1	03/27/14 22:00		CC42520
Aroclor 1248	ND (0.0544)		8082A		1	03/27/14 22:00		CC42520
Aroclor 1254	ND (0.0544)		8082A		1	03/27/14 22:00		CC42520
Aroclor 1260	ND (0.0544)		8082A		1	03/27/14 22:00		CC42520
Aroclor 1262	ND (0.0544)		8082A		1	03/27/14 22:00		CC42520
Aroclor 1268	ND (0.0544)		8082A		1	03/27/14 22:00		CC42520

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: S-9 12-24in
Date Sampled: 03/24/14 10:34
Percent Solids: 41
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (12.1)		8082A		100	03/28/14 21:44		CC42520
Aroclor 1221	ND (12.1)		8082A		100	03/28/14 21:44		CC42520
Aroclor 1232	ND (12.1)		8082A		100	03/28/14 21:44		CC42520
Aroclor 1242	ND (12.1)		8082A		100	03/28/14 21:44		CC42520
Aroclor 1248	**152** (12.1)		8082A		100	03/28/14 21:44		CC42520
Aroclor 1254	ND (12.1)		8082A		100	03/28/14 21:44		CC42520
Aroclor 1260	ND (12.1)		8082A		100	03/28/14 21:44		CC42520
Aroclor 1262	ND (12.1)		8082A		100	03/28/14 21:44		CC42520
Aroclor 1268	ND (12.1)		8082A		100	03/28/14 21:44		CC42520

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-11 24-36in
Date Sampled: 03/24/14 10:36
Percent Solids: 86
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0583)		8082A		1	03/28/14 0:50		CC42520
Aroclor 1221	ND (0.0583)		8082A		1	03/28/14 0:50		CC42520
Aroclor 1232	ND (0.0583)		8082A		1	03/28/14 0:50		CC42520
Aroclor 1242	ND (0.0583)		8082A		1	03/28/14 0:50		CC42520
Aroclor 1248	**8.66** (0.583)		8082A		10	03/28/14 22:03		CC42520
Aroclor 1254	ND (0.0583)		8082A		1	03/28/14 0:50		CC42520
Aroclor 1260	ND (0.0583)		8082A		1	03/28/14 0:50		CC42520
Aroclor 1262	ND (0.0583)		8082A		1	03/28/14 0:50		CC42520
Aroclor 1268	ND (0.0583)		8082A		1	03/28/14 0:50		CC42520

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-12 24-36in
Date Sampled: 03/24/14 10:38
Percent Solids: 90
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0556)		8082A		1	03/28/14 1:09		CC42520
Aroclor 1221	ND (0.0556)		8082A		1	03/28/14 1:09		CC42520
Aroclor 1232	ND (0.0556)		8082A		1	03/28/14 1:09		CC42520
Aroclor 1242	ND (0.0556)		8082A		1	03/28/14 1:09		CC42520
Aroclor 1248	ND (0.0556)		8082A		1	03/28/14 1:09		CC42520
Aroclor 1254	**0.207** (0.0556)		8082A		1	03/28/14 1:09		CC42520
Aroclor 1260	ND (0.0556)		8082A		1	03/28/14 1:09		CC42520
Aroclor 1262	ND (0.0556)		8082A		1	03/28/14 1:09		CC42520
Aroclor 1268	ND (0.0556)		8082A		1	03/28/14 1:09		CC42520

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*118 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-13 24-36in
Date Sampled: 03/24/14 10:42
Percent Solids: 91
Initial Volume: 20.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403418
ESS Laboratory Sample ID: 1403418-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0527)		8082A		1	03/28/14 1:28		CC42616
Aroclor 1221	ND (0.0527)		8082A		1	03/28/14 1:28		CC42616
Aroclor 1232	ND (0.0527)		8082A		1	03/28/14 1:28		CC42616
Aroclor 1242	ND (0.0527)		8082A		1	03/28/14 1:28		CC42616
Aroclor 1248	ND (0.0527)		8082A		1	03/28/14 1:28		CC42616
Aroclor 1254	ND (0.0527)		8082A		1	03/28/14 1:28		CC42616
Aroclor 1260	ND (0.0527)		8082A		1	03/28/14 1:28		CC42616
Aroclor 1262	ND (0.0527)		8082A		1	03/28/14 1:28		CC42616
Aroclor 1268	ND (0.0527)		8082A		1	03/28/14 1:28		CC42616

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403418

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42520 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403418

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42520 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403418

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42520 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0304*		mg/kg wet	*0.02500*		*122*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0226*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0231*		mg/kg wet	*0.02500*		*93*	*30-150*			
LCS										
Aroclor 1016	0.491	0.0500	mg/kg wet	0.5000		98	40-140			
Aroclor 1260	0.505	0.0500	mg/kg wet	0.5000		101	40-140			
Surrogate: Decachlorobiphenyl	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0301*		mg/kg wet	*0.02500*		*120*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
LCS Dup										
Aroclor 1016	0.479	0.0500	mg/kg wet	0.5000		96	40-140	2	30	
Aroclor 1260	0.514	0.0500	mg/kg wet	0.5000		103	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0268*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0303*		mg/kg wet	*0.02500*		*121*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Batch CC42616 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403418

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42616 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403418

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42616 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0186*		mg/kg wet	*0.02500*		*74*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403418

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42616 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS										
Aroclor 1016	0.439	0.0500	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.429	0.0500	mg/kg wet	0.5000		86	40-140			
Surrogate: Decachlorobiphenyl	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS Dup										
Aroclor 1016	0.461	0.0500	mg/kg wet	0.5000		92	40-140	5	30	
Aroclor 1260	0.455	0.0500	mg/kg wet	0.5000		91	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403418

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403418

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030418
Date Project Due: 4/1/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **3.5**
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: _____ Date/Time: 3/25/14 1607
Reviewed By: _____ Date/Time: 3/25/14 1657

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 7 of 11 1 of 2 3/25/14

Turn Time: X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403418

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO EPH No Targets	8081 Pesticides 8082 PCB 608 Pesticides 608 PCB	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7
1	3/24/2014	1008		X	S	Q-6 0-12"	1	G				X			
2		1027				Q-9 12-24"									
3		1052				R-11 24-36"									
4		1054				R-11 36-48"									
5		1056				R-12 24-36"									
6		1058				R-13 24-36"									
7		1100				R-13 36-48"									
8		1029				R-4 0-12"									
9		1030				R-5 0-12"									
10		1031				R-6 0-12"									

Container Type: P-Poly G-Glass S-Sterile V-VOA Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: 35 + 1.8 16 a

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30pm	M. Mid	3/25/14 1330
M. Mid	3/25/14 1500	[signature]	3/25/14 1545				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
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www.esslaboratory.com

CHAIN OF CUSTODY

Page 8 of 11 292 3/25/14

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
(MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403418

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH / No Targets	8081 Pesticides / 8082 PCB / 608 Pesticides / 608 PCB	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
11	3/24/2014	1033		X	S	R-9 12-24"	1	G				X										
12		1035				S-11 24-36"																
13		1045				S-12 24-36"																
14		1047				S-12 36-48"																
15		1049				S-13 24-36"																
16		1051				S-13 36-48"																
17		1034				S-9 12-24"																
18		1036				T-11 24-36"																
19		1038				T-12 24-36"																
20		1042				T-13 24-36"																

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: 3.5 + 1.8 ice

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30pm	[signature]	3/25/14 1330
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1500	[signature]	3/25/14 1515				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403419

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 5:01 pm, Apr 01, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403419

SAMPLE RECEIPT

The following samples were received on March 25, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403419-01	T-36 12-24in	Soil	8082A
1403419-02	T-37 0-12in	Soil	8082A
1403419-03	U-13 24-36in	Soil	8082A
1403419-04	V-11 24-36in	Soil	8082A
1403419-05	T-9 24-36in	Soil	8082A
1403419-06	U-11 24-36in	Soil	8082A
1403419-07	U-12 24-36in	Soil	8082A
1403419-08	V-9 36-48in	Soil	8082A
1403419-09	V-12 0-12in	Soil	8082A
1403419-10	V-12 24-36in	Soil	8082A
1403419-11	V-13 24-36in	Soil	8082A
1403419-12	V-35 0-12in	Soil	8082A
1403419-13	V-36 0-12in	Soil	8082A
1403419-14	V-36 60-72in over 60	Soil	8082A
1403419-15	W-10 12-24	Soil	8082A
1403419-16	W-10 0-12	Soil	8082A
1403419-17	W-10 36-48	Soil	8082A
1403419-18	W-11 24-36	Soil	8082A
1403419-19	W-12 12-24	Soil	8082A
1403419-20	W-12 0-12	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403419

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403419-08 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403419-15 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403419

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403419

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403419-01 through 1403419-20**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: April 01, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-36 12-24in
Date Sampled: 03/24/14 11:40
Percent Solids: 93
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0521)		8082A		1	03/28/14 2:43		CC42616
Aroclor 1221	ND (0.0521)		8082A		1	03/28/14 2:43		CC42616
Aroclor 1232	ND (0.0521)		8082A		1	03/28/14 2:43		CC42616
Aroclor 1242	ND (0.0521)		8082A		1	03/28/14 2:43		CC42616
Aroclor 1248	**1.74** (0.261)		8082A		5	03/28/14 22:22		CC42616
Aroclor 1254	ND (0.0521)		8082A		1	03/28/14 2:43		CC42616
Aroclor 1260	ND (0.0521)		8082A		1	03/28/14 2:43		CC42616
Aroclor 1262	ND (0.0521)		8082A		1	03/28/14 2:43		CC42616
Aroclor 1268	ND (0.0521)		8082A		1	03/28/14 2:43		CC42616

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-37 0-12in
Date Sampled: 03/24/14 12:00
Percent Solids: 93
Initial Volume: 19.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0562)		8082A		1	03/28/14 3:02		CC42616
Aroclor 1221	ND (0.0562)		8082A		1	03/28/14 3:02		CC42616
Aroclor 1232	ND (0.0562)		8082A		1	03/28/14 3:02		CC42616
Aroclor 1242	ND (0.0562)		8082A		1	03/28/14 3:02		CC42616
Aroclor 1248	ND (0.0562)		8082A		1	03/28/14 3:02		CC42616
Aroclor 1254	ND (0.0562)		8082A		1	03/28/14 3:02		CC42616
Aroclor 1260	ND (0.0562)		8082A		1	03/28/14 3:02		CC42616
Aroclor 1262	ND (0.0562)		8082A		1	03/28/14 3:02		CC42616
Aroclor 1268	ND (0.0562)		8082A		1	03/28/14 3:02		CC42616

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-13 24-36in
Date Sampled: 03/24/14 09:25
Percent Solids: 92
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0550)		8082A		1	03/28/14 3:21		CC42616
Aroclor 1221	ND (0.0550)		8082A		1	03/28/14 3:21		CC42616
Aroclor 1232	ND (0.0550)		8082A		1	03/28/14 3:21		CC42616
Aroclor 1242	ND (0.0550)		8082A		1	03/28/14 3:21		CC42616
Aroclor 1248	ND (0.0550)		8082A		1	03/28/14 3:21		CC42616
Aroclor 1254	**0.392** (0.0550)		8082A		1	03/28/14 3:21		CC42616
Aroclor 1260	ND (0.0550)		8082A		1	03/28/14 3:21		CC42616
Aroclor 1262	ND (0.0550)		8082A		1	03/28/14 3:21		CC42616
Aroclor 1268	ND (0.0550)		8082A		1	03/28/14 3:21		CC42616

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-11 24-36in
Date Sampled: 03/24/14 11:12
Percent Solids: 94
Initial Volume: 20.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0516)		8082A		1	03/28/14 3:40		CC42616
Aroclor 1221	ND (0.0516)		8082A		1	03/28/14 3:40		CC42616
Aroclor 1232	ND (0.0516)		8082A		1	03/28/14 3:40		CC42616
Aroclor 1242	ND (0.0516)		8082A		1	03/28/14 3:40		CC42616
Aroclor 1248	**2.75** (0.258)		8082A		5	03/28/14 22:41		CC42616
Aroclor 1254	ND (0.0516)		8082A		1	03/28/14 3:40		CC42616
Aroclor 1260	ND (0.0516)		8082A		1	03/28/14 3:40		CC42616
Aroclor 1262	ND (0.0516)		8082A		1	03/28/14 3:40		CC42616
Aroclor 1268	ND (0.0516)		8082A		1	03/28/14 3:40		CC42616

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-9 24-36in
Date Sampled: 03/24/14 11:08
Percent Solids: 70
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0722)		8082A		1	03/28/14 3:59		CC42616
Aroclor 1221	ND (0.0722)		8082A		1	03/28/14 3:59		CC42616
Aroclor 1232	ND (0.0722)		8082A		1	03/28/14 3:59		CC42616
Aroclor 1242	ND (0.0722)		8082A		1	03/28/14 3:59		CC42616
Aroclor 1248	**9.88** (0.722)		8082A		10	03/28/14 22:59		CC42616
Aroclor 1254	ND (0.0722)		8082A		1	03/28/14 3:59		CC42616
Aroclor 1260	ND (0.0722)		8082A		1	03/28/14 3:59		CC42616
Aroclor 1262	ND (0.0722)		8082A		1	03/28/14 3:59		CC42616
Aroclor 1268	ND (0.0722)		8082A		1	03/28/14 3:59		CC42616

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*104 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-11 24-36in
Date Sampled: 03/24/14 11:03
Percent Solids: 89
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/26/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0559)		8082A		1	03/28/14 4:17		CC42616
Aroclor 1221	ND (0.0559)		8082A		1	03/28/14 4:17		CC42616
Aroclor 1232	ND (0.0559)		8082A		1	03/28/14 4:17		CC42616
Aroclor 1242	ND (0.0559)		8082A		1	03/28/14 4:17		CC42616
Aroclor 1248	ND (0.0559)		8082A		1	03/28/14 4:17		CC42616
Aroclor 1254	**0.0708** (0.0559)		8082A		1	03/28/14 4:17		CC42616
Aroclor 1260	ND (0.0559)		8082A		1	03/28/14 4:17		CC42616
Aroclor 1262	ND (0.0559)		8082A		1	03/28/14 4:17		CC42616
Aroclor 1268	ND (0.0559)		8082A		1	03/28/14 4:17		CC42616

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*107 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: U-12 24-36in
Date Sampled: 03/24/14 11:05
Percent Solids: 92
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0528)		8082A		1	03/28/14 16:48		CC42616
Aroclor 1221	ND (0.0528)		8082A		1	03/28/14 16:48		CC42616
Aroclor 1232	ND (0.0528)		8082A		1	03/28/14 16:48		CC42616
Aroclor 1242	ND (0.0528)		8082A		1	03/28/14 16:48		CC42616
Aroclor 1248	**0.0906** (0.0528)		8082A		1	03/28/14 16:48		CC42616
Aroclor 1254	ND (0.0528)		8082A		1	03/28/14 16:48		CC42616
Aroclor 1260	ND (0.0528)		8082A		1	03/28/14 16:48		CC42616
Aroclor 1262	ND (0.0528)		8082A		1	03/28/14 16:48		CC42616
Aroclor 1268	ND (0.0528)		8082A		1	03/28/14 16:48		CC42616

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*110 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-9 36-48in
Date Sampled: 03/24/14 11:09
Percent Solids: 64
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (15.5)		8082A		200	03/31/14 20:55		CC42616
Aroclor 1221	ND (15.5)		8082A		200	03/31/14 20:55		CC42616
Aroclor 1232	ND (15.5)		8082A		200	03/31/14 20:55		CC42616
Aroclor 1242	ND (15.5)		8082A		200	03/31/14 20:55		CC42616
Aroclor 1248	**275** (15.5)		8082A		200	03/31/14 20:55		CC42616
Aroclor 1254	ND (15.5)		8082A		200	03/31/14 20:55		CC42616
Aroclor 1260	ND (15.5)		8082A		200	03/31/14 20:55		CC42616
Aroclor 1262	ND (15.5)		8082A		200	03/31/14 20:55		CC42616
Aroclor 1268	ND (15.5)		8082A		200	03/31/14 20:55		CC42616

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-12 0-12in
Date Sampled: 03/24/14 09:00
Percent Solids: 91
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0558)		8082A		1	03/28/14 17:25		CC42616
Aroclor 1221	ND (0.0558)		8082A		1	03/28/14 17:25		CC42616
Aroclor 1232	ND (0.0558)		8082A		1	03/28/14 17:25		CC42616
Aroclor 1242	ND (0.0558)		8082A		1	03/28/14 17:25		CC42616
Aroclor 1248	**4.73** (0.558)		8082A		10	03/31/14 21:14		CC42616
Aroclor 1254	ND (0.0558)		8082A		1	03/28/14 17:25		CC42616
Aroclor 1260	ND (0.0558)		8082A		1	03/28/14 17:25		CC42616
Aroclor 1262	ND (0.0558)		8082A		1	03/28/14 17:25		CC42616
Aroclor 1268	ND (0.0558)		8082A		1	03/28/14 17:25		CC42616

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-12 24-36in
Date Sampled: 03/24/14 09:05
Percent Solids: 91
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0559)		8082A		1	03/28/14 17:43		CC42617
Aroclor 1221	ND (0.0559)		8082A		1	03/28/14 17:43		CC42617
Aroclor 1232	ND (0.0559)		8082A		1	03/28/14 17:43		CC42617
Aroclor 1242	ND (0.0559)		8082A		1	03/28/14 17:43		CC42617
Aroclor 1248	**3.69** (0.280)		8082A		5	03/31/14 21:33		CC42617
Aroclor 1254	ND (0.0559)		8082A		1	03/28/14 17:43		CC42617
Aroclor 1260	ND (0.0559)		8082A		1	03/28/14 17:43		CC42617
Aroclor 1262	ND (0.0559)		8082A		1	03/28/14 17:43		CC42617
Aroclor 1268	ND (0.0559)		8082A		1	03/28/14 17:43		CC42617

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-13 24-36in
Date Sampled: 03/24/14 09:10
Percent Solids: 95
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0527)		8082A		1	03/28/14 18:02		CC42617
Aroclor 1221	ND (0.0527)		8082A		1	03/28/14 18:02		CC42617
Aroclor 1232	ND (0.0527)		8082A		1	03/28/14 18:02		CC42617
Aroclor 1242	ND (0.0527)		8082A		1	03/28/14 18:02		CC42617
Aroclor 1248	ND (0.0527)		8082A		1	03/28/14 18:02		CC42617
Aroclor 1254	**0.157** (0.0527)		8082A		1	03/28/14 18:02		CC42617
Aroclor 1260	ND (0.0527)		8082A		1	03/28/14 18:02		CC42617
Aroclor 1262	ND (0.0527)		8082A		1	03/28/14 18:02		CC42617
Aroclor 1268	ND (0.0527)		8082A		1	03/28/14 18:02		CC42617

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*119 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-35 0-12in
Date Sampled: 03/24/14 12:15
Percent Solids: 94
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0537)		8082A		1	03/28/14 18:21		CC42617
Aroclor 1221	ND (0.0537)		8082A		1	03/28/14 18:21		CC42617
Aroclor 1232	ND (0.0537)		8082A		1	03/28/14 18:21		CC42617
Aroclor 1242	ND (0.0537)		8082A		1	03/28/14 18:21		CC42617
Aroclor 1248	**5.46** (0.537)		8082A		10	03/31/14 21:52		CC42617
Aroclor 1254	ND (0.0537)		8082A		1	03/28/14 18:21		CC42617
Aroclor 1260	ND (0.0537)		8082A		1	03/28/14 18:21		CC42617
Aroclor 1262	ND (0.0537)		8082A		1	03/28/14 18:21		CC42617
Aroclor 1268	ND (0.0537)		8082A		1	03/28/14 18:21		CC42617

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*115 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-36 0-12in
Date Sampled: 03/24/14 12:25
Percent Solids: 93
Initial Volume: 20.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0523)		8082A		1	03/28/14 18:40		CC42617
Aroclor 1221	ND (0.0523)		8082A		1	03/28/14 18:40		CC42617
Aroclor 1232	ND (0.0523)		8082A		1	03/28/14 18:40		CC42617
Aroclor 1242	ND (0.0523)		8082A		1	03/28/14 18:40		CC42617
Aroclor 1248	**2.77** (0.262)		8082A		5	03/31/14 22:11		CC42617
Aroclor 1254	ND (0.0523)		8082A		1	03/28/14 18:40		CC42617
Aroclor 1260	ND (0.0523)		8082A		1	03/28/14 18:40		CC42617
Aroclor 1262	ND (0.0523)		8082A		1	03/28/14 18:40		CC42617
Aroclor 1268	ND (0.0523)		8082A		1	03/28/14 18:40		CC42617

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*114 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-36 60-72in over 60
Date Sampled: 03/24/14 12:35
Percent Solids: 89
Initial Volume: 20.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0541)		8082A		1	03/28/14 19:55		CC42617
Aroclor 1221	ND (0.0541)		8082A		1	03/28/14 19:55		CC42617
Aroclor 1232	ND (0.0541)		8082A		1	03/28/14 19:55		CC42617
Aroclor 1242	ND (0.0541)		8082A		1	03/28/14 19:55		CC42617
Aroclor 1248	**2.39** (0.270)		8082A		5	03/31/14 22:30		CC42617
Aroclor 1254	ND (0.0541)		8082A		1	03/28/14 19:55		CC42617
Aroclor 1260	ND (0.0541)		8082A		1	03/28/14 19:55		CC42617
Aroclor 1262	ND (0.0541)		8082A		1	03/28/14 19:55		CC42617
Aroclor 1268	ND (0.0541)		8082A		1	03/28/14 19:55		CC42617

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*116 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-10 12-24
Date Sampled: 03/24/14 10:24
Percent Solids: 87
Initial Volume: 19.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1221	ND (3.02)		8082A		50	03/31/14 22:49		CC42616
Aroclor 1232	ND (3.02)		8082A		50	03/31/14 22:49		CC42616
Aroclor 1242	ND (3.02)		8082A		50	03/31/14 22:49		CC42616
Aroclor 1248	**51.3** (3.02)		8082A		50	03/31/14 22:49		CC42616
Aroclor 1254	ND (3.02)		8082A		50	03/31/14 22:49		CC42616
Aroclor 1260	ND (3.02)		8082A		50	03/31/14 22:49		CC42616
Aroclor 1262	ND (3.02)		8082A		50	03/31/14 22:49		CC42616
Aroclor 1268	ND (3.02)		8082A		50	03/31/14 22:49		CC42616

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-10 0-12
Date Sampled: 03/24/14 10:22
Percent Solids: 86
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0590)		8082A		1	03/28/14 20:14		CC42617
Aroclor 1221	ND (0.0590)		8082A		1	03/28/14 20:14		CC42617
Aroclor 1232	ND (0.0590)		8082A		1	03/28/14 20:14		CC42617
Aroclor 1242	ND (0.0590)		8082A		1	03/28/14 20:14		CC42617
Aroclor 1248	**0.115** (0.0590)		8082A		1	03/28/14 20:14		CC42617
Aroclor 1254	ND (0.0590)		8082A		1	03/28/14 20:14		CC42617
Aroclor 1260	ND (0.0590)		8082A		1	03/28/14 20:14		CC42617
Aroclor 1262	ND (0.0590)		8082A		1	03/28/14 20:14		CC42617
Aroclor 1268	ND (0.0590)		8082A		1	03/28/14 20:14		CC42617

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*114 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-10 36-48
Date Sampled: 03/24/14 10:30
Percent Solids: 84
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0602)		8082A		1	03/28/14 20:33		CC42617
Aroclor 1221	ND (0.0602)		8082A		1	03/28/14 20:33		CC42617
Aroclor 1232	ND (0.0602)		8082A		1	03/28/14 20:33		CC42617
Aroclor 1242	ND (0.0602)		8082A		1	03/28/14 20:33		CC42617
Aroclor 1248	**0.628** (0.0602)		8082A		1	03/28/14 20:33		CC42617
Aroclor 1254	ND (0.0602)		8082A		1	03/28/14 20:33		CC42617
Aroclor 1260	ND (0.0602)		8082A		1	03/28/14 20:33		CC42617
Aroclor 1262	ND (0.0602)		8082A		1	03/28/14 20:33		CC42617
Aroclor 1268	ND (0.0602)		8082A		1	03/28/14 20:33		CC42617

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*106 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*120 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*113 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*102 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-11 24-36
Date Sampled: 03/24/14 10:17
Percent Solids: 89
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0579)		8082A		1	03/28/14 20:52		CC42617
Aroclor 1221	ND (0.0579)		8082A		1	03/28/14 20:52		CC42617
Aroclor 1232	ND (0.0579)		8082A		1	03/28/14 20:52		CC42617
Aroclor 1242	ND (0.0579)		8082A		1	03/28/14 20:52		CC42617
Aroclor 1248	**0.0705** (0.0579)		8082A		1	03/28/14 20:52		CC42617
Aroclor 1254	ND (0.0579)		8082A		1	03/28/14 20:52		CC42617
Aroclor 1260	ND (0.0579)		8082A		1	03/28/14 20:52		CC42617
Aroclor 1262	ND (0.0579)		8082A		1	03/28/14 20:52		CC42617
Aroclor 1268	ND (0.0579)		8082A		1	03/28/14 20:52		CC42617

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*107 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-12 12-24
Date Sampled: 03/24/14 08:40
Percent Solids: 93
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0538)		8082A		1	03/28/14 21:11		CC42617
Aroclor 1221	ND (0.0538)		8082A		1	03/28/14 21:11		CC42617
Aroclor 1232	ND (0.0538)		8082A		1	03/28/14 21:11		CC42617
Aroclor 1242	ND (0.0538)		8082A		1	03/28/14 21:11		CC42617
Aroclor 1248	**0.932** (0.0538)		8082A		1	03/28/14 21:11		CC42617
Aroclor 1254	**0.772** (0.0538)		8082A		1	03/28/14 21:11		CC42617
Aroclor 1260	ND (0.0538)		8082A		1	03/28/14 21:11		CC42617
Aroclor 1262	ND (0.0538)		8082A		1	03/28/14 21:11		CC42617
Aroclor 1268	ND (0.0538)		8082A		1	03/28/14 21:11		CC42617

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*110 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-12 0-12
Date Sampled: 03/24/14 08:45
Percent Solids: 90
Initial Volume: 19.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403419
ESS Laboratory Sample ID: 1403419-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 3/27/14 17:38
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0578)		8082A		1	03/28/14 21:30		CC42617
Aroclor 1221	ND (0.0578)		8082A		1	03/28/14 21:30		CC42617
Aroclor 1232	ND (0.0578)		8082A		1	03/28/14 21:30		CC42617
Aroclor 1242	ND (0.0578)		8082A		1	03/28/14 21:30		CC42617
Aroclor 1248	**4.88** (0.578)		8082A		10	04/01/14 0:05		CC42617
Aroclor 1254	ND (0.0578)		8082A		1	03/28/14 21:30		CC42617
Aroclor 1260	ND (0.0578)		8082A		1	03/28/14 21:30		CC42617
Aroclor 1262	ND (0.0578)		8082A		1	03/28/14 21:30		CC42617
Aroclor 1268	ND (0.0578)		8082A		1	03/28/14 21:30		CC42617

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*107 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403419

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42616 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403419

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42616 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403419

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42616 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0186*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS										
Aroclor 1016	0.439	0.0500	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.429	0.0500	mg/kg wet	0.5000		86	40-140			
Surrogate: Decachlorobiphenyl	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS Dup										
Aroclor 1016	0.461	0.0500	mg/kg wet	0.5000		92	40-140	5	30	
Aroclor 1260	0.455	0.0500	mg/kg wet	0.5000		91	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Batch CC42617 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403419

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42617 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403419

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42617 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0256*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403419

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42617 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0211*		mg/kg wet	*0.02500*		*85*	*30-150*			
LCS										
Aroclor 1016	0.465	0.0500	mg/kg wet	0.5000		93	40-140			
Aroclor 1260	0.489	0.0500	mg/kg wet	0.5000		98	40-140			
Surrogate: Decachlorobiphenyl	*0.0259*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0211*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
LCS Dup										
Aroclor 1016	0.468	0.0500	mg/kg wet	0.5000		94	40-140	0.7	30	
Aroclor 1260	0.488	0.0500	mg/kg wet	0.5000		98	40-140	0.1	30	
Surrogate: Decachlorobiphenyl	*0.0257*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0259*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403419

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403419

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030419
Date Project Due: 4/1/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **3.5**
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____
18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP

Completed By: _____ Date/Time: 3/25/14
Reviewed By: _____ Date/Time: 3/25/14 1706

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 9 of 11 1 of 2 3/25/14

Turn Time: X Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____

State where samples were collected from: (MA) RI CT NH NJ NY ME Other ____

Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403419

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO EPH No Targets	8081 Pesticides 8082 PCB 608 Pesticides 608 PCB	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7
1	3/24/2014	1140		X	S	T-36 12-24"	1	G				X			
2		1200				T-37 0-12"									
3		0925				U-13 24-36"									
4		1112				V-11 24-36"									
5		1108				T-9 24-36"									
6		1103				U-11 24-36"									
7		1105				U-12 24-36"									
8		1109				V-9 36-48"									
9		0900				V-12 0-12"									
10		0905				V-12 24-36"									

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ____
Cooler Temp: 3.5 + 1.8 ice

Internal Use Only
[ ] Pickup
[ ] Technicians ____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30pm	M. Mied	3/25/14 1330
M. Mied	3/25/14 1500	[signature]	3/25/14 1545				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 10 of 11 2 of 2 3/25/14

Turn Time: X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 14O3419

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH / No Targets	8081 Pesticides / 8082 PCB / 608 Pesticides / 608 PCB	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
11	3/24/2014	0910		X	S	V-13 24-36"	1	G				X										
12		1215				V-35 0-12"																
13		1225				V-36 0-12"																
14		1235				V-36 60-72" (over 60)																
15		1024				W-10 12-24																
16		1022				W-10 0-12																
17		1030				W-10 36-48																
18		1017				W-11 24-36																
19		0840				W-12 12-24																
20		0845				W-12 0-12																

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present: ✓ Yes ___ No
Seals Intact: ___ Yes ___ No NA: _____
Cooler Temp: 3.5 & 1.8 in ice

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30pm	[signature]	3/25/14 1330
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1500	[signature]	3/25/14 1545				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403420

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 5:04 pm, Apr 01, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403420

SAMPLE RECEIPT

The following samples were received on March 25, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

Lab Number	Sample Name	Matrix	Analysis
1403420-01	W-36 0-12in	Soil	8082A
1403420-02	W-35 0-12in	Soil	8082A
1403420-03	W-9 24-36in	Soil	8082A
1403420-04	X-12 0-12in	Soil	8082A
1403420-05	Y-10 0-12in	Soil	8082A
1403420-06	Y-11 0-12in	Soil	8082A
1403420-07	Y-12 0-12in	Soil	8082A
1403420-08	F-45 24-36in	Soil	8082A
1403420-09	F-46 24-36in	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403420

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403420-02 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403420

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403420

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403420-01 through 1403420-09**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: April 01, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-36 0-12in
Date Sampled: 03/24/14 13:00
Percent Solids: 94
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403420
ESS Laboratory Sample ID: 1403420-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0547)		8082A		1	03/28/14 8:33		CC42518
Aroclor 1221	ND (0.0547)		8082A		1	03/28/14 8:33		CC42518
Aroclor 1232	ND (0.0547)		8082A		1	03/28/14 8:33		CC42518
Aroclor 1242	ND (0.0547)		8082A		1	03/28/14 8:33		CC42518
Aroclor 1248	**1.77** (0.273)		8082A		5	03/29/14 23:52		CC42518
Aroclor 1254	ND (0.0547)		8082A		1	03/28/14 8:33		CC42518
Aroclor 1260	ND (0.0547)		8082A		1	03/28/14 8:33		CC42518
Aroclor 1262	ND (0.0547)		8082A		1	03/28/14 8:33		CC42518
Aroclor 1268	ND (0.0547)		8082A		1	03/28/14 8:33		CC42518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*108 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*120 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*108 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*111 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-35 0-12in
Date Sampled: 03/24/14 12:45
Percent Solids: 90
Initial Volume: 19.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403420
ESS Laboratory Sample ID: 1403420-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 3/26/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.16)		8082A		20	03/30/14 0:11		CC42518
Aroclor 1221	ND (1.16)		8082A		20	03/30/14 0:11		CC42518
Aroclor 1232	ND (1.16)		8082A		20	03/30/14 0:11		CC42518
Aroclor 1242	ND (1.16)		8082A		20	03/30/14 0:11		CC42518
Aroclor 1248	**22.4** (1.16)		8082A		20	03/30/14 0:11		CC42518
Aroclor 1254	ND (1.16)		8082A		20	03/30/14 0:11		CC42518
Aroclor 1260	ND (1.16)		8082A		20	03/30/14 0:11		CC42518
Aroclor 1262	ND (1.16)		8082A		20	03/30/14 0:11		CC42518
Aroclor 1268	ND (1.16)		8082A		20	03/30/14 0:11		CC42518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-9 24-36in
Date Sampled: 03/24/14 10:47
Percent Solids: 97
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403420
ESS Laboratory Sample ID: 1403420-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0525)		8082A		1	03/28/14 9:11		CC42518
Aroclor 1221	ND (0.0525)		8082A		1	03/28/14 9:11		CC42518
Aroclor 1232	ND (0.0525)		8082A		1	03/28/14 9:11		CC42518
Aroclor 1242	ND (0.0525)		8082A		1	03/28/14 9:11		CC42518
Aroclor 1248	ND (0.0525)		8082A		1	03/28/14 9:11		CC42518
Aroclor 1254	ND (0.0525)		8082A		1	03/28/14 9:11		CC42518
Aroclor 1260	ND (0.0525)		8082A		1	03/28/14 9:11		CC42518
Aroclor 1262	ND (0.0525)		8082A		1	03/28/14 9:11		CC42518
Aroclor 1268	ND (0.0525)		8082A		1	03/28/14 9:11		CC42518

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: X-12 0-12in
Date Sampled: 03/24/14 08:30
Percent Solids: 88
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403420
ESS Laboratory Sample ID: 1403420-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0577)		8082A		1	03/28/14 12:20		CC42518
Aroclor 1221	ND (0.0577)		8082A		1	03/28/14 12:20		CC42518
Aroclor 1232	ND (0.0577)		8082A		1	03/28/14 12:20		CC42518
Aroclor 1242	ND (0.0577)		8082A		1	03/28/14 12:20		CC42518
Aroclor 1248	**8.38** (0.577)		8082A		10	04/01/14 0:43		CC42518
Aroclor 1254	ND (0.0577)		8082A		1	04/01/14 0:43		CC42518
Aroclor 1260	ND (0.0577)		8082A		1	03/28/14 12:20		CC42518
Aroclor 1262	ND (0.0577)		8082A		1	03/28/14 12:20		CC42518
Aroclor 1268	ND (0.0577)		8082A		1	03/28/14 12:20		CC42518

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*108 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*109 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*104 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Y-10 0-12in
Date Sampled: 03/24/14 10:10
Percent Solids: 89
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403420
ESS Laboratory Sample ID: 1403420-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0582)		8082A		1	03/28/14 12:39		CC42518
Aroclor 1221	ND (0.0582)		8082A		1	03/28/14 12:39		CC42518
Aroclor 1232	ND (0.0582)		8082A		1	03/28/14 12:39		CC42518
Aroclor 1242	ND (0.0582)		8082A		1	03/28/14 12:39		CC42518
Aroclor 1248	ND (0.0582)		8082A		1	03/28/14 12:39		CC42518
Aroclor 1254	ND (0.0582)		8082A		1	03/28/14 12:39		CC42518
Aroclor 1260	ND (0.0582)		8082A		1	03/28/14 12:39		CC42518
Aroclor 1262	ND (0.0582)		8082A		1	03/28/14 12:39		CC42518
Aroclor 1268	ND (0.0582)		8082A		1	03/28/14 12:39		CC42518

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*109 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*107 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Y-11 0-12in
Date Sampled: 03/24/14 10:20
Percent Solids: 86
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403420
ESS Laboratory Sample ID: 1403420-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0601)		8082A		1	03/28/14 12:58		CC42518
Aroclor 1221	ND (0.0601)		8082A		1	03/28/14 12:58		CC42518
Aroclor 1232	ND (0.0601)		8082A		1	03/28/14 12:58		CC42518
Aroclor 1242	ND (0.0601)		8082A		1	03/28/14 12:58		CC42518
Aroclor 1248	**0.383** (0.0601)		8082A		1	03/28/14 12:58		CC42518
Aroclor 1254	ND (0.0601)		8082A		1	03/28/14 12:58		CC42518
Aroclor 1260	ND (0.0601)		8082A		1	03/28/14 12:58		CC42518
Aroclor 1262	ND (0.0601)		8082A		1	03/28/14 12:58		CC42518
Aroclor 1268	ND (0.0601)		8082A		1	03/28/14 12:58		CC42518

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Y-12 0-12in
Date Sampled: 03/24/14 08:33
Percent Solids: 90
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403420
ESS Laboratory Sample ID: 1403420-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0562)		8082A		1	03/28/14 13:17		CC42518
Aroclor 1221	ND (0.0562)		8082A		1	03/28/14 13:17		CC42518
Aroclor 1232	ND (0.0562)		8082A		1	03/28/14 13:17		CC42518
Aroclor 1242	ND (0.0562)		8082A		1	03/28/14 13:17		CC42518
Aroclor 1248	**0.554** (0.0562)		8082A		1	03/28/14 13:17		CC42518
Aroclor 1254	ND (0.0562)		8082A		1	03/28/14 13:17		CC42518
Aroclor 1260	ND (0.0562)		8082A		1	03/28/14 13:17		CC42518
Aroclor 1262	ND (0.0562)		8082A		1	03/28/14 13:17		CC42518
Aroclor 1268	ND (0.0562)		8082A		1	03/28/14 13:17		CC42518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*103 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*116 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: F-45 24-36in
Date Sampled: 03/24/14 12:05
Percent Solids: 99
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403420
ESS Laboratory Sample ID: 1403420-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/26/14 16:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0513)		8082A		1	03/28/14 13:36		CC42518
Aroclor 1221	ND (0.0513)		8082A		1	03/28/14 13:36		CC42518
Aroclor 1232	ND (0.0513)		8082A		1	03/28/14 13:36		CC42518
Aroclor 1242	ND (0.0513)		8082A		1	03/28/14 13:36		CC42518
Aroclor 1248	ND (0.0513)		8082A		1	03/28/14 13:36		CC42518
Aroclor 1254	ND (0.0513)		8082A		1	03/28/14 13:36		CC42518
Aroclor 1260	ND (0.0513)		8082A		1	03/28/14 13:36		CC42518
Aroclor 1262	ND (0.0513)		8082A		1	03/28/14 13:36		CC42518
Aroclor 1268	ND (0.0513)		8082A		1	03/28/14 13:36		CC42518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*144 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: F-46 24-36in
Date Sampled: 03/24/14 12:08
Percent Solids: 98
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403420
ESS Laboratory Sample ID: 1403420-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 3/25/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0521)		8082A		1	03/28/14 13:55		CC42519
Aroclor 1221	ND (0.0521)		8082A		1	03/28/14 13:55		CC42519
Aroclor 1232	ND (0.0521)		8082A		1	03/28/14 13:55		CC42519
Aroclor 1242	ND (0.0521)		8082A		1	03/28/14 13:55		CC42519
Aroclor 1248	ND (0.0521)		8082A		1	03/28/14 13:55		CC42519
Aroclor 1254	ND (0.0521)		8082A		1	03/28/14 13:55		CC42519
Aroclor 1260	ND (0.0521)		8082A		1	03/28/14 13:55		CC42519
Aroclor 1262	ND (0.0521)		8082A		1	03/28/14 13:55		CC42519
Aroclor 1268	ND (0.0521)		8082A		1	03/28/14 13:55		CC42519

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403420

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42518 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403420

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42518 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403420

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42518 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0264*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0302*		mg/kg wet	*0.02500*		*121*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0226*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS										
Aroclor 1016	0.507	0.0500	mg/kg wet	0.5000		101	40-140			
Aroclor 1260	0.529	0.0500	mg/kg wet	0.5000		106	40-140			
Surrogate: Decachlorobiphenyl	*0.0278*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0317*		mg/kg wet	*0.02500*		*127*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0244*		mg/kg wet	*0.02500*		*98*	*30-150*			
LCS Dup										
Aroclor 1016	0.519	0.0500	mg/kg wet	0.5000		104	40-140	2	30	
Aroclor 1260	0.535	0.0500	mg/kg wet	0.5000		107	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0277*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0313*		mg/kg wet	*0.02500*		*125*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Batch CC42519 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403420

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42519 - 3540C										
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403420

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42519 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0251*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403420

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC42519 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS										
Aroclor 1016	0.511	0.0250	mg/kg wet	0.5000		102	40-140			
Aroclor 1260	0.491	0.0250	mg/kg wet	0.5000		98	40-140			
Surrogate: Decachlorobiphenyl	*0.0269*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0261*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0231*		mg/kg wet	*0.02500*		*93*	*30-150*			
LCS Dup										
Aroclor 1016	0.515	0.0250	mg/kg wet	0.5000		103	40-140	0.7	30	
Aroclor 1260	0.488	0.0250	mg/kg wet	0.5000		98	40-140	0.7	30	
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403420

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403420

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030420
Date Project Due: 4/1/14
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **3.5**
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes|No**
17. Were samples received intact? **Yes|No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.
Received sample W-9 12-24" in empty 4oz. Jar. 3/25/14 (R)

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP

Completed By: _____ Date/Time: 3/25/14 1615
Reviewed By: _____ Date/Time: 3/25/14 1624

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 1 of 1 3/25/14

Turn Time: X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: 1403420
Electronic Deliverable: X Yes ___ No
Format: pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis: 8260, 624, 524.2, 8021 MTBE/BTEX, VPH, 8100 TPH, 8015 DRO, 8015 GRO, EPH, 8081 Pesticides, 8082 PCB, No Targets, 608 Pesticides, 608 PCB, 8270, 625, PAH only, RCRA5, RCRA8, PP13, TAL23, TCLP8, MCP, MCPw/Hg, NBC7

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers
1	3/24/2014	1300		X	S	W-36 0-12"	1	G
2		1245				W-35 0-12"		
~~3~~		1045				W-9 12-24" ①		
3 ~~4~~		1047				W-9 24-36"		
4 ~~5~~		0830				~~X-10 12-24~~ X-12 0-12"		
5 ~~6~~		1010				~~X-34 12-24~~ Y-10 0-12"		
6 ~~7~~		1020				Y-11 0-12"		
7 ~~8~~		0833				Y-12 0-12"		
8 ~~9~~		1205				F-45 24-36"		
9 ~~10~~		1208				F-46 24-36"		

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present: ✓ Yes ___ No
Seals Intact: ___ Yes ___ No NA: _____
Cooler Temp: 3.5 + 1.8 10 m

Internal Use Only: [ ] Pickup [ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb
① Received 4oz Jar empty 3/25/14 ⓚ ESS.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30	[signature]	3/25/14 1350
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1520	[signature]	3/25/14 1545				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1403421

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 12:46 pm, Apr 21, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403421

SAMPLE RECEIPT

The following samples were received on April 14, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

These samples were originally received on hold on March 25, 2014.

The cooler temperature was not within the acceptance limit of <6°C.

Lab Number	Sample Name	Matrix	Analysis
1403421-02	T-36 36-48in	Soil	8082A
1403421-03	T-37 12-24in	Soil	8082A
1403421-06	V-36 12-24in	Soil	8082A
1403421-07	V-36 24-36in	Soil	8082A
1403421-08	W-10 24-36in	Soil	8082A
1403421-09	W-35 12-24in	Soil	8082A
1403421-11	W-35 36-48in	Soil	8082A
1403421-14	W-36 36-48in	Soil	8082A
1403421-15	X-10 12-24in	Soil	8082A
1403421-16	X-12 12-24in	Soil	8082A
1403421-17	X-13 0-12in	Soil	8082A
1403421-21	F-31 12-24in	Soil	8082A
1403421-23	P-47 12-24	Soil	8082A
1403421-26	Q-46 34-36in	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403421

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1403421-23 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1403421-26 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403421

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403421

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1403421-02 through 1403421-26**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: April 21, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-36 36-48in
Date Sampled: 03/24/14 11:46
Percent Solids: 96
Initial Volume: 19.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0541)		8082A		1	04/17/14 16:11		CD41517
Aroclor 1221	ND (0.0541)		8082A		1	04/17/14 16:11		CD41517
Aroclor 1232	ND (0.0541)		8082A		1	04/17/14 16:11		CD41517
Aroclor 1242	ND (0.0541)		8082A		1	04/17/14 16:11		CD41517
Aroclor 1248	**0.0608** (0.0541)		8082A		1	04/17/14 16:11		CD41517
Aroclor 1254	ND (0.0541)		8082A		1	04/17/14 16:11		CD41517
Aroclor 1260	ND (0.0541)		8082A		1	04/17/14 16:11		CD41517
Aroclor 1262	ND (0.0541)		8082A		1	04/17/14 16:11		CD41517
Aroclor 1268	ND (0.0541)		8082A		1	04/17/14 16:11		CD41517

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*82 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: T-37 12-24in
Date Sampled: 03/24/14 12:05
Percent Solids: 86
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0582)		8082A		1	04/17/14 16:30		CD41517
Aroclor 1221	ND (0.0582)		8082A		1	04/17/14 16:30		CD41517
Aroclor 1232	ND (0.0582)		8082A		1	04/17/14 16:30		CD41517
Aroclor 1242	ND (0.0582)		8082A		1	04/17/14 16:30		CD41517
Aroclor 1248	ND (0.0582)		8082A		1	04/17/14 16:30		CD41517
Aroclor 1254	ND (0.0582)		8082A		1	04/17/14 16:30		CD41517
Aroclor 1260	ND (0.0582)		8082A		1	04/17/14 16:30		CD41517
Aroclor 1262	ND (0.0582)		8082A		1	04/17/14 16:30		CD41517
Aroclor 1268	ND (0.0582)		8082A		1	04/17/14 16:30		CD41517

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*37 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*38 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-36 12-24in
Date Sampled: 03/24/14 12:27
Percent Solids: 93
Initial Volume: 19.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0549)		8082A		1	04/17/14 0:49		CD41518
Aroclor 1221	ND (0.0549)		8082A		1	04/17/14 0:49		CD41518
Aroclor 1232	ND (0.0549)		8082A		1	04/17/14 0:49		CD41518
Aroclor 1242	ND (0.0549)		8082A		1	04/17/14 0:49		CD41518
Aroclor 1248	**0.979** (0.0549)		8082A		1	04/17/14 0:49		CD41518
Aroclor 1254	ND (0.0549)		8082A		1	04/17/14 0:49		CD41518
Aroclor 1260	ND (0.0549)		8082A		1	04/17/14 0:49		CD41518
Aroclor 1262	ND (0.0549)		8082A		1	04/17/14 0:49		CD41518
Aroclor 1268	ND (0.0549)		8082A		1	04/17/14 0:49		CD41518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: V-36 24-36in
Date Sampled: 03/24/14 12:30
Percent Solids: 92
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0558)		8082A		1	04/17/14 1:08		CD41518
Aroclor 1221	ND (0.0558)		8082A		1	04/17/14 1:08		CD41518
Aroclor 1232	ND (0.0558)		8082A		1	04/17/14 1:08		CD41518
Aroclor 1242	ND (0.0558)		8082A		1	04/17/14 1:08		CD41518
Aroclor 1248	**2.22** (0.279)		8082A		5	04/17/14 19:07		CD41518
Aroclor 1254	ND (0.0558)		8082A		1	04/17/14 1:08		CD41518
Aroclor 1260	ND (0.0558)		8082A		1	04/17/14 1:08		CD41518
Aroclor 1262	ND (0.0558)		8082A		1	04/17/14 1:08		CD41518
Aroclor 1268	ND (0.0558)		8082A		1	04/17/14 1:08		CD41518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-10 24-36in
Date Sampled: 03/24/14 10:28
Percent Solids: 88
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0568)		8082A		1	04/17/14 2:05		CD41518
Aroclor 1221	ND (0.0568)		8082A		1	04/17/14 2:05		CD41518
Aroclor 1232	ND (0.0568)		8082A		1	04/17/14 2:05		CD41518
Aroclor 1242	ND (0.0568)		8082A		1	04/17/14 2:05		CD41518
Aroclor 1248	**1.13** (0.0568)		8082A		1	04/17/14 2:05		CD41518
Aroclor 1254	ND (0.0568)		8082A		1	04/17/14 2:05		CD41518
Aroclor 1260	ND (0.0568)		8082A		1	04/17/14 2:05		CD41518
Aroclor 1262	ND (0.0568)		8082A		1	04/17/14 2:05		CD41518
Aroclor 1268	ND (0.0568)		8082A		1	04/17/14 2:05		CD41518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-35 12-24in
Date Sampled: 03/24/14 12:47
Percent Solids: 95
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0523)		8082A		1	04/17/14 2:24		CD41518
Aroclor 1221	ND (0.0523)		8082A		1	04/17/14 2:24		CD41518
Aroclor 1232	ND (0.0523)		8082A		1	04/17/14 2:24		CD41518
Aroclor 1242	ND (0.0523)		8082A		1	04/17/14 2:24		CD41518
Aroclor 1248	**1.02** (0.0523)		8082A		1	04/17/14 2:24		CD41518
Aroclor 1254	ND (0.0523)		8082A		1	04/17/14 2:24		CD41518
Aroclor 1260	ND (0.0523)		8082A		1	04/17/14 2:24		CD41518
Aroclor 1262	ND (0.0523)		8082A		1	04/17/14 2:24		CD41518
Aroclor 1268	ND (0.0523)		8082A		1	04/17/14 2:24		CD41518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-35 36-48in
Date Sampled: 03/24/14 12:55
Percent Solids: 88
Initial Volume: 20.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0541)		8082A		1	04/17/14 2:43		CD41518
Aroclor 1221	ND (0.0541)		8082A		1	04/17/14 2:43		CD41518
Aroclor 1232	ND (0.0541)		8082A		1	04/17/14 2:43		CD41518
Aroclor 1242	ND (0.0541)		8082A		1	04/17/14 2:43		CD41518
Aroclor 1248	ND (0.0541)		8082A		1	04/17/14 2:43		CD41518
Aroclor 1254	ND (0.0541)		8082A		1	04/17/14 2:43		CD41518
Aroclor 1260	ND (0.0541)		8082A		1	04/17/14 2:43		CD41518
Aroclor 1262	ND (0.0541)		8082A		1	04/17/14 2:43		CD41518
Aroclor 1268	ND (0.0541)		8082A		1	04/17/14 2:43		CD41518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: W-36 36-48in
Date Sampled: 03/24/14 13:10
Percent Solids: 97
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0510)		8082A		1	04/17/14 3:02		CD41518
Aroclor 1221	ND (0.0510)		8082A		1	04/17/14 3:02		CD41518
Aroclor 1232	ND (0.0510)		8082A		1	04/17/14 3:02		CD41518
Aroclor 1242	ND (0.0510)		8082A		1	04/17/14 3:02		CD41518
Aroclor 1248	**0.577** (0.0510)		8082A		1	04/17/14 3:02		CD41518
Aroclor 1254	ND (0.0510)		8082A		1	04/17/14 3:02		CD41518
Aroclor 1260	ND (0.0510)		8082A		1	04/17/14 3:02		CD41518
Aroclor 1262	ND (0.0510)		8082A		1	04/17/14 3:02		CD41518
Aroclor 1268	ND (0.0510)		8082A		1	04/17/14 3:02		CD41518

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: X-10 12-24in
Date Sampled: 03/24/14 10:25
Percent Solids: 90
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0557)		8082A		1	04/17/14 3:21		CD41518
Aroclor 1221	ND (0.0557)		8082A		1	04/17/14 3:21		CD41518
Aroclor 1232	ND (0.0557)		8082A		1	04/17/14 3:21		CD41518
Aroclor 1242	ND (0.0557)		8082A		1	04/17/14 3:21		CD41518
Aroclor 1248	**0.378** (0.0557)		8082A		1	04/17/14 3:21		CD41518
Aroclor 1254	ND (0.0557)		8082A		1	04/17/14 3:21		CD41518
Aroclor 1260	ND (0.0557)		8082A		1	04/17/14 3:21		CD41518
Aroclor 1262	ND (0.0557)		8082A		1	04/17/14 3:21		CD41518
Aroclor 1268	ND (0.0557)		8082A		1	04/17/14 3:21		CD41518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: X-12 12-24in
Date Sampled: 03/24/14 08:37
Percent Solids: 90
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0553)		8082A		1	04/17/14 3:40		CD41518
Aroclor 1221	ND (0.0553)		8082A		1	04/17/14 3:40		CD41518
Aroclor 1232	ND (0.0553)		8082A		1	04/17/14 3:40		CD41518
Aroclor 1242	ND (0.0553)		8082A		1	04/17/14 3:40		CD41518
Aroclor 1248	**0.533** (0.0553)		8082A		1	04/17/14 3:40		CD41518
Aroclor 1254	ND (0.0553)		8082A		1	04/17/14 3:40		CD41518
Aroclor 1260	ND (0.0553)		8082A		1	04/17/14 3:40		CD41518
Aroclor 1262	ND (0.0553)		8082A		1	04/17/14 3:40		CD41518
Aroclor 1268	ND (0.0553)		8082A		1	04/17/14 3:40		CD41518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: X-13 0-12in
Date Sampled: 03/24/14 08:25
Percent Solids: 90
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0564)		8082A		1	04/17/14 3:58		CD41518
Aroclor 1221	ND (0.0564)		8082A		1	04/17/14 3:58		CD41518
Aroclor 1232	ND (0.0564)		8082A		1	04/17/14 3:58		CD41518
Aroclor 1242	ND (0.0564)		8082A		1	04/17/14 3:58		CD41518
Aroclor 1248	**0.814** (0.0564)		8082A		1	04/17/14 3:58		CD41518
Aroclor 1254	ND (0.0564)		8082A		1	04/17/14 3:58		CD41518
Aroclor 1260	ND (0.0564)		8082A		1	04/17/14 3:58		CD41518
Aroclor 1262	ND (0.0564)		8082A		1	04/17/14 3:58		CD41518
Aroclor 1268	ND (0.0564)		8082A		1	04/17/14 3:58		CD41518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*107 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*103 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: F-31 12-24in
Date Sampled: 03/24/14 12:03
Percent Solids: 72
Initial Volume: 20.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-21
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0675)		8082A		1	04/17/14 4:17		CD41518
Aroclor 1221	ND (0.0675)		8082A		1	04/17/14 4:17		CD41518
Aroclor 1232	ND (0.0675)		8082A		1	04/17/14 4:17		CD41518
Aroclor 1242	ND (0.0675)		8082A		1	04/17/14 4:17		CD41518
Aroclor 1248	**2.34** (0.338)		8082A		5	04/17/14 19:44		CD41518
Aroclor 1254	ND (0.0675)		8082A		1	04/17/14 4:17		CD41518
Aroclor 1260	ND (0.0675)		8082A		1	04/17/14 4:17		CD41518
Aroclor 1262	ND (0.0675)		8082A		1	04/17/14 4:17		CD41518
Aroclor 1268	ND (0.0675)		8082A		1	04/17/14 4:17		CD41518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: P-47 12-24
Date Sampled: 03/24/14 11:30
Percent Solids: 30
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-23
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (8.26)		8082A		50	04/17/14 20:03		CD41518
Aroclor 1221	ND (8.26)		8082A		50	04/17/14 20:03		CD41518
Aroclor 1232	ND (8.26)		8082A		50	04/17/14 20:03		CD41518
Aroclor 1242	ND (8.26)		8082A		50	04/17/14 20:03		CD41518
Aroclor 1248	**111** (8.26)		8082A		50	04/17/14 20:03		CD41518
Aroclor 1254	ND (8.26)		8082A		50	04/17/14 20:03		CD41518
Aroclor 1260	ND (8.26)		8082A		50	04/17/14 20:03		CD41518
Aroclor 1262	ND (8.26)		8082A		50	04/17/14 20:03		CD41518
Aroclor 1268	ND (8.26)		8082A		50	04/17/14 20:03		CD41518

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-46 34-36in
Date Sampled: 03/24/14 11:42
Percent Solids: 88
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1403421
ESS Laboratory Sample ID: 1403421-26
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/15/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.26)		8082A		40	04/18/14 15:24		CD41518
Aroclor 1221	ND (2.26)		8082A		40	04/18/14 15:24		CD41518
Aroclor 1232	ND (2.26)		8082A		40	04/18/14 15:24		CD41518
Aroclor 1242	ND (2.26)		8082A		40	04/18/14 15:24		CD41518
Aroclor 1248	**25.1** (2.26)		8082A		40	04/18/14 15:24		CD41518
Aroclor 1254	ND (2.26)		8082A		40	04/18/14 15:24		CD41518
Aroclor 1260	ND (2.26)		8082A		40	04/18/14 15:24		CD41518
Aroclor 1262	ND (2.26)		8082A		40	04/18/14 15:24		CD41518
Aroclor 1268	ND (2.26)		8082A		40	04/18/14 15:24		CD41518

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*%*	*SD*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene	*%*	*SD*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*%*	*SD*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403421

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41517 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403421

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41517 - 3540C										
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403421

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41517 - 3540C										
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0177*		mg/kg wet	*0.02500*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0168*		mg/kg wet	*0.02500*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0177*		mg/kg wet	*0.02500*		*71*	*30-150*			
LCS										
Aroclor 1016	0.435	0.0500	mg/kg wet	0.5000		87	40-140			
Aroclor 1260	0.426	0.0500	mg/kg wet	0.5000		85	40-140			
Surrogate: Decachlorobiphenyl	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0166*		mg/kg wet	*0.02500*		*66*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0170*		mg/kg wet	*0.02500*		*68*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0171*		mg/kg wet	*0.02500*		*68*	*30-150*			
LCS Dup										
Aroclor 1016	0.423	0.0500	mg/kg wet	0.5000		85	40-140	3	30	
Aroclor 1260	0.430	0.0500	mg/kg wet	0.5000		86	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0189*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0169*		mg/kg wet	*0.02500*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0170*		mg/kg wet	*0.02500*		*68*	*30-150*			
Batch CD41518 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403421

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41518 - 3540C										
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403421

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41518 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0127*		mg/kg wet	*0.02500*		*51*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0121*		mg/kg wet	*0.02500*		*48*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0226*		mg/kg wet	*0.02500*		*90*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403421

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD41518 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS										
Aroclor 1016	0.583	0.0250	mg/kg wet	0.5000		117	40-140			
Aroclor 1260	0.564	0.0250	mg/kg wet	0.5000		113	40-140			
Surrogate: Decachlorobiphenyl	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0268*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
LCS Dup										
Aroclor 1016	0.537	0.0250	mg/kg wet	0.5000		107	40-140	8	30	
Aroclor 1260	0.543	0.0250	mg/kg wet	0.5000		109	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0219*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1403421

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1403421

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14030421
Date Project Due: ~~4/1/14~~ * 4/21/14
Days For Project: ~~5 Day~~ 19 days
eo 4/17/14

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **14.1**
   Iced With: **None**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes | No**
17. Were samples received intact? **Yes | No**
    ESS Sample IDs: _____
    Sub Lab: _____
    Analysis: _____
    TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
17	Yes	4 oz Soil Jar	1	NP
18	Yes	4 oz Soil Jar	1	NP
19	Yes	4 oz Soil Jar	1	NP
20	Yes	4 oz Soil Jar	1	NP
21	Yes	4 oz Soil Jar	1	NP
22	Yes	4 oz Soil Jar	1	NP
~~23~~ 16	Yes	4 oz Soil Jar	1	NP
24	Yes	4 oz Soil Jar	1	NP
25	Yes	4 oz Soil Jar	1	NP

Samples still on Hold

Sample and Cooler Receipt Checklist

Client: Tighe & Bond

ESS Project ID: 14030421

26	Yes	4 oz Soil Jar	1	NP
27	Yes	4 oz Soil Jar	1	NP
28	Yes	4 oz Soil Jar	1	NP
29	Yes	4 oz Soil Jar	1	NP
30	Yes	4 oz Soil Jar	1	NP

Completed By: HOL Date/Time: 4/15/14 0400

Reviewed By: [signature] Date/Time: 4/15/14 1039

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
(MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: 1403421

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH	8081 Pesticides / 8082 PCB / No Targets	8270 / 625 / 608 Pesticides	RCRA5 / RCRA8 / PP13 / 608 PCB	TCLP8 / MCP / MCPw/Hg / PAH only	NBC7 / TAL23							
1	3/24/2014	1142		X	S	T-36 24-36"	1	G				X											
(1) 2		1146				T-36 36-48"																	
(1) 3		1205				T-37 12-24"																	
4		0930				U-13 36-48"																	
5		1220				V-35 24-36"																	
(1) 6		1227				V-36 12-24"																	
(1) 7		1230				V-36 24-36"																	
(1) 8		1028				W-10 24-36"																	
(1) 9		1247				W-35 12-24"																	
10		1250				W-35 24-36"						X											

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present X Yes ___ No
Seals Intact ___ Yes ___ No NA: X
Cooler Temp: 14.1° No ICE 3/25/14

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb
*Hold Samples
(1) Samples off hold per client request. 4/15/14 @ ESS

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:34pm	[signature]	3/25/14 1330
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1500	[signature]	3/25/14 1615				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Turn Time: X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: 1403421
Electronic Deliverable: X Yes ___ No
Format: pdf/excel

Co. Name: Tighe & Bond
Project #: N-1011
Project Name (20 Char. or less): Polyply
Contact Person: Michael Martin
Address: 4 Barlows Landing Rd, Unit 15
City: Pocasset State: MA Zip: 02559
PO#:
Telephone #: 508-564-7285
Fax #: 508-564-4298
Email Address: memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / VPH	8100 TPH / 8015 DRO / 8015 GRO	8081 Pesticides / 8082 PCB / EPH	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7	608 Pesticides / No Targets	608 PCB						
(1) 11	3/24/2014	1255		X	S	W-35 36-48"	1	G				X											
12		1300				W-36 12-24"																	
13		1305				W-36 24-36"																	
(1) 14		1310				W-36 36-48"																	
(1) 15		1025				X-10 12-24"																	
(1) 16		0837				X-12 12-24"																	
(1) 17		0825				X-13 0-12"																	
18		1015				~~X-34~~ 12-24" ↔ Y-11																	
19		1200				D-47 24-36																	
20		1200		X		F-30 12-24																	

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present: X Yes ___ No
Seals Intact: ___ Yes ___ No NA: X
Cooler Temp: 14.1° NO ICE 3/25/14
Internal Use Only: [ ] Pickup [ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb
HOLD SAMPLES

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30pm	M. Mid	3/25/14 1330
M. Mid	3/25/14 1500	[signature]	3/25/14 1615				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Turn Time: X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm
ESS LAB PROJECT ID: 1403421
Electronic Deliverable: X Yes ___ No
Format: pdf/excel

Co. Name: Tighe & Bond
Project #: N-1011
Project Name (20 Char. or less): Polyply
Contact Person: Michael Martin
Address: 4 Barlows Landing Rd, Unit 15
City: Pocasset State: MA Zip: 02559
PO#:
Telephone #: 508-564-7285
Fax #: 508-564-4298
Email Address: memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / VPH	8100 TPH / 8015 DRO / 8015 GRO / EPH	8081 Pesticides / 8082 PCB / No Targets	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7	608 Pesticides / 608 PCB						
(1) 21	3/24/2014	1203		X	S	F-31 12-24"	1	G														
22		1215				J-48 0-12"																
(1) 23		1130				~~M-50 0-12"~~ dup P-47 12-24																
24		1132				P-48 12-24"																
25		1025				Q-13 36-48"																
(1) 26		1142				Q-46 24-36"																
27		1037				S-11 36-48"																
28		1040				T-12 36-48"																
29		1044				T-13 36-48"																
30		1106				U-12 36-48"																

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present: X Yes ___ No
Seals Intact: ___ Yes ___ No NA: X
Cooler Temp: 14.1° NO ICE w/ 3/25/14
Internal Use Only: [ ] Pickup [ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb
HOLD SAMPLES

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30pm	[signature]	3/25/14 1330
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1500	[signature]	3/25/14 1615				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

CERTIFICATE OF ANALYSIS

Michael Martin
Tighe & Bond
4 Barlows Landing Road, Unit 15
Pocasset, MA 02559

RE: Former Polyply New Bedford (N-1011)
ESS Laboratory Work Order Number: 1404659

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 5:01 pm, May 01, 2014

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1404659

SAMPLE RECEIPT

The following samples were received on April 28, 2014 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

For EPH soil samples, the aromatic range results have been corrected for identified cartridge contaminant in accordance with the CAM protocol.

These samples were originally received on hold on March 21, 2014, March 24, 2014 and March 25, 2014.

Lab Number	Sample Name	Matrix	Analysis
1404659-01	L-49 24-36	Soil	8082A
1404659-02	K-47 24-36	Soil	8082A
1404659-03	Q-44 24-36	Soil	8082A
1404659-04	Q-45 36-48	Soil	8082A
1404659-05	B-49 12-24	Soil	8082A
1404659-06	B-50 0-12	Soil	8082A
1404659-07	C-47 12-24	Soil	8082A
1404659-08	C-49 12-24	Soil	8082A
1404659-09	E-49 0-12	Soil	8082A
1404659-10	E-50 0-12	Soil	8082A
1404659-11	N-49 12-24	Soil	8082A
1404659-12	N-50 12-24	Soil	8082A
1404659-13	J-48 0-12in	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1404659

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1404659-01 **Surrogate recovery(ies) above upper control limit (S+).**
Decachlorobiphenyl (188% @ 30-150%)

1404659-02 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1248

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1404659

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1404659

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1404659-01 through 1404659-13**

Matrices: ( ) Ground Water/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) 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 B	( ) 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	(X) 8082 PCB CAM V A	( ) 6860 Perchlorate CAM VIII B	( ) 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) No ( )
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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	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 performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (X)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes (X) No ( )*

****All negative responses must be addressed in an attached laboratory 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: _____ Date: May 01, 2014
Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: L-49 24-36
Date Sampled: 03/20/14 14:00
Percent Solids: 14
Initial Volume: 29.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1404659
ESS Laboratory Sample ID: 1404659-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.237)		8082A		1	04/30/14 22:24		CD42905
Aroclor 1221	ND (0.237)		8082A		1	04/30/14 22:24		CD42905
Aroclor 1232	ND (0.237)		8082A		1	04/30/14 22:24		CD42905
Aroclor 1242	ND (0.237)		8082A		1	04/30/14 22:24		CD42905
Aroclor 1248	**0.827** (0.237)		8082A		1	04/30/14 22:24		CD42905
Aroclor 1254	ND (0.237)		8082A		1	04/30/14 22:24		CD42905
Aroclor 1260	ND (0.237)		8082A		1	04/30/14 22:24		CD42905
Aroclor 1262	ND (0.237)		8082A		1	04/30/14 22:24		CD42905
Aroclor 1268	ND (0.237)		8082A		1	04/30/14 22:24		CD42905

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*188 %*	*S+*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: K-47 24-36
Date Sampled: 03/20/14 14:10
Percent Solids: 15
Initial Volume: 29.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1404659
ESS Laboratory Sample ID: 1404659-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.228)		8082A		1	04/30/14 22:05		CD42905
Aroclor 1221	ND (0.228)		8082A		1	04/30/14 22:05		CD42905
Aroclor 1232	ND (0.228)		8082A		1	04/30/14 22:05		CD42905
Aroclor 1242	ND (0.228)		8082A		1	04/30/14 22:05		CD42905
Aroclor 1248	**P 0.298** (0.228)		8082A		1	04/30/14 22:05		CD42905
Aroclor 1254	ND (0.228)		8082A		1	04/30/14 22:05		CD42905
Aroclor 1260	ND (0.228)		8082A		1	04/30/14 22:05		CD42905
Aroclor 1262	ND (0.228)		8082A		1	04/30/14 22:05		CD42905
Aroclor 1268	ND (0.228)		8082A		1	04/30/14 22:05		CD42905

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-44 24-36
Date Sampled: 03/18/14 09:17
Percent Solids: 88
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1404659
ESS Laboratory Sample ID: 1404659-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0561)		8082A		1	04/30/14 15:48		CD42905
Aroclor 1221	ND (0.0561)		8082A		1	04/30/14 15:48		CD42905
Aroclor 1232	ND (0.0561)		8082A		1	04/30/14 15:48		CD42905
Aroclor 1242	ND (0.0561)		8082A		1	04/30/14 15:48		CD42905
Aroclor 1248	ND (0.0561)		8082A		1	04/30/14 15:48		CD42905
Aroclor 1254	ND (0.0561)		8082A		1	04/30/14 15:48		CD42905
Aroclor 1260	ND (0.0561)		8082A		1	04/30/14 15:48		CD42905
Aroclor 1262	ND (0.0561)		8082A		1	04/30/14 15:48		CD42905
Aroclor 1268	ND (0.0561)		8082A		1	04/30/14 15:48		CD42905

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: Q-45 36-48
Date Sampled: 03/18/14 09:37
Percent Solids: 70
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1404659
ESS Laboratory Sample ID: 1404659-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0713)		8082A		1	04/30/14 16:07		CD42905
Aroclor 1221	ND (0.0713)		8082A		1	04/30/14 16:07		CD42905
Aroclor 1232	ND (0.0713)		8082A		1	04/30/14 16:07		CD42905
Aroclor 1242	ND (0.0713)		8082A		1	04/30/14 16:07		CD42905
Aroclor 1248	ND (0.0713)		8082A		1	04/30/14 16:07		CD42905
Aroclor 1254	ND (0.0713)		8082A		1	04/30/14 16:07		CD42905
Aroclor 1260	ND (0.0713)		8082A		1	04/30/14 16:07		CD42905
Aroclor 1262	ND (0.0713)		8082A		1	04/30/14 16:07		CD42905
Aroclor 1268	ND (0.0713)		8082A		1	04/30/14 16:07		CD42905

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-49 12-24
Date Sampled: 03/21/14 10:48
Percent Solids: 20
Initial Volume: 29.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1404659
ESS Laboratory Sample ID: 1404659-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0837)		8082A		1	04/30/14 16:45		CD42905
Aroclor 1221	ND (0.0837)		8082A		1	04/30/14 16:45		CD42905
Aroclor 1232	ND (0.0837)		8082A		1	04/30/14 16:45		CD42905
Aroclor 1242	ND (0.0837)		8082A		1	04/30/14 16:45		CD42905
Aroclor 1248	ND (0.0837)		8082A		1	04/30/14 16:45		CD42905
Aroclor 1254	ND (0.0837)		8082A		1	04/30/14 16:45		CD42905
Aroclor 1260	ND (0.0837)		8082A		1	04/30/14 16:45		CD42905
Aroclor 1262	ND (0.0837)		8082A		1	04/30/14 16:45		CD42905
Aroclor 1268	ND (0.0837)		8082A		1	04/30/14 16:45		CD42905

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*54 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*42 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: B-50 0-12
Date Sampled: 03/21/14 10:50
Percent Solids: 21
Initial Volume: 29.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1404659
ESS Laboratory Sample ID: 1404659-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.165)		8082A		1	04/30/14 17:23		CD42905
Aroclor 1221	ND (0.165)		8082A		1	04/30/14 17:23		CD42905
Aroclor 1232	ND (0.165)		8082A		1	04/30/14 17:23		CD42905
Aroclor 1242	ND (0.165)		8082A		1	04/30/14 17:23		CD42905
Aroclor 1248	**0.207** (0.165)		8082A		1	04/30/14 17:23		CD42905
Aroclor 1254	ND (0.165)		8082A		1	04/30/14 17:23		CD42905
Aroclor 1260	ND (0.165)		8082A		1	04/30/14 17:23		CD42905
Aroclor 1262	ND (0.165)		8082A		1	04/30/14 17:23		CD42905
Aroclor 1268	ND (0.165)		8082A		1	04/30/14 17:23		CD42905

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*40 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*42 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-47 12-24
Date Sampled: 03/21/14 10:10
Percent Solids: 18
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1404659
ESS Laboratory Sample ID: 1404659-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.185)		8082A		1	04/30/14 17:42		CD42905
Aroclor 1221	ND (0.185)		8082A		1	04/30/14 17:42		CD42905
Aroclor 1232	ND (0.185)		8082A		1	04/30/14 17:42		CD42905
Aroclor 1242	ND (0.185)		8082A		1	04/30/14 17:42		CD42905
Aroclor 1248	**0.494** (0.185)		8082A		1	04/30/14 17:42		CD42905
Aroclor 1254	ND (0.185)		8082A		1	04/30/14 17:42		CD42905
Aroclor 1260	ND (0.185)		8082A		1	04/30/14 17:42		CD42905
Aroclor 1262	ND (0.185)		8082A		1	04/30/14 17:42		CD42905
Aroclor 1268	ND (0.185)		8082A		1	04/30/14 17:42		CD42905

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*59 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*55 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: C-49 12-24
Date Sampled: 03/21/14 10:16
Percent Solids: 18
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1404659
ESS Laboratory Sample ID: 1404659-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0925)		8082A		1	04/30/14 18:00		CD42905
Aroclor 1221	ND (0.0925)		8082A		1	04/30/14 18:00		CD42905
Aroclor 1232	ND (0.0925)		8082A		1	04/30/14 18:00		CD42905
Aroclor 1242	ND (0.0925)		8082A		1	04/30/14 18:00		CD42905
Aroclor 1248	**0.162** (0.0925)		8082A		1	04/30/14 18:00		CD42905
Aroclor 1254	ND (0.0925)		8082A		1	04/30/14 18:00		CD42905
Aroclor 1260	ND (0.0925)		8082A		1	04/30/14 18:00		CD42905
Aroclor 1262	ND (0.0925)		8082A		1	04/30/14 18:00		CD42905
Aroclor 1268	ND (0.0925)		8082A		1	04/30/14 18:00		CD42905

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*39 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*39 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*43 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-49 0-12
Date Sampled: 03/21/14 09:31
Percent Solids: 19
Initial Volume: 29.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1404659
ESS Laboratory Sample ID: 1404659-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0906)		8082A		1	04/30/14 18:19		CD42905
Aroclor 1221	ND (0.0906)		8082A		1	04/30/14 18:19		CD42905
Aroclor 1232	ND (0.0906)		8082A		1	04/30/14 18:19		CD42905
Aroclor 1242	ND (0.0906)		8082A		1	04/30/14 18:19		CD42905
Aroclor 1248	**0.135** (0.0906)		8082A		1	04/30/14 18:19		CD42905
Aroclor 1254	ND (0.0906)		8082A		1	04/30/14 18:19		CD42905
Aroclor 1260	ND (0.0906)		8082A		1	04/30/14 18:19		CD42905
Aroclor 1262	ND (0.0906)		8082A		1	04/30/14 18:19		CD42905
Aroclor 1268	ND (0.0906)		8082A		1	04/30/14 18:19		CD42905

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*30 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*30 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*34 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*34 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: E-50 0-12
Date Sampled: 03/21/14 09:35
Percent Solids: 18
Initial Volume: 29.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1404659
ESS Laboratory Sample ID: 1404659-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.190)		8082A		1	04/30/14 18:38		CD42905
Aroclor 1221	ND (0.190)		8082A		1	04/30/14 18:38		CD42905
Aroclor 1232	ND (0.190)		8082A		1	04/30/14 18:38		CD42905
Aroclor 1242	ND (0.190)		8082A		1	04/30/14 18:38		CD42905
Aroclor 1248	**0.192** (0.190)		8082A		1	04/30/14 18:38		CD42905
Aroclor 1254	ND (0.190)		8082A		1	04/30/14 18:38		CD42905
Aroclor 1260	ND (0.190)		8082A		1	04/30/14 18:38		CD42905
Aroclor 1262	ND (0.190)		8082A		1	04/30/14 18:38		CD42905
Aroclor 1268	ND (0.190)		8082A		1	04/30/14 18:38		CD42905

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*53 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-49 12-24
Date Sampled: 03/21/14 13:10
Percent Solids: 17
Initial Volume: 30
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1404659
ESS Laboratory Sample ID: 1404659-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/14 18:00
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.201)		8082A		1	04/30/14 18:57		CD42905
Aroclor 1221	ND (0.201)		8082A		1	04/30/14 18:57		CD42905
Aroclor 1232	ND (0.201)		8082A		1	04/30/14 18:57		CD42905
Aroclor 1242	ND (0.201)		8082A		1	04/30/14 18:57		CD42905
Aroclor 1248	**0.637** (0.201)		8082A		1	04/30/14 18:57		CD42905
Aroclor 1254	ND (0.201)		8082A		1	04/30/14 18:57		CD42905
Aroclor 1260	ND (0.201)		8082A		1	04/30/14 18:57		CD42905
Aroclor 1262	ND (0.201)		8082A		1	04/30/14 18:57		CD42905
Aroclor 1268	ND (0.201)		8082A		1	04/30/14 18:57		CD42905

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*57 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: N-50 12-24
Date Sampled: 03/21/14 13:12
Percent Solids: 13
Initial Volume: 20.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1404659
ESS Laboratory Sample ID: 1404659-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/14 18:32
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.395)		8082A		1	04/30/14 23:03		CD42906
Aroclor 1221	ND (0.395)		8082A		1	04/30/14 23:03		CD42906
Aroclor 1232	ND (0.395)		8082A		1	04/30/14 23:03		CD42906
Aroclor 1242	ND (0.395)		8082A		1	04/30/14 23:03		CD42906
Aroclor 1248	**0.513** (0.395)		8082A		1	04/30/14 23:03		CD42906
Aroclor 1254	ND (0.395)		8082A		1	04/30/14 23:03		CD42906
Aroclor 1260	ND (0.395)		8082A		1	04/30/14 23:03		CD42906
Aroclor 1262	ND (0.395)		8082A		1	04/30/14 23:03		CD42906
Aroclor 1268	ND (0.395)		8082A		1	04/30/14 23:03		CD42906

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*63 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
Client Sample ID: J-48 0-12in
Date Sampled: 03/24/14 12:15
Percent Solids: 18
Initial Volume: 29.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1404659
ESS Laboratory Sample ID: 1404659-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TAJ
Prepared: 4/29/14 18:32
Cleanup Method: 3665A

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.193)		8082A		1	04/30/14 23:22		CD42906
Aroclor 1221	ND (0.193)		8082A		1	04/30/14 23:22		CD42906
Aroclor 1232	ND (0.193)		8082A		1	04/30/14 23:22		CD42906
Aroclor 1242	ND (0.193)		8082A		1	04/30/14 23:22		CD42906
Aroclor 1248	**2.15** (0.193)		8082A		1	04/30/14 23:22		CD42906
Aroclor 1254	ND (0.193)		8082A		1	04/30/14 23:22		CD42906
Aroclor 1260	ND (0.193)		8082A		1	04/30/14 23:22		CD42906
Aroclor 1262	ND (0.193)		8082A		1	04/30/14 23:22		CD42906
Aroclor 1268	ND (0.193)		8082A		1	04/30/14 23:22		CD42906

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1404659

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD42905 - 3540C										
Blank										
Aroclor 1016	ND	0.0250	mg/kg wet							
Aroclor 1016 (1)	ND	0.0250	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (2)	ND	0.0250	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (3)	ND	0.0250	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (4)	ND	0.0250	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1016 (5)	ND	0.0250	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221	ND	0.0250	mg/kg wet							
Aroclor 1221 (1)	ND	0.0250	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (2)	ND	0.0250	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (3)	ND	0.0250	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (4)	ND	0.0250	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1221 (5)	ND	0.0250	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232	ND	0.0250	mg/kg wet							
Aroclor 1232 (1)	ND	0.0250	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (2)	ND	0.0250	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (3)	ND	0.0250	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (4)	ND	0.0250	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1232 (5)	ND	0.0250	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242	ND	0.0250	mg/kg wet							
Aroclor 1242 (1)	ND	0.0250	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (2)	ND	0.0250	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (3)	ND	0.0250	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (4)	ND	0.0250	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1242 (5)	ND	0.0250	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1404659

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD42905 - 3540C										
Aroclor 1248	ND	0.0250	mg/kg wet							
Aroclor 1248 (1)	ND	0.0250	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (2)	ND	0.0250	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (3)	ND	0.0250	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (4)	ND	0.0250	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1248 (5)	ND	0.0250	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254	ND	0.0250	mg/kg wet							
Aroclor 1254 (1)	ND	0.0250	mg/kg wet							
Aroclor 1254 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (2)	ND	0.0250	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (3)	ND	0.0250	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (4)	ND	0.0250	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1254 (5)	ND	0.0250	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260	ND	0.0250	mg/kg wet							
Aroclor 1260 (1)	ND	0.0250	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (2)	ND	0.0250	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (3)	ND	0.0250	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (4)	ND	0.0250	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1260 (5)	ND	0.0250	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262	ND	0.0250	mg/kg wet							
Aroclor 1262 (1)	ND	0.0250	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (2)	ND	0.0250	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (3)	ND	0.0250	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (4)	ND	0.0250	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1262 (5)	ND	0.0250	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268	ND	0.0250	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1404659

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD42905 - 3540C										
Aroclor 1268 (1)	ND	0.0250	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (2)	ND	0.0250	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (3)	ND	0.0250	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (4)	ND	0.0250	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0250	mg/kg wet							
Aroclor 1268 (5)	ND	0.0250	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0250	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0209*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0188*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0194*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
LCS										
Aroclor 1016	0.508	0.0250	mg/kg wet	0.5000		102	40-140			
Aroclor 1260	0.482	0.0250	mg/kg wet	0.5000		96	40-140			
Surrogate: Decachlorobiphenyl	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0226*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS Dup										
Aroclor 1016	0.682	0.0250	mg/kg wet	0.5000		136	40-140	29	30	
Aroclor 1260	0.497	0.0250	mg/kg wet	0.5000		99	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Batch CD42906 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1016 (1)	ND	0.0500	mg/kg wet							
Aroclor 1016 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (2)	ND	0.0500	mg/kg wet							
Aroclor 1016 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (3)	ND	0.0500	mg/kg wet							
Aroclor 1016 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (4)	ND	0.0500	mg/kg wet							
Aroclor 1016 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1016 (5)	ND	0.0500	mg/kg wet							
Aroclor 1016 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1404659

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD42906 - 3540C										
Aroclor 1221 (1)	ND	0.0500	mg/kg wet							
Aroclor 1221 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (2)	ND	0.0500	mg/kg wet							
Aroclor 1221 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (3)	ND	0.0500	mg/kg wet							
Aroclor 1221 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (4)	ND	0.0500	mg/kg wet							
Aroclor 1221 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1221 (5)	ND	0.0500	mg/kg wet							
Aroclor 1221 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1232 (1)	ND	0.0500	mg/kg wet							
Aroclor 1232 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (2)	ND	0.0500	mg/kg wet							
Aroclor 1232 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (3)	ND	0.0500	mg/kg wet							
Aroclor 1232 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (4)	ND	0.0500	mg/kg wet							
Aroclor 1232 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1232 (5)	ND	0.0500	mg/kg wet							
Aroclor 1232 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1242 (1)	ND	0.0500	mg/kg wet							
Aroclor 1242 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (2)	ND	0.0500	mg/kg wet							
Aroclor 1242 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (3)	ND	0.0500	mg/kg wet							
Aroclor 1242 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (4)	ND	0.0500	mg/kg wet							
Aroclor 1242 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1242 (5)	ND	0.0500	mg/kg wet							
Aroclor 1242 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1248 (1)	ND	0.0500	mg/kg wet							
Aroclor 1248 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (2)	ND	0.0500	mg/kg wet							
Aroclor 1248 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (3)	ND	0.0500	mg/kg wet							
Aroclor 1248 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (4)	ND	0.0500	mg/kg wet							
Aroclor 1248 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1248 (5)	ND	0.0500	mg/kg wet							
Aroclor 1248 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1254 (1)	ND	0.0500	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1404659

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD42906 - 3540C										
Aroclor 1254 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (2)	ND	0.0500	mg/kg wet							
Aroclor 1254 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (3)	ND	0.0500	mg/kg wet							
Aroclor 1254 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (4)	ND	0.0500	mg/kg wet							
Aroclor 1254 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1254 (5)	ND	0.0500	mg/kg wet							
Aroclor 1254 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1260 (1)	ND	0.0500	mg/kg wet							
Aroclor 1260 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (2)	ND	0.0500	mg/kg wet							
Aroclor 1260 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (3)	ND	0.0500	mg/kg wet							
Aroclor 1260 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (4)	ND	0.0500	mg/kg wet							
Aroclor 1260 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1260 (5)	ND	0.0500	mg/kg wet							
Aroclor 1260 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1262 (1)	ND	0.0500	mg/kg wet							
Aroclor 1262 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (2)	ND	0.0500	mg/kg wet							
Aroclor 1262 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (3)	ND	0.0500	mg/kg wet							
Aroclor 1262 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (4)	ND	0.0500	mg/kg wet							
Aroclor 1262 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1262 (5)	ND	0.0500	mg/kg wet							
Aroclor 1262 (5) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Aroclor 1268 (1)	ND	0.0500	mg/kg wet							
Aroclor 1268 (1) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (2)	ND	0.0500	mg/kg wet							
Aroclor 1268 (2) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (3)	ND	0.0500	mg/kg wet							
Aroclor 1268 (3) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (4)	ND	0.0500	mg/kg wet							
Aroclor 1268 (4) [2C]	ND	0.0500	mg/kg wet							
Aroclor 1268 (5)	ND	0.0500	mg/kg wet							
Aroclor 1268 (5) [2C]	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.00805*		mg/kg wet	*0.02500*		*32*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.00859*		mg/kg wet	*0.02500*		*34*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1404659

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CD42906 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0275*		mg/kg wet	*0.02500*		*110*	*30-150*			
LCS										
Aroclor 1016	0.469	0.0500	mg/kg wet	0.5000		94	40-140			
Aroclor 1260	0.408	0.0500	mg/kg wet	0.5000		82	40-140			
Surrogate: Decachlorobiphenyl	*0.0180*		mg/kg wet	*0.02500*		*72*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0175*		mg/kg wet	*0.02500*		*70*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0246*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
LCS Dup										
Aroclor 1016	0.479	0.0500	mg/kg wet	0.5000		96	40-140	2	30	
Aroclor 1260	0.390	0.0500	mg/kg wet	0.5000		78	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0168*		mg/kg wet	*0.02500*		*67*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0177*		mg/kg wet	*0.02500*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0229*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford
ESS Laboratory Work Order: 1404659

Notes and Definitions

U	Analyte included in the analysis, but not detected
S+	Surrogate recovery(ies) above upper control limit (S+).
P	Percent difference between primary and confirmation results exceeds 40% (P).
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: Former Polyply New Bedford

ESS Laboratory Work Order: 1404659

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist

Client: Tighe & Bond
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 14040659
Date Project Due: ~~5/5/14~~ 5/1/14
Days For Project: ~~5 Day~~ 3 days

Items to be checked upon receipt:

1. Air Bill Manifest Present? *** No**
   Air No.:
2. Were Custody Seals Present? **No**
3. Were Custody Seals Intact? **N/A**
4. Is Radiation count < 100 CPM? **Yes**
5. Is a cooler present? **Yes**
   Cooler Temp: **1.6**
   Iced With: **Ice**
6. Was COC included with samples? **Yes**
7. Was COC signed and dated by client? **Yes**
8. Does the COC match the sample **Yes**
9. Is COC complete and correct? **Yes**
10. Are the samples properly preserved? **Yes**
11. Proper sample containers used? **Yes**
12. Any air bubbles in the VOA vials? **N/A**
13. Holding times exceeded? **No**
14. Sufficient sample volumes? **Yes**
15. Any Subcontracting needed? **No**
16. Are ESS labels on correct containers? **Yes** | **No**
17. Were samples received intact? **Yes** | **No**

ESS Sample IDs: _____
Sub Lab: _____
Analysis: _____
TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

Relog

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP

Completed By: [signature] Date/Time: 4/28/14 1640
Reviewed By: [signature] Date/Time: 4/28/14 1718

1404659 ~~2 of 82~~ 1 of 6 as 4/28/14 as 4/28/14

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403342

Turn Time X Standard Other

Reporting Limits - < 1 ppm

Regulatory State: (MA) RI CT NH NJ NY ME Other

Is this project for any of the following:(please circle)
(MA-MCP) Navy USACE CT DEP Other TSCA

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond
Project #: N-1011
Project Name: Polyply
Contact Person: Mike Martin
Address: 4 Barlows
City:
State:
Zip:
PO #:
Tel.:
Fax.:
email:

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	Analysis: PCBs
11	3/20/14	1354	Grab	Soil	L-47 (24-36)	NP	1	Glass	4 oz	X
12		1400			L-49 (24-36)					
13		1335			M-48 (24-36)					
14		1342			M-49 (24-36)					
15		1057			M-40 (60-72)					
16		1047			M-39 (60-72)					
17		1050			M-39 (94-96)					
18		1135			N-41 (60-72)					
19		1407			K-47 (12-24)					
20	3/20/14	1410			K-47 (24-36)					

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ___ No

Seals Intact ___ Yes ___ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 CEKH

Internal Use Only
[✓] Pickup
[ ] Technician

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-

Sampled by: Holly Lamb

Comments: TSCA Extraction *HOLD*

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
3/21/14 0935		COOLER 3/21/14 09:44	K. Gillahan 3/21/14 09:44
K. Gillahan 3/21/14 10:44	M. [illegible] 3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

1404659 ~~4 of 5~~ 2 of ~~2~~ 6

ESS Laboratory

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CHAIN OF CUSTODY

ESS Lab # ~~1403343~~ CT 4/28/14

Turn Time X Standard Other_____

Regulatory State: MA RI CT NH NJ NY ME Other_____

Is this project for any of the following:(please circle) MA-MCP Navy USACE CT DEP Other TSCA

Reporting Limits - < 1 ppm

Electonic Deliverables Excel Access PDF

Co. Name Tighe & Bond	Project # N-1011	Project Name Polyply	
Contact Person Mike Martin	Address 4 Barlows Landing Rd		
City Pocasset	State MA	Zip 02559	PO #
Tel.	Fax.	email:	

Analysis: PCBs

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
~~1~~	~~3/20/14~~	~~0822~~	~~Grab~~	~~Soil~~	~~X-34 (36-48)~~	~~NP~~	~~1~~	~~Glass~~	~~4oz~~	~~*~~ * EO 3/24/14
09	↓	0848	↓	↓	T-35 (48-60)	↓	↓	↓	↓	↓
10	↓	0905	↓	↓	U-34 (0905)	↓	↓	↓	↓	↓
11	3/18/14	1320	↓	↓	X-35 (24-36)	↓	↓	↓	↓	↓
12	↓	1230	↓	↓	X-36 (12-24)	↓	↓	↓	↓	↓
13	↓	1235	↓	↓	X-36 (24-36)	↓	↓	↓	↓	↓
14	↓	1315	↓	↓	X-35 (12-24)	↓	↓	↓	↓	↓
15	↓	0912	↓	↓	Q-44 (12-24)	↓	↓	↓	↓	↓
16	↓	0917	↓	↓	Q-44 (24-36)	↓	↓	↓	↓	↓
17	↓	0930	↓	↓	Q-45 (12-24)	↓	↓	↓	↓	↓

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 ICE KH

Internal Use Only: [✓] Pickup [ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by: Holli Lomb

Comments: TSCA Extraction * HOLD *

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
[signature] 3/21/14		COOLER 3/21/14 09:44	[signature] 3/21/14 09:44
[signature] 3/21/14 10:44	[signature] 3/21/14 1044		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

3 of 6 1404659 ~~5 of 5 1 of 2~~ 1

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1403344 → CJ 4/28/14

Turn Time X Standard Other ____

Regulatory State: MA RI CT NH NJ NY ME Other ____

Is this project for any of the following:(please circle) MA-MCP Navy USACE CT DEP Other TSCA

Reporting Limits - < 1 ppm

Electonic Deliverables Excel Access PDF

Co. Name: Tighe & Bond	Project #: N-1011	Project Name: Polyply	
Contact Person: Mike Martin	Address: 4 Barlows Landing Rd		
City: Pocasset	State: MA	Zip: 02559	PO #:
Tel.	Fax.	email:	

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	PCBs
4 ~~01~~	3/19/14	0937	Grab	Soil	Q-45 (36-48)	NP	1	Glass	4 oz	X
CJ 4/28/14 02	3/17/14	1330	↓	↓	P-43 (12-24)	↓	↓	↓	↓	↓
03	3/18/14	1332	↓	↓	U-35 (24-36)	↓	↓	↓	↓	↓
1 04	↓	1335	↓	↓	U-35 (36-48)	↓	↓	↓	↓	↓
05	↓	1340	↓	↓	U-35 (48-60)	↓	↓	↓	↓	↓
06	↓	0933	↓	↓	Q-45 (24-36)	↓	↓	↓	↓	↓
07	3/20/14	0823	↓	↓	W-34 (12-24)	↓	↓	↓	↓	↓
1 08	↓	0802			V-34 (12-24)	↓	↓	↓	↓	↓
1 09	↓	0805			V-34 (24-36)	↓	↓	↓	↓	↓
CJ 4/28/14										

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA: ✓

Cooler Temperature: 1.6+5.0+2.0 Ice KH

Internal Use Only

[✓] Pickup

[ ] Technician ____

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-____

Sampled by: Holli Lamb OOff Hold per client request. 4/15/14 (LC) ESS

Comments: TSCA Extraction *HOLD*

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
[signature] 3/21/14		K. Hallahan 3/21/14 09:44	K. Hallahan 3/21/14 09:44
K. Hallahan 3/21/14 10:44	[signature] 3/21/14 10:44		

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

1404659 ~~2 of 3~~ 4 of 6 3/24/14

Page ~~10~~ of ~~12~~

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
(MA) RI CT NH NJ NY ME Other _____

Is this project for any of the following:
(MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: ~~1403386~~

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH	8081 Pesticides / 8082 PCB / No Targets	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13	TCLP8 / MCP / MCPw/Hg	TAL23 / NBC7	608 PCB / 608 Pesticides
5	3/21/2014	1048		X	S	B-49 (12-24)	1	G				✓					
6		1050				B-50 (0-12)											
7		1003				C-43 (12-24)											
8		1003				C-44 (12-24)											
9		1005				C-45 (12-24)											
10		1008				C-46 (12-24)											
11		1010				C-47 (12-24)											
12		1016				C-49 (12-24)											
13		0940				D-43 (12-24)											
14	3/21/14	0943				D-44 (12-24)						✓					

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: 3.8 +3.9 ICE KH

Internal Use Only
[✓] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

HOLD SAMPLES

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			Cooler	3/24/14 10:05	K. Callahan	3/24/14 10:05
K. Callahan	3/24/14 10:59	[signature]	3/24/14 11:05				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

1404659 ~~3-2-3~~ 5 of 6

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CHAIN OF CUSTODY

Page ~~12~~ of ~~12~~ 3/24/14

Turn Time X Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other ____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: ~~1403386~~ 4/28/14

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

	ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 624 524.2	8021 MTBE/BTEX 8015 GRO VPH	8100 TPH 8015 DRO EPH No Targets	8081 Pesticides 8082 PCB 608 Pesticides 608 PCB	8270 625 PAH only	RCRA5 RCRA8 PP13 TAL23	TCLP8 MCP MCPw/Hg NBC7
9	15	3/21/2014	0931		X	S	E-49 (0-12)	1	G				X			
10	16		0935				E-50 (0-12)									
11	17		1300				N-47 (12-24)									
12	18		1305				N-48 (12-24)									
	19		1310				N-49 (12-24)									
	20		1312				N-50 (12-24)									
	21		1315				O-51 (0-12)									
	22		1318				P-50 (0-12)									

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp 2.1 F3.8 F3.9 ICE KH
Internal Use Only [✓] Pickup [ ] Technicians ____

Comments: TSCA Extraction
Sampled by Holli Lamb
HOLD SAMPLES

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/24/14			COOLER	3/24/14 10:05	K. Hallahan	3/24/14 10:05
K. Hallahan	3/24/14 10:59	[signature]	3/24/14 1105				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

ESS Laboratory

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Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

1404659 6 of 6
Page ~~3 of 3~~ cdj 4/28/14

Turn Time X Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____
State where samples were collected from: (MA) RI CT NH NJ NY ME Other _____
Is this project for any of the following: (MA-MCP*) Navy USACE Other TSCA

Reporting Limits: PCBs < 1 ppm

ESS LAB PROJECT ID: ~~1403421~~ cdj 4/28/14

Electronic Deliverable: X Yes ___ No Format pdf/excel

Co. Name	Project #	Project Name (20 Char. or less)
Tighe & Bond	N-1011	Polyply

Contact Person	Address
Michael Martin	4 Barlows Landing Rd, Unit 15

City	State	Zip	PO#
Pocasset	MA	02559	

Telephone #	Fax #	Email Address
508-564-7285	508-564-4298	memartin@tighebond.com

Circle and/or Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	8260 / 624 / 524.2	8021 MTBE/BTEX / 8015 GRO / VPH	8100 TPH / 8015 DRO / EPH / No Targets	8081 Pesticides / 8082 PCB / 608 Pesticides / 608 PCB	8270 / 625 / PAH only	RCRA5 / RCRA8 / PP13 / TAL23	TCLP8 / MCP / MCPw/Hg / NBC7							
2	3/24/2014	1203		X	S	F-31 12-24"	1	G														
22		1215				J-48 0-12"																
23		1130				~~M-50 0-12"~~ P-47 12-24																
24		1132				P-48 12-24"																
25		1025				Q-13 36-48"																
26		1142				Q-46 24-36"																
27		1037				S-11 36-48"																
28		1040				T-12 36-48"																
29		1044				T-13 36-48"																
30		1106				U-12 36-48"																

cdj 4/28/14

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present X Yes ___ No
Seals Intact ___ Yes ___ No NA: X
Cooler Temp: 14.1 NO ICE w 3/25/14

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments: TSCA Extraction
Sampled by Holli Lamb

HOLD SAMPLES

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1200	[signature]	3/25/14 1pm	[signature]	3/25/14 1:30pm	[signature]	3/25/14 1330
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	3/25/14 1500	[signature]	3/25/14 1615				

*MADEP requires that all additional calibrated analytes found during analysis be disclosed.

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

Tighe&Bond

APPENDIX E

N-10111-01
August 6, 2015

Mayor Jon Mitchell
City of New Bedford
133 William Street
New Bedford, MA 02740

Re: **Public Notification Letter**
Former Polymerine Facility
241 Duchaine Boulevard
New Bedford, Massachusetts
RTN 4-1347

Dear Mayor Mitchell:

In accordance with requirements of the Massachusetts Department of Environmental Protection (DEP) and the Public Notification Procedures of the Massachusetts Contingency Plan (MCP 310 CMR 40.1403(3) (a) and (e), we are writing to notify you of the submittal to Massachusetts Department of Environmental Protection (MassDEP) of a Phase IV Remedy Implementation Plan (RIP) for the site referenced above.

The Massachusetts Department of Environmental Protection (MassDEP) first assigned Release Tracking Number (RTN) 4-1347 to the site in October 1993 for the release of polychlorinated biphenyls (PCBs) to site soils. The source of the PCB contamination was identified as the PCB-containing oil used in manufacturing operations at the site.

As you are aware, the City of New Bedford is the current owner of the site, and is conducting building demolition and site cleanup through funding from MassDevelopment. Tighe & Bond is currently serving as the environmental consultant and Licensed Site Professional (LSP) for this project, with Michele Paul serving as our City contact.

In general, the proposed cleanup plan will involve demolition of the abandoned site building, excavation and off-site disposal of the higher impacted soils, consolidation of the remaining impacted soils to the reduced the footprint of impacts, and the installation of a permanent capping system over the consolidated impacted soil area. Due to project funding constraints, the cleanup plan generally does not include addressing PCB impacts within the wetland (i.e., Hobomock Swamp) that abuts the site. The building demolition is scheduled to begin in late fall of 2015, and the cleanup work is tentatively scheduled to begin in late winter/early spring of 2015.

A copy of this report is provided to City in accordance with our contract. The report can be reviewed on-line at http://public.dep.state.ma.us/SearchableSites2/Search.aspx using site RTN 4-1347 in the search. A copy is also available for public review at the Southeast Region office of the Massachusetts Department of Environmental Protection at 20 Riverside Drive in Lakeville. Public file review sessions can also be scheduled by appointment. For more information about file review, please call the MassDEP Service Center at 508-946-2700. If you have any questions or comments relative to this correspondence or would like to obtain a copy of the report, please contact the undersigned at (413) 562-1600.

Very truly yours,

TIGHE & BOND, INC.

Todd D. Kirton

53 Southampton Road • Westfield, MA 01085-5308 • Tel 413.562.1600 • Fax 413.562.5317

Senior Hydrogeologist

Enclosures
Copy: Michele Paul; Director of Environmental Stewardship, City of New Bedford
Brenda Weis; Director of Health Department, City of New Bedford
MassDEP Southeast Region Office

J:\N\N1011 New Bedford\PCB_TSCA\PCB Cleanup Plan\Appendix E_Public Notice\Pubnot Letter.Doc

Tighe&Bond

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throughout New England.

www.tighebond.com