PRELIMINARY SITE CHARACTERIZATION AND SELF-IMPLEMENTING CLEANUP PLAN

PAWTUCKET 1 NO. 107 SUBSTATION - CONTROL HOUSE

6 THORNTON STREET

PAWTUCKET, RHODE ISLAND

SUBMITTED TO:

United States Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code: LCRD07-2
Boston, Massachusetts 02109-3912

ON BEHALF OF:

The Narragansett Electric Company
William Howard
Principal Environmental Scientist
280 Melrose Street
Providence, Rhode Island 02907

PREPARED BY:

April 14, 2022
Coneco Project No. 5675.F.101

CONECO
Engineers & Scientists

ENVIRONMENTAL
ECOLOGICAL
SURVEY
CIVIL

April 14, 2022
Coneco Project No. 5675.F.101

United States Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code: LCRD07-2
Boston, Massachusetts 02109-3912

RE: **Preliminary Site Characterization and Self-Implementing Cleanup Plan**
Pawtucket 1 No. 107 Substation - Control House
6 Thornton Street
Pawtucket, Rhode Island

To Whom It May Concern:

On behalf of The Narragansett Electric Company, Coneco Engineers & Scientists, Incorporated respectfully submits the following Preliminary Site Characterization and Self-Implementing Cleanup Plan to address polychlorinated biphenyl (PCB) concentrations identified in building materials associated with the Control House situated within the Pawtucket 1 No. 107 Substation, located at 6 Thornton Street in Pawtucket, Rhode Island. The proposed plan is intended to dispose of PCB Remediation Waste in accordance with 40 CFR 761.61(a) during the proposed demolition of the Control House. Procedures cited in this report are consistent with those specified in the Toxic Substances Control Act, 40 CFR 761 and the Rhode Island Department of Environmental Management *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases*.

If you have any questions or require additional information regarding this submittal, please contact the undersigned.

Respectfully Submitted,
Coneco Engineers & Scientists, Incorporated

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1.0 INTRODUCTION

The following Preliminary Site Characterization and Self-Implementing Cleanup Plan has been prepared by Coneco Engineers & Scientists, Incorporated (Coneco) and is submitted on behalf of The Narragansett Electric Company (TNEC) to address polychlorinated biphenyl (PCB) concentrations identified in building materials at the Pawtucket 1 No. 107 Substation, located at 6 Thornton Street in Pawtucket, Rhode Island, hereinafter the "Site." The "Property" is defined as the approximately 10.3-acre parcel owned by TNEC identified as Lot 645 on Pawtucket Assessor's Plat Map 65. The north-central portion of the Property is occupied by the Pawtucket 1 No. 107 Substation (the Site). The five-story brick control house at the Site in which regulated concentrations of PCBs have been identified in building materials, and the subject of this investigation, is hereinafter defined as the "Control House."

Characterization activities were initiated at the request of TNEC in advance of the proposed demolition of the existing Control House. The purpose of initial characterization activities was to establish if building materials associated with the Control House contain certain hazardous materials which may be regulated for disposal in accordance with applicable state and/or federal regulations. Findings of initial characterization activities identified PCB Remediation Waste in accessible building materials associated with the Control House. At this time, the Control House is utilized for substation operations and contains energized electrical equipment. The Control House is scheduled to be de-energized in the Winter of 2022 and electrical equipment will be subsequently removed. At that time, Coneco will conduct additional assessment in previously inaccessible areas of the Control House (i.e., inaccessible due to safety considerations relative to energized electrical equipment). The purpose of this report is to document initial assessment findings, present a plan and timeline for future sampling activities, and outline a conceptual remedial plan to address PCB Remediation Waste associated with the Control House during proposed demolition activities. It is anticipated that a Final Site Characterization and Self-Implementing Cleanup Plan will be submitted to the United States Environmental Protection Agency (EPA) for review and approval in January 2023, prior to the initiation of remedial and/or demolition activities associated with the Control House. For a detailed timeline and schedule of anticipated events, please reference the table in Section 7.0.

The activities and findings detailed herein are provided to document assessment activities, describe the nature and extent of materials which are subject to the management and disposal requirements of the Toxic Substances Control Act (TSCA), 40 CFR 761, and provide details in support of the proposed Self-Implementing Cleanup Plan. Procedures and regulations cited in this report are consistent with those included in 40 CFR 761, and presented by the EPA and the Rhode Island Department of Environmental Management (RIDEM) *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases* (Remediation Regulations).

2.0 GENERAL SITE INFORMATION

2.1 Site Contact Information

a) The contact information for the Responsible Party performing the Self-Implementing Cleanup is as follows:

The Narragansett Electric Company
Mr. William Howard
Principal Environmental Scientist
280 Melrose Street
Providence, Rhode Island 02907
Tel: (401) 784-7490
E-mail: William.Howard@nationalgrid.com

b) The contact information for the party submitting this Preliminary Site Characterization and Self-Implementing Cleanup Plan is as follows:

Coneco Engineers & Scientists, Incorporated
Mr. John Aevazelis
Principal Environmental Scientist
4 First Street
Bridgewater, Massachusetts 02324
Phone: (508) 962-7423
E-mail: Jaevazelis@coneco.com

c) The contact information for the environmental services contractor conducting the demolition work and PCB waste transportation and disposal, as well as preparing the contractor work plan detailing the means and methods for removal and disposal activities, will be included in the Final Site Characterization and Self Implementing Cleanup Plan.

The certification statement required by 40 CFR 761.61(a)(3)(E) is included as Appendix 1.

2.2 Site Description

The Property consists of approximately 10.3 acres (448,668 square-feet) with the north-central portion of the property occupied by the Pawtucket 1 No. 107 Substation (the Site), which is bounded by a gated and locked chain-link fence topped with barbed wire. The five-story Control House, consisting of an approximately 9,000 square-foot building footprint, is located north of the outdoor electrical equipment and structures within the Site. The Site can be accessed from the west via a gate at the corner of Merry Street and Thornton Street. Access to the substation is restricted to TNEC and authorized subcontractors. The Site is located within a mixed-use industrial and residential portion of Pawtucket, Rhode Island. The Francis J. Varieur Elementary School is located approximately 550 feet southwest of the Control House, and the International Charter School/ Blackstone Academy Charter School is located approximately 750 feet northwest of the Control House. A Site Locus Map and Aerial Image are provided for reference as Figures 1 and 2, respectively. Photographs of the Control House and relevant areas of investigation are included as Appendix 2.

The Property was formerly used by the Pawtucket Gas Company as an electric power plant and manufactured gas plant (MGP), referred to as the Tidewater Gas Works. The MGP generated gas using coal and coke and operated from the 1880s until the late 1960s. In 1890, the Pawtucket Gas Company began building the Pawtucket 1 Station to generate electricity. The power station, operating from the early 1890s until 1975, used coal, petroleum-based products, and residual by-product tars from the MGP station to generate electricity. TNEC is currently performing remedial activities (as part of a RIDEM-approved Remedial Action Work Plan [RAWP]) to address contaminated soil and groundwater at the Property. Remedial actions include source area removals, installation of an engineered cap, construction of a subsurface containment wall to mitigate migration of non-aqueous phase liquid (NAPL) to the Seekonk River, and the recording of an Environmental Land Use Restriction (ELUR) to limit future uses of the Property. The RIDEM Case No. for this work is SR-26-0934A (formerly RIDEM Case No. 95-022). The northern abutting property to the Control House is currently undergoing significant remediation and construction associated with the redevelopment of the property as a recreational area including a soccer stadium.

The Control House was constructed in 1907 as part of the electric power plant and has undergone multiple additions and renovations. The five-story building has a footprint of approximately 9,000 square feet (60 feet wide by 150 feet long). The building was constructed on battered stone masonry and brick masonry foundations with approximately 16-inch-thick brick masonry exterior walls and a concrete slab roof covered by asphaltic roofing membrane. The eastern half of the building comprises a large, full-height space that housed the former power plant “Turbine Room”. This space contains a gantry crane & crane rails supported by a row of steel columns that are constructed integral with the existing brick masonry bearing wall at the east edge of the building, and a row of steel columns that are constructed integral with a multi-level steel framed mezzanine structure at the west edge of the Turbine Room. The existing ground floor level of the Turbine Room was previously lower than its current elevation. A partial basement was historically located at the east edge of the building. The entryways to these basement areas were partially blocked off with unreinforced masonry walls, and the remaining Turbine Room floor area was infilled and covered with trap rock. The western portion of the building is comprised of multiple floor levels of varying heights that house active electrical infrastructure, control room equipment, and miscellaneous utility and storage spaces. Steel columns appear to be constructed integral with the existing brick masonry walls and provide structural support for the roof framing and intermediate floor framing. The intermediate floor levels are constructed with concrete structural slabs supported by either concrete encased steel beams or exposed steel beams that span east to west between additional concrete encased steel framing members constructed integral with the existing brick masonry bearing walls.

The Control House currently contains energized electrical equipment and is utilized for electrical operations at the substation. The building, as currently configured, includes a cable vault, reactor room, switchboard/control room, circuit breaker rooms, a potential transformer room, bus room, and a lightning arrestor room. The vacant Turbine Room (not part of current building operations) and a series of smaller vacant rooms (former partial basement areas that were not filled) occupy the eastern portion of the building. Characterization of crushed stone and/or soil fill material in the Turbine Room was not conducted as part of this investigation.

The Control House layout can be referenced in the Sampling Results Plans, included as Figures 3 through 8.

Records regarding the prior configuration of equipment within the structure, including records pertaining to oil-filled electrical equipment, are limited and incomplete. These limited records indicate that oil-filled electrical equipment has been historically present within portions of the building. According to interviews with TNEC personnel, oil-filled circuit breakers were replaced with vacuum (air) circuit breakers at some time in the past. Paper insulated lead covered cables were noted in the cable vault on the first floor of the building. Cable oil is contained within the lead sheath of the cables. Records regarding the polychlorinated biphenyl (PCB)-content of mineral oil dielectric fluid (MODF) within electrical equipment (i.e., breakers, regulators, transformers) in the building were reviewed by Coneco and discussed in Section 2.4.

Based on information provided by TNEC, a new approximately 1,080 square-foot control house will be constructed directly east of the existing outdoor substation as part of regional upgrades to the electric distribution system. Following completion of the construction activities, the existing Control House will be rendered obsolete. Once the new control house is brought on-line, electrical equipment will be removed from the subject building and the Control House will be demolished. The Control House is currently scheduled to be demolished in the Fall of 2022.

Coordinates:	Latitude 41.86770º UTM 4,637,845 Meters N	Longitude -71.38140º 302,351 Meters E (Zone 19)
Assessors' Information:	According to the City of Pawtucket Assessor's Office, the Property is identified as Lot 645 on Assessor's Plat Map 65, located at 6 Thornton Street within a mixed-use industrial and residential portion of Pawtucket, Rhode Island. The Site and Control House comprise a portion of the Property. The Property is zoned for public utility use.	
Occupancy & Use:	The north-central portion of the Property (the Site) is currently used as an active electrical transmission and distribution substation with outdoor and indoor components, including the Control House. The Control House currently contains a control room and electrical equipment including circuit breakers, reactors, and potential transformers. Two electrical transmission line towers, and associated overhead transmission lines, are situated in the southeastern portion of the Property. Remaining portions of the Property consist of vacant land, currently undergoing redevelopment. The Site is not accessible by the public and access is restricted to TNEC and authorized subcontractors.	

Adjacent Land Use: The Seekonk River abuts the Control House to the east. An active natural gas regulator station is located on the northern abutting parcel. Residential properties are located west and southwest of the Control House. The Francis J. Varieur Elementary School is located southwest of the Control House. A soccer stadium is being constructed north of the Control House.

2.3 Sensitive Receptors

The RIDEM Environmental Resource Map (http://www.dem.ri.gov/maps) was reviewed online for the Control House and surrounding area on January 7, 2022. According to information presented in the RIDEM Environmental Resource Map, the Control House is not located within the geographic boundaries of a groundwater resource area. The Control House is located within a Natural Heritage Area. The Seekonk River is located approximately 200 feet east of the Control House. Local conservation land is located approximately 475 feet northeast of the Control House. No other environmentally sensitive areas, as defined in Section 1.4.21 of the RIDEM Remediation Regulations, were noted within a 500-foot radius of the Control House. Municipal water and sewer systems service the Control House and adjacent properties, and no private water supply wells were observed in the vicinity of the Control House.

2.4 Potential PCB Sources

Due to the age of the Control House and its use for electrical generation and distribution, oil-filled electrical equipment containing PCBs has historically been present in the building. Historical plans depict oil-filled circuit breakers and oil-filled potential capacitor voltage transformers formerly utilized within the Control House. According to interviews with TNEC, some former oil-filled circuit breakers have been replaced with vacuum (air) circuit breakers. Records regarding the PCB-content of mineral oil dielectric fluid (MODF) within electrical equipment (i.e., breakers, regulators, transformers) in the building, currently or historically, were requested and reviewed by Coneco during this investigation. A total of 59 operating or decommissioned pieces of oil-filled electrical equipment were identified in TNEC's historical records, of which only 13 had information on PCB testing of the oil. TNEC's records identified one piece of oil-filled equipment, a decommissioned oil-filled circuit breaker, manufactured by Westinghouse Electric Corporation in June of 1950, that formerly contained PCB-contaminated MODF. This circuit breaker was reportedly retired and removed from the control house in 2009. TNEC's records indicated that the remaining oil-filled equipment for which PCB information was available were characterized as non-PCB. MODF-filled electrical equipment that is no longer in use at the Site was previously removed by TNEC in accordance with TNEC's Standard Operating Procedures and applicable state and federal regulations.

Oil-filled electrical equipment currently present within the Control House will be assessed and removed prior to demolition in accordance with applicable state and federal regulations. Prior to removal of the electrical equipment, TNEC will collect MODF samples from the oil-filled equipment scheduled for removal to be analyzed for PCBs by EPA Method 8082. The MODF analytical results will be evaluated, and the electrical equipment will be removed from the Site by TNEC and/or a qualified contractor for proper disposal.

PCBs were widely used in the manufacture of certain building materials from approximately 1950 to 1979. Potential sources of PCBs in buildings built or renovated between about 1950 and 1979 include caulking, paints, mastics and other adhesives, fireproofing materials, and the capacitors of fluorescent light ballasts manufactured. Based on the age of the building and potential for repairs and/or renovations to have been performed during this time period, building materials associated with the Control House may contain regulated concentrations of PCBs.

3.0 HAZARDOUS BUILDING MATERIAL ASSESSMENT

From 2018 to 2021, at the request of TNEC, Coneco conducted sampling activities to evaluate building materials prior to the proposed retirement and demolition of the Control House. Sampling activities were performed to assess if a historical release(s) of liquid PCBs occurred within the Control House and if certain building materials contain regulated concentrations of PCBs. In addition, sampling activities were conducted to evaluate for the presence of asbestos-containing material (ACM) and paint containing heavy metals (specifically cadmium, chromium, and lead) within the Control House.

In order to characterize select materials associated with the Control House that may contain certain hazardous materials, and establish if a release of oil and/or hazardous material (OHM) occurred within the building, Coneco conducted a visual assessment and subsequent sampling activities for materials characterization, where feasible. Sampling activities were limited in select portions of the Control House due to the presence of energized and in service electrical equipment at the time of sampling activities and the need to maintain appropriate safety protocols regarding minimum approach distances. Therefore, sampling locations were limited to safely accessible areas beyond the minimum approach distances associated with energized electrical equipment.

Initial assessment and investigation activities in the Control House included the collection and laboratory analysis of representative concrete, brick, paint, bulk building material, and wipe samples, as well as an asbestos survey. Samples collected as part of this investigation were submitted to ESS Laboratory (ESS), a Rhode Island and National Environmental Laboratory Accreditation Program (NELAP)-certified analytical laboratory located in Cranston, Rhode Island, for laboratory analysis of PCBs by EPA Method 8082 using a manual Soxhlet extraction per EPA Method 3540. Select paint samples were also submitted for cadmium, chromium, and lead analysis by EPA 6000/7000 Series Methods. Select bulk materials samples were submitted to AmeriSci Virginia Laboratory, an independent NELAP-certified analytical laboratory located in Midlothian, Virginia, for qualitative bulk asbestos analysis using polarized light microscopy. Sample identifications were assigned based on the material type and sampling location (i.e., floor, wall, first floor, second floor, etc.) Sample identifications, locations, and total PCB concentrations can be referenced in the Sampling Results Plans, included as Figures 3 through 8. Laboratory analytical documentation is included as Appendix 3. Analytical results are discussed in Section 5.0.

3.1 Concrete and Brick Sampling

From October 2018 to October 2021, Coneco collected a total of 312 porous material samples (i.e., concrete, brick, and mortar) representative of floors, walls, ceilings, stairs, and/or former equipment foundations/structures located within the Control House. The initial concrete sample locations were selected to characterize areas most likely subject to potential impact based on surficial staining (discoloration), high foot traffic, and the configuration of former and current oil-filled equipment. Initial concrete sampling was limited (i.e., sampling was not conducted along a 3-meter grid in accordance with 40 CFR 761, Subpart N throughout the building) and was conducted to obtain baseline information regarding the presence or absence of regulated concentrations of PCBs.

In areas where concentrations of PCBs were initially identified within concrete and brick wall and/or floor samples equal to or in excess of 1 milligram per kilogram (mg/kg), a 3-meter sampling grid was overlaid throughout the area in accordance with 40 CFR 761, Subpart N to delineate the extent of PCB Remediation Waste (which, in some cases, included sampling the adjacent concrete wall, ceiling, and/or brick and mortar walls). In addition to lateral delineation sampling, depth delineation sampling activities were conducted in select areas to further define the limits of PCB concentrations within the Control House.

Concrete and brick samples were collected in accordance with the EPA method described in EPA Region I Standard Operating Procedure (SOP) for Sampling Concrete in the Field. Prior to porous material sample collection, the sample locations were cleared of surficial dust and/or debris. Where paint or other surface coating was present, it was removed prior to sampling. A total of 278 concrete floor/ceiling samples, 22 concrete wall samples, and 12 brick wall samples were submitted to ESS for PCB analysis. Concrete and brick sample analytical results are tabulated for reference in Tables 1 through 3.

3.2 Paint Sampling

The exterior of the Control House primarily consists of unpainted brick. Exterior painted surfaces include doors, doorframes, and a steel fire escape. Exterior painted surfaces were noted to be in fair condition and paint chips were not observed on the ground surface. Interior walls and ceilings consist of painted brick and/or concrete, with the exception of the Turbine Room where limited paint was observed on the brick walls. Concrete floors within the building were not observed to be painted. From October 2018 to October 2021, Coneco collected a total of 256 paint chip (porous material) samples from painted surfaces within the interior and exterior of the control house (i.e., concrete and/or brick and mortar walls, floors, ceilings, interior and/or exterior metal doors, concrete stairs, steel handrails, metal window frames, steel beams, etc.) associated with the Control House. During initial paint assessment activities, a minimum of one representative sample was collected from each homogenous surface of paint (distinct paint type where feasible) to obtain baseline information regarding the presence or absence of regulated concentrations of PCBs. Following receipt of laboratory analytical results for the initial characterization paint samples, additional paint sampling was conducted in order to:

1) Delineate PCB concentrations greater than or equal to 50 mg/kg and determine if greater than or equal to 50 mg/kg PCB paint is classified as PCB Remediation Waste or PCB Bulk Product Waste;
2) In areas where a release to the unpainted concrete floor was identified, adjacent paint samples were analyzed to evaluate if paint may have been impacted by a historical liquid release (i.e., to delineate potential PCB Remediation Waste in media adjacent to impacted concrete);
3) Evaluate if paint types in which PCBs greater than or equal to 1 mg/kg but less than 50 mg/kg were detected during the initial paint assessment are classified as PCB Remediation Waste or Excluded PCB Products;
4) Gather additional data and further the lines of evidence to support the waste classification for each paint type identified within the building.

Additional paint samples were collected at varying locations (separate rooms, different walls within the same room, varying heights along the same wall, different lateral locations on the same wall, etc.) to provide data on the distribution of PCB concentrations and lines of evidence of the likely source of the detected PCB concentrations in certain paint samples.

Paint chip samples were collected in accordance with the method described in EPA SOP No. 2011 for Chip, Wipe, and Sweep Sampling. Samples were obtained using disposable dedicated razor blades and then placed in the appropriate sample containers. Paint sample descriptions, location, substrate, and analytical results are tabulated for reference in Table 4.

3.3 Bulk Building Material Sampling

In October 2018 and September 2021, Coneco collected a total of 57 representative bulk building material samples including but not limited to caulk, window glazing, tar paper, conduit sealants, gaskets, and weather stripping from the interior and exterior of the Control House. Initial bulk building material sampling was conducted to obtain baseline information regarding the presence or absence of regulated concentrations of PCBs and asbestos. Supplemental bulk material sampling was conducted in areas where PCBs were identified in bulk materials in excess of 1 mg/kg to evaluate whether the potential source of the PCBs is associated with a liquid release, or the result of historical manufacturing process. Bulk material sampling procedures were conducted in accordance with the EPA method described in EPA SOP No. 2011 for Chip, Wipe, and Sweep Sampling. The samples were obtained using disposable dedicated razor blades. Bulk material sample descriptions and PCB analytical results are tabulated for reference in Table 5.

3.4 Wipe Sampling

Between September 2019 and October 2021, Coneco collected a total of 24 PCB wipe samples from unpainted and painted surfaces throughout the building to gather baseline data on the potential for tracking and/or migration of PCBs throughout the building interior via dust particulates and/or air vapors. Wipe samples were collected from both high traffic and air circulation areas (HVAC system components, stairwells, etc.) as well as low traffic and limited air flow areas to offer a comparison of PCB concentrations in potentially high tracking and low tracking areas. Standard hexane-prepared wipe samples were collected over 100 square-centimeter areas in accordance with the method described in EPA SOP No. 2011

for Chip, Wipe, and Sweep Sampling, and 40 CFR 761.123. Wipe sample analytical results are tabulated for reference in Table 6.

4.0 QUALITY ASSURANCE AND QUALITY CONTROL

4.1 QA/QC Sampling and Analytical Results

A quality assurance/quality control (QA/QC) program including the collection of one blind collocated field duplicate sample for every 20 samples of paint, brick, and concrete was employed as part of Coneco's investigation. Matrix spike/matrix spike duplicate results were requested for the blind collocated field duplicates and the corresponding initial samples. Coneco's review of laboratory data for blind collocated field duplicate samples identified no significant disparity between results of the collocated duplicates and the corresponding characterization samples. QA/QC analytical results and the results of the corresponding collocated environmental assessment samples are tabulated for reference as Table 7.

4.2 Data Evaluation

Following the receipt of analytical results, Coneco conducted a data validation review to ensure that laboratory data is of defensible analytical quality. Procedures employed were consistent with *EPA Region I Data Validation Functional Guidelines for Evaluating Environmental Analyses*.

Coneco's review of laboratory documentation, including analytical results, narratives, and chain-of-custodies provided by ESS for collected concrete, brick, paint, bulk material, and wipe samples identified no departure from the requirements specified by the EPA. Coneco also conducted an evaluation of information provided by ESS concerning sample integrity, chain-of-custody procedures, QA/QC, and necessary report components. Any nonconformance to QC objectives are listed in the laboratory reports. Based on the information presented by ESS, and considering the scope of use for the presented analytical results, it is the opinion of Coneco that the presented laboratory data is in compliance with the applicable EPA and RIDEM standards and laboratory QC requirements. As such, laboratory data produced for samples collected from the Site are considered valid and do not require adjustment.

Please note that although full data packages were produced for Site Characterization laboratory analytical results, only the cover page, table of contents, analytical narrative, certification, result sheets, sample receipt checklist, and chain-of-custody forms for each data set are included in Appendix 3. Full data package information will be provided at the request of the EPA or RIDEM.

4.3 Data Gaps

Based on the sampling activities conducted to date, the following data gaps have been identified:

- Electrical equipment associated with the Control House was energized and in service at the time of sampling activities. Therefore, sampling locations were limited to

safely accessible areas beyond the minimum approach distances associated with energized electrical equipment. Following the de-energization and/or removal of the electrical equipment, additional assessment and sampling of these respective areas will be required. As detailed below in Section 6.0, the Control House is scheduled to become de-energized in the Spring of 2022, and additional sampling is expected to occur in June 2022.

- Due to the size and layout of the building, as well as the nature of the project as a demolition rather than a renovation, initial Site Characterization sampling was limited and did not strictly comply with the characterization requirements of 40 CFR 761 Subpart N (i.e., sampling was not conducted along a 3-meter grid throughout the Control House) in an attempt to make broad, conservative assumptions for waste handling during demolition. The sampling program to date was designed to assess for the presence of regulated concentrations of PCBs in areas/materials that are most likely to contain PCBs and delineate identified impacts based on potential migration pathways. In areas where concentrations of PCBs were initially identified within concrete and brick walls and/or floors samples equal to or in excess of 1 mg/kg, a 3-meter sampling grid was overlaid throughout the area in accordance with 40 CFR 761, Subpart N to delineate the extent of PCB Remediation Waste. Furthermore, there is no record of oil-filled electrical equipment or other liquid sources of PCBs in some areas, for example: Room A. Sampling in these areas was conducted as a conservative measure to screen for the presence of PCBs attributable to tracking/migration, or the historical use of PCBs in manufacturing processes.

- PCB concentrations have not been fully vertically depth delineated in accordance with the requirements of 40 CFR 761 Subpart N. Depth delineation was performed at select locations to gain representative data of vertical extent of PCB concentrations to aid in the development of removal plans. In areas where further depth delineation is not feasible due to the limitations of the sampling method and the observed depth of PCB concentrations; PCB remediation, demolition, and removal plans will be developed to address the data gap.

- Sampling in the Turbine Room was limited due to safety concerns associated with the risk of loose brick debris becoming dislodged from the walls. However, Coneco was able to safely collect at least one paint sample per distinct paint type used in the Turbine Room, as well as concrete samples from the concrete foundations formerly supporting turbines located within the Turbine Room.

- The Turbine Room has been filled to grade and covered with trap rock (crushed stone), making the lower walls and sub-grade floor of the turbine room inaccessible for inspection and sampling. Coneco cannot make any statement concerning OHM releases, and/or PCB concentrations in building materials that may be concealed by the fill material. Portions of the building foundation remaining on-Site following demolition will be covered by an engineered cap, as detailed in Section 7.0.

Additional characterization sampling is warranted to address the above data gaps and further characterize building materials to support the findings and conclusions of the Final Site

Characterization and Self-Implementing Cleanup Plan (estimated submittal July 2022). If PCB delineation/characterization activities cannot be completed in select areas, materials shall be conservatively classified as PCB Remediation Waste for handling and disposal purposes. Following additional characterization sampling activities, remaining data gaps will be addressed in the demolition work plans, which will be included in the Final Site Characterization and Self-Implementing Cleanup Plan for EPA review and approval.

5.0 EXTENT OF IMPACT

As a result of sampling activities, concentrations of PCBs equal to or in excess of 1 mg/kg were identified in concrete, brick, paint, and bulk building materials associated with the Control House. PCB concentrations identified in these materials may be attributable to one or more of the following:

- Spills, releases, or other unauthorized disposals (i.e., direct impact from liquid sources)
- Impact via direct contact transfer by site workers and/or contaminated equipment (i.e., a historical tracking scenario)
- Building materials (i.e., paint, caulk, etc.) historically manufactured with PCBs

Potential sources of PCBs currently and/or historically located within the building from which a release may have occurred include oil-filled electrical equipment. As the Control House was constructed in 1907, with operations and maintenance ongoing since then, there is the potential for building materials manufactured with PCBs to be present (i.e., products manufactured with PCBs). Materials containing concentrations of PCBs equal to or in excess of 1 mg/kg may be classified as one of the following in accordance with at 40 CFR 761.3:

- **PCB Remediation Waste**: Materials containing concentrations of PCBs equal to or in excess of 1 mg/kg as the result of spills, releases, unauthorized disposals, or impact via direct contact transfer by site workers and/or contaminated equipment (i.e., a historical tracking scenario) are classified as PCB Remediation Waste.

- **Excluded PCB Products**: Materials manufactured with PCBs at concentrations of less than 50 mg/kg before October 1, 1984 and resulting PCB concentration is not a result of dilution or a release of PCBs from a source equal to or in excess of 50 mg/kg.

- **Bulk PCB Product Waste**: Waste derived from manufactured products containing PCBs in a non-liquid state, at any concentration where the concentration at the time of designation for disposal is equal to or greater than 50 mg/kg.

In accordance with 40 CFR 761.3, if materials are to be managed as Excluded or Bulk Product Waste, it must be demonstrated that the PCBs are not present due to a release.

5.1 Concrete and Brick

Concrete Floors/Ceilings

Laboratory analytical results indicated that 61 of the 278 discrete concrete floor/ceiling samples collected as part of the initial characterization activities contain concentrations of PCBs equal to or in excess of 1 mg/kg, with the highest detected concentration of 27,700 mg/kg. As the detected PCB concentrations are likely attributable to a release(s) from oil-filled electrical equipment and/or tracking by site workers, portions of the concrete floors containing PCBs at concentrations equal to or in excess of 1 mg/kg are considered to represent PCB Remediation Waste as defined at 40 CFR 761.3. The locations and approximate inferred areas of PCB Remediation Waste identified to date in the concrete floors are listed below and depicted in the PCB Remediation Waste Plans provided as Figures 9 to 12.

First Floor

- Entryway (60 square feet)
- Locker Room (35 square feet)
- Western/central portion of Room 2 (20 square feet)
- Exterior stairwell at southwest corner of the Control House (70 square feet)

Second Floor

- Southeast ceiling of Office Room 1 (35 square feet)

Third Floor

- East Hallway (1,600 square feet)
- Room C northern doorway (35 square feet)
- Room D northern doorway (30 square feet)

Fourth Floor

- Northern portion of Mezzanine (40 square feet)
- Room E northern doorway (60 square feet)

The highest PCB concentrations were observed at the north end of the third-floor East Hallway. PCB concentrations in this area extend beyond 4 inches in depth (below the floor surface), the maximum sampling depth. PCBs concentrations detected in a sample of the second-floor ceiling concrete directly below this area may indicate that PCB concentrations have penetrated the entirety of the concrete slab in this vicinity. No electrical equipment is currently present in this area and no records indicating the presence of historical equipment are available; therefore, the PCB source cannot be definitively determined. Based on interviews with TNEC personnel, the area was reportedly used as a work area for equipment repairs, and therefore ancillary storage of oil-containing equipment and spillage from said equipment is the suspected PCB source.

Concrete Walls

Concrete wall samples were collected in select areas where PCB Remediation Waste was identified in unpainted concrete floors and/or where paint on the walls contains PCB concentrations equal to or in excess of 1 mg/kg. Based on sampling conducted to date, no concentrations of PCBs were identified equal to or in excess of 1 mg/kg in concrete samples

collected from the walls, indicating that migration of PCBs associated with historical releases or tracking (i.e., from floor areas with identified PCB Remediation Waste), and/or leaching of PCBs from a manufactured product (e.g., paint, caulk, etc.) were not identified in the underlying wall substrate (concrete).

Brick Walls

Two brick samples, BR-03-01 and BR-03-09, collected from the third-floor East Hallway wall were found to contain concentrations of PCBs equal to or in excess of 1 mg/kg. The brick associated with the samples is covered by paint containing PCB concentrations greater than 50 mg/kg (BR-03-01) or approaching 50 mg/kg (BR-03-09) and is located within the third-floor East Hallway area of concern where PCB Remediation Waste has also been identified in paint and concrete. The detected PCB concentrations in the bricks may be attributable to a liquid release or tracking of PCBs, or the overlying paint may have been manufactured with PCBs (PCB Bulk Product) which migrated/leached into the brick substrate. However, as indications of a historical release of PCBs have been identified in the East Hallway, painted brick in this area containing PCBs at concentrations equal to or in excess of 1 mg/kg will be managed and disposed as PCB Remediation Waste as detailed below in Section 7.3.

5.2 Paint

The majority of the paint samples collected throughout the building were found to contain PCB concentrations equal to or in excess of 1 mg/kg. Of the 253 paint samples collected, 228 samples contain PCB concentrations equal to or in excess of 1 mg/kg but less than 50 mg/kg. Ten paint samples contain PCB concentrations equal to or in excess of 50 mg/kg. The classification of paints from within the Control House containing concentrations of PCBs equal to or in excess of 1 mg/kg is detailed below.

PCB Remediation Waste

Paint samples containing PCB concentrations equal to or in excess of 1 mg/kg as well as in excess of 50 mg/kg include samples collected from painted steel doors and handrails. While paint located on steel doors and handrails could be considered to represent PCB Bulk Product Waste (or Excluded PCB Product if PCB concentrations are less than 50 mg/kg), it is possible that the PCB concentrations are the result of tracking associated with a direct contact transfer of PCBs, or via a liquid release of PCBs. Paint samples collected from steel doors and handrails represent high contact surfaces for site workers in a building where PCB releases have been identified. The presence of PCBs in select portions of the concrete floor associated with doorways and entryways within the Control House indicate there was likely tracking associated with historical releases in the building. As such, paint containing concentrations of PCBs equal to or in excess of 1 mg/kg (and in excess of 50 mg/kg) associated with doors (including door frames) and handrails is therefore considered to represent PCB Remediation Waste as defined at 40 CFR 761.3.

PCB concentrations in paint samples collected from the third-floor East Hallway are on average higher than other paint samples collected from the walls of other rooms in the Control House. As detailed in Section 5.1, the highest PCB concentrations in concrete were found at the northern end of the East Hallway on the third floor, where a historical release of

PCBs has occurred. Paint chip samples collected from the adjacent walls contain higher PCB concentrations than similar paint types on walls in other areas of the building. Additionally, a paint sample collected from the second-floor Office 1 ceiling, located directly below the third-floor East Hallway, contained higher PCB concentrations than similar paint types found in the Control House, which may indicate that PCB concentrations have penetrated the concrete slab in this area. It is likely that the elevated concentrations of PCBs found in paint in the hallway are attributable to a release of PCBs. Therefore, paint in the third-floor East Hallway and portions of the second-floor Office 1 ceiling containing PCB concentrations equal to or in excess of 1 mg/kg is characterized as PCB Remediation Waste. Paint samples collected from other rooms of the building indicate that the elevated PCB concentrations identified in the East Hallway are not widespread throughout the building. Additional sampling is necessary and will be performed to delineate the extent of PCBs in the second-floor Office 1 ceiling, as detailed in Section 6.0.

Excluded PCB Product

With the exception of areas detailed above, results of paint characterization sampling indicate that paint samples collected from the building walls do not contain PCB concentrations in excess of 50 mg/kg. PCB concentrations in paint are relatively consistent between homogenous paint types throughout the building. Coneco is of the opinion that concentrations of PCBs identified in the paint samples collected from the building exterior and interior walls, with the exception of a select area of the third floor (i.e., the east hallway area, depicted in Figure 6), are the result of the manufacturing processes, and thus represent Excluded PCB Products as defined in 40 CFR 761.3, and not the result of a historical liquid release of PCBs, which would represent PCB Remediation Waste. Coneco has utilized the following lines of evidence to support this conclusion:

- No staining, discoloration, or visual evidence of a liquid release from oil-filled electrical equipment was observed on the painted surfaces.

- PCBs were not present at concentrations equal to or greater than 50 mg/kg in the paint samples collected from the first, second, fourth, and fifth-floor walls and floors. The paint samples contain PCB concentrations at comparable levels among samples of like paint types and paint locations (as listed in Table 4). In the case of a liquid release, one would expect to find greater concentrations of PCBs in select areas (i.e. a hotspot or source area similar to that in the third-floor East Hallway), indicating proximity to a potential release source. The relative consistency of the detected PCB concentrations amongst paint samples throughout the Control House (with the exception of a select area on the third-floor East Hallway) of the same paint type does not suggest such a release scenario.

- In the event of a liquid release, PCB concentrations would be expected to vary across the impacted surface based on the distance from the point of release. PCBs would also likely impact only one side of the physical obstacle (i.e., a wall). Coneco's assessment of painted materials included the collection of paint samples from a variety of locations within the Control House (different directional walls within the same room, different rooms containing the same paint types, multiple locations along

open walls and corridors with no obstructions) to evaluate the variation, if any, of PCB concentrations across the surfaces. Based on the analytical data for the paint samples, there is no apparent directionality to the detected concentrations of PCBs within the control house first, second, fourth, and fifth floors. For example:

- Samples PS-143, PS-148, and PS-154, representing dark green paint collected from the first-floor lower wall of the east hallway of the cable vault, exhibited similar PCB concentrations (ranging from 3.1 mg/kg to 4.1 mg/kg).
- Samples PS-126 through PS-129, representing dark green paint collected from three different walls of the first-floor Room 9 (Locker and Toilet Room), exhibited similar PCB concentrations (4.2 mg/kg to 5.5 mg/kg).
- Samples PS-113, PS-115, and PS-117, representing white paint collected from the first-floor walls of Room 2, Room 7, and Room 9, respectively, exhibited similar PCB concentrations (ranging from 4.2 mg/kg to 5.8 mg/kg).

- In the event of a liquid release, PCB concentrations would be expected to vary widely at different heights along an impacted surface, with higher concentrations expected at the height closest to the point source of the release. Coneco's assessment of painted materials included the collection of paint samples from varying heights (heights ranging from 1 to 9 feet above the specific floor) along the same vertical axis at pre-determined select interior walls within the Control House. Based on the analytical data for the paint samples, PCB concentrations are similar in paint chip samples collected at varying heights at certain sampling locations, indicating that the PCB concentrations are not likely the result of a liquid release and/or tracking/contact. For example:
  - Samples PS-203 through PS-206, collected from the fourth-floor Room E wall from 1 foot to 9 feet above the floor surface exhibited similar PCB concentrations for each respective paint type. PCB concentrations ranged from 2.0 mg/kg to 2.1 mg/kg for the lower portion of the wall (dark green paint) and 1.1 mg/kg to 1.2 mg/kg for the upper portion of the wall (white paint underlain by yellow paint). It would be expected that the paint samples collected from the same wall (at various heights from the floor) would contain a variable range of PCB concentrations if the paint had been impacted by a historical release of liquid PCBs.
  - Samples PS-165 and PS-166, representing light green paint underlain by brown paint, collected from the second-floor Office Room 2 south wall from 2 feet to 3 feet exhibited similar PCB concentrations. PCB concentrations were 5.0 mg/kg for both samples, collected from the lower portion of the wall (PS-166) and the mid-level portion of the wall (PS-165).

- A total of 24 PCB wipe samples were collected from various painted and unpainted surfaces throughout the Control House. Wipe samples were collected to evaluate if painted surfaces may have been impacted by a liquid release of PCBs and if PCBs had migrated throughout the interior of the Control House via dust particulates or vapors. Three of the 24 wipe samples were collected within the interior of the air

handlers associated with the heating and ventilation system for the Control House. Results of the wipe sample analysis indicated that 22 of the 24 samples did not contain concentrations of PCBs above the laboratory detection limit (0.5 or 1.0 micrograms per 100 square centimeters). The remaining two samples contained PCB concentrations of 1.4 and 5.8 micrograms per 100 square centimeters, respectively. Based on these results, PCB contamination of indoor air or other surfaces resulting from airborne dust or vapors does not appear to have occurred in association with a historical presence of PCBs or suspected release(s) within the Control House. In addition, no indication of a liquid release to the painted surfaces sampled was identified.

- Of the 253 paint samples collected, 228 samples contain PCB concentrations equal to or in excess of 1 mg/kg but less than 50 mg/kg, and 12 samples contained detected PCB concentration less than 1 mg/kg. Additionally, 3 paint samples did not have PCB detections in excess of the laboratory detection limits of 1.0, 1.1, and 22.7 mg/kg, respectively. Therefore, approximately 96% of the paint samples collected did not contain PCB concentrations in excess of 50 mg/kg.

Based on the above multiple lines of evidence, it is Coneco's opinion that paint types containing PCBs at concentrations equal to or greater than 1 mg/kg and less than 50 mg/kg (except as previously categorized as PCB Remediation Waste in this section) were not impacted by a spill, release, tracking/contact, or other unauthorized disposal release of PCBs. Rather, these materials comprise products that were contaminated with Aroclor or other PCB materials from historic PCB uses in manufacturing of paint products. Therefore, with the exception of the third-floor East Hallway and the high contact surfaces detailed above, painted surfaces associated with the interior and exterior of the building are considered Excluded PCB Products, as defined at 40 CFR 761.3.

In addition to concentrations of PCBs, paint samples from each of the five floors contain concentrations of cadmium, chromium, and lead. The presence of lead, cadmium, and chromium in certain PCB Remediation Wastes and Excluded PCB Product requires that this waste also be managed in accordance with applicable state and federal regulations pertaining to the presence of heavy metals.

5.3 Bulk Materials

Bulk material samples collected from the Control House for PCB analysis consisted of caulk, rubber floor mats, window glazing, tar paper, conduit sealants, gaskets, weather stripping, table coverings, and cove base moldings. Laboratory analytical results indicate that the collected bulk material samples contain concentrations of PCBs ranging from below the laboratory detection limit (less than 0.1 mg/kg) to 42.3 mg/kg. No bulk material samples contained PCB concentrations greater than 50 mg/kg.

The bulk material samples representing rubber floor matting on the second floor of the Control House within Office 1 (2003A/B/C), Office 2 (2012A/B), Office 3 (2014), and the Room B: Main Switchboard Room (2016A/B/C) contained PCB concentrations ranging from 1.5 to 42.3 mg/kg. Additionally, the bulk material samples representing table coverings on

the second floor of the Control House within Office 1 (2001) and in Room B: Main Switchyard Room (2015) contained PCB concentrations of 6.4 and 19.9 mg/kg, respectively. Based on the variability of concentrations among these samples and the locations of the floor matting in areas of high foot traffic and the table coverings in areas of high contact and tracking potential, these materials are considered PCB Remediation Waste due to the likelihood that these concentrations represent tracking of a release of PCBs.

Based on the locations of the remaining bulk materials found to contain PCBs at concentrations equal to or greater than 1 mg/kg and less than 50 mg/kg, it is Coneco's opinion that the identified PCB concentrations are attributable to the manufacturing process, due to the low potential for direct impact or tracking to these materials associated with a liquid release of PCBs. Additionally, the locations, directionality, and heights of the identified bulk materials were assessed via the collection of multiple homogenous samples from different locations, where feasible. Coneco did not identify any significant discrepancy between PCB concentrations in the duplicate samples. Based on the above lines of evidence, Coneco has classified these remaining bulk materials as Excluded PCB Products, as defined at 40 CFR 761.3.

An ACM survey was performed for the Control House during bulk material sampling activities. Laboratory analytical results for the bulk material samples submitted for asbestos analysis indicate that ACM is present in select portions of the Control House. As such, ACM will be removed and properly disposed of by a trained and licensed asbestos abatement contractor in accordance with applicable state and federal regulations and requirements. Identified ACM that is comingled with PCB Remediation Waste will be managed and disposed of as PCB Remediation Waste in accordance with 40 CFR 761.61(a)(5)(i)(B)(2)(iii). PCB Remediation Waste disposal is detailed in Section 7.3.

6.0 PROPOSED ADDITIONAL SAMPLING

Select portions of the Control House are currently active and energized, limiting sampling locations to safely accessible areas beyond the minimum approach distances associated with energized electrical equipment. The Control House is expected to be taken offline in the Spring of 2022 and electrical equipment will be de-energized at this time. Coneco will then conduct additional sampling in previously inaccessible areas. The sampling will include oil-contained within equipment, as well as bulk materials or painted surfaces in the vicinity of the current and/or former location of oil-filled electrical equipment. These areas include:

- Room D Breaker Cabinets
- Room E Potential Transformer Cabinets
- Room F Breaker Cabinets
- Lighting Arrestor Room Breaker Cabinets

Based on concrete sampling conducted proximal to these areas to date, no indication of a liquid release to the concrete floors in the general vicinity of the electrical equipment has been identified. One concrete sample will be collected from the floor under each breaker or potential transformer following removal of the equipment. Note, each vacuum and/or oil-

filled circuit breaker consists of three compartments. A representative concrete sample will be collected from one of the three compartments. In the event staining is present, the sample will be collected from the area of surficial staining. If no indication of a release is observed, the sample will be collected from the area most likely to have been impacted during a potential release, i.e., underneath drain valves and/or fill ports. If PCB Remediation Waste is identified in concrete, additional sampling will be conducted in accordance with Subpart N to delineate PCB concentrations.

As PCB concentrations were identified in the concrete floor of the third-floor East Hallway up to 4 inches below the floor surface, paint and concrete samples were collected from the ceiling of Office 1 on the second floor immediately beneath this area to determine if PCBs had migrated through the concrete floor. The samples were collected directly beneath the highest PCB concentrations in the concrete floor of the third-floor East Hallway. PCBs were identified in excess of 1 mg/kg in the three paint samples and one of the concrete samples (16.4 mg/kg in concrete sample ICS-02-18). Based on these results, it appears that PCBs have migrated through the concrete of the third-floor East Hallway floor. Coneco proposes to collect additional paint and concrete samples from the Office 1 ceiling to delineate PCB concentrations. Proposed sample locations are depicted in Figures 4 through 8. Results and findings of additional sampling activities will be included in the Final Site Characterization and Self Implementing Cleanup Plan estimated to be submitted to EPA in July 2022.

7.0 CONCEPTUAL SELF-IMPLEMENTING CLEANUP PLAN

The following sections outline the proposed Self-Implementing Cleanup of PCB Remediation Waste identified within the Control House at the Site. It is provided as a conceptual plan until such time as additional sampling as detailed in Section 6.0 is completed, a remediation/demolition contractor is selected, and a contractor work plan is prepared by said contractor.

7.1 Building Demolition

The Control House is scheduled for demolition following the completion of upgrades to the existing substation, including the construction of a new control house. TNEC is expected to award the project to a contractor in early 2022. Detailed plans for the building demolition including the means and methods for removal and handling PCB waste will be developed with the selected contractor and provided in the Final Site Characterization and Self Implementing Cleanup Plan. The Control House is expected to be demolished in its entirety with the exception of the concrete building foundation. The concrete building foundation will be removed to approximately 1 to 3 feet below existing exterior grades to facilitate the installation of the engineered cap and perform surface regrading activities. The remaining portions of the foundation expected to remain in place following demolition activities. Following the completion of demolition activities, the footprint of the building will be backfilled to grade with appropriate, imported replacement material containing less than 1 mg/kg PCBs.

As noted in Section 4.3, the Turbine Room has been infilled to approximately exterior surface grade, rendering the below grade foundation inaccessible for assessment. Based on analytical results for samples collected from the concrete turbine foundations and the below grade rooms adjacent to the Turbine Room, it is unlikely that the concrete building foundation associated with the Turbine Room has been impacted by a release of PCBs. As part of the RIDEM-approved RAWP for the Property, the building footprint (including the remaining below grade concrete building foundation) and surrounding area will be covered by an engineered cap following demolition of the remainder of the structure. The building foundation associated with the former Control Building will remain inside of a gated and locked fenced area associated with the Substation, with access limited to authorized personnel (i.e., TNEC employees and contractors) who will be present at the Site on an infrequent basis due to the nature of operations of the Substation. An Environmental Land Use Restriction, as well as a TSCA deed restriction, will be recorded for the entire Property (including the Site and area of the Control House) to prevent human exposure to impacted soil and groundwater and limit future use of the Property. Therefore, disturbance of the remaining building foundation, including subsurface materials beneath the former Turbine Room that are unable to be assessed, are not proposed. If construction in this area is proposed in the future, TNEC will conduct appropriate characterization of subsurface materials prior to performing activities that have the potential to disturb materials that could not be characterized as part of this submittal.

7.2 Cleanup Standards and PCB-Impacted Material Removal

The cleanup level specified at 40 CFR 761.61(a)(4)(i) for unrestricted use is less than or equal to 1 mg/kg. This cleanup level also meets the Method 1 objectives for PCBs established in Rule 1.9.2 of the Remediation Regulations. Accordingly, porous materials and painted surfaces associated with the Control House containing total PCB concentrations in excess of 1 mg/kg are proposed to be removed for disposal.

Specific demolition and PCB Remediation Waste removal practices will be developed with the selected environmental services contractor. This may include removal of entire floor and walls containing PCB Remediation Waste. PCB removal areas will be determined based on results of the proposed additional sampling and contractors proposed methods of demolition. The need for post-removal verification sampling will be evaluated for each proposed removal area. Items that have been classified as PCB Remediation Waste, including painted doors/railings and floor mats will be removed in their entirety and disposed of as PCB Remediation Waste. Building materials not otherwise classified as PCB Remediation Waste that are coated in paint types classified as Excluded PCB Products will be disposed of at a RCRA Subtitle D landfill permitted to accept such waste. Coneco plans to submit a Final Site Characterization and Self-Implementing Cleanup Plan to EPA detailing specific removal areas, waste disposal facilities, and demolition/remediation means/methods (contractor work plan) following the completion of additional assessment activities proposed in Section 6.0, and selection of the remediation/demolition contractor.

7.3 PCB Waste Disposal

PCB Remediation Waste comprised of concrete, brick, select painted materials, and other bulk materials generated as a result of demolition activities will be disposed of in a hazardous

waste landfill permitted by the EPA under section 3004 of RCRA or an approved PCB disposal facility meeting the requirements of 40 CFR 761.61(a)(5). TNEC plans to manage and dispose of all PCB Remediation Waste as a greater than or equal to 50 ppm PCB waste in accordance with 40 CFR 761.61(a)(5)(i)(B)(2)(iii). Building materials classified as Excluded PCB Products, characterized as building materials containing concentrations of PCBs greater than 1 ppm and less than 50 ppm as a result of manufacturing processes, will be disposed of at a RCRA Subtitle D landfill permitted to accept such waste. Additional information on material classification, waste streams, and disposal facilities will be provided in the Final Site Characterization and Self-Implementing Cleanup Plan estimated to be submitted to EPA in July 2022.

7.4 Public Notification and Required Permits

This Preliminary Site Characterization and Self-Implementing Cleanup Plan has been provided to the EPA Region 1, RIDEM, and the Rhode Island Department of Health. As this report is intended to provide preliminary findings and detail proposed additional future sampling activities for informational purposes, no approval is required at this time. Remedial activities will be performed following EPA and RIDEM approval of the Final Site Characterization and Self-Implementing Cleanup Plan.

7.5 Schedule

Coneco anticipates the completion of the proposed Self-Implementing Cleanup in accordance with the following schedule:

Self-Implementing Cleanup Schedule

Activity	Anticipated Date
De-energization and removal of electrical equipment	December 2022-February 2023
Additional Sampling Following De-Energization of Control House	December 2022-January 2023
Submittal of Final Site Characterization and Self-Implementing Cleanup Plan to EPA Region 1	January 2023
EPA Region 1 Approval of Proposed Self-Implementing Cleanup	March 2023
Removal Activities	March-May 2023
Closure Report Preparation	June 2023
Submittal of Closure Report to EPA Region 1	July 2023 (60 days from completion of removal activities)

7.6 Contingencies

Additional sampling activities are planned prior to demolition of the Control House. Coneco will provide EPA and RIDEM with a Final Site Characterization and Self-Implementing

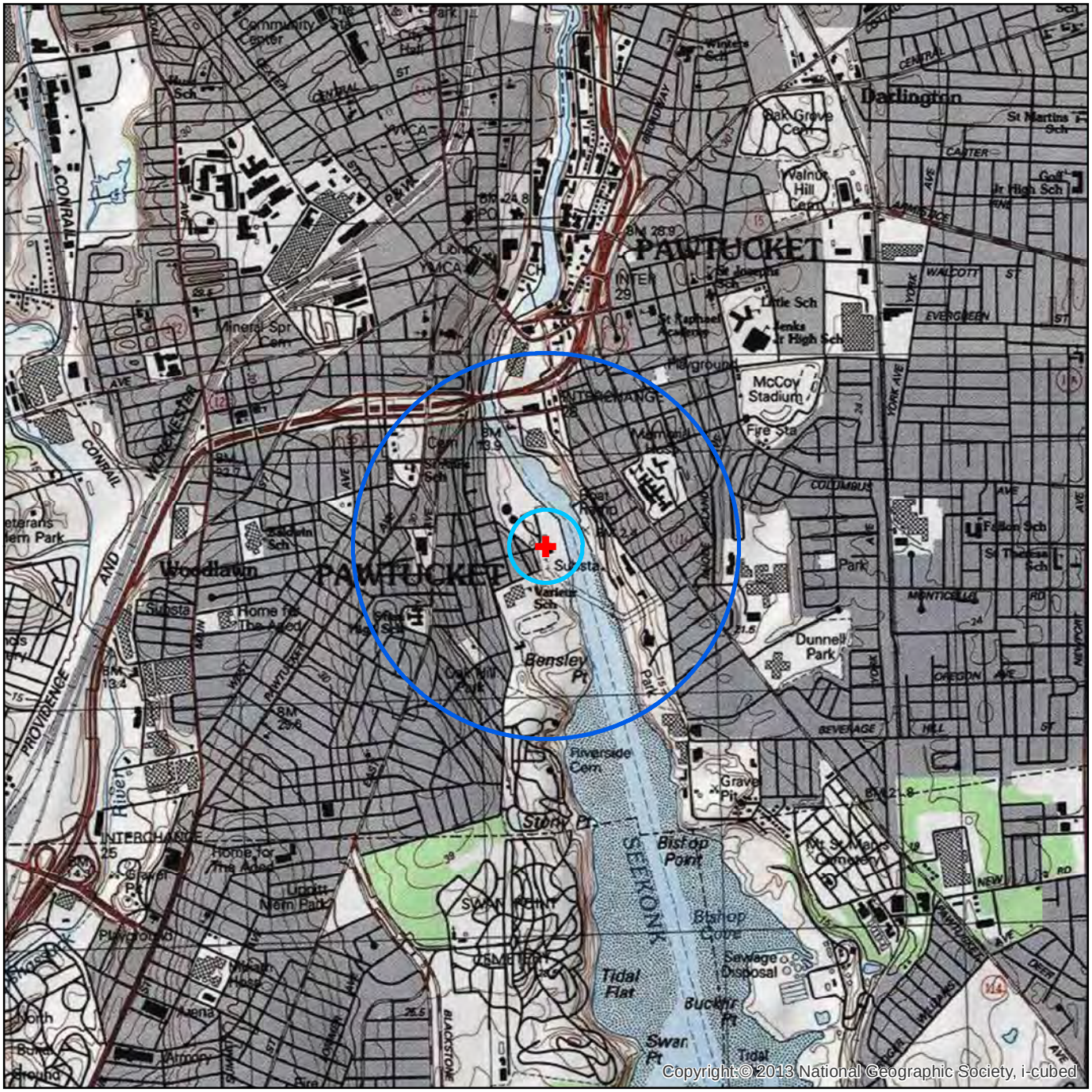
Cleanup Plan detailing the new findings and specifics of the cleanup plan. TNEC will obtain EPA and RIDEM approval for cleanup activities associated prior to the demolition of the Control House.

8.0 LIMITATIONS

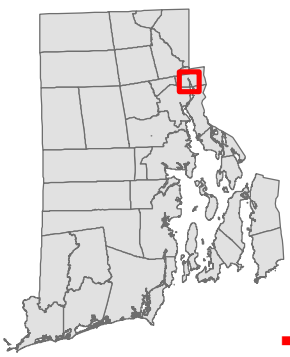
The information presented by Coneco in this report is based solely on the references cited. Observations were made under the conditions stated. Information provided by subcontractors, federal, state, and local agencies contacted was relied upon as accurate and complete.

With specific regard to Site Characterization sampling, data obtained from specific sampling points may not be wholly representative of the nature of environmental conditions at locations other than the actual test location. Variable conditions may only become evident upon further exploration or future sampling activities. Should additional information become available concerning the Site in the future, that information should be made available to Coneco for review so that the conclusions presented in this report may be modified as necessary.

FIGURES



LATITUDE: 41.86770° LONGITUDE: −71.38140°
UTM: 4,637,845 N 302,351 E (Zone 19)



N

SITE LOCUS
500−FOOT RADIUS
0.5−MILE RADIUS

CONECO
Engineers & Scientists
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SITE LOCUS MAP

PAWTUCKET 1 NO. 107 SUBSTATION
CONTROL HOUSE
6 THORNTON STREET
PAWTUCKET, RHODE ISLAND

SCALE	PROJECT NO.	DRAWING NUMBER
1:25000	5675.F.101	FIGURE 1

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	DRAWN	CHECKED
BY	WRA	KML
DATE	2/23/2021	2/23/2021
PROJECT NO. 5675.F.101		

PAWTUCKET NO. 107 SUBSTATION
CONTROL HOUSE
6 THORNTON STREET
PAWTUCKET, RHODE ISLAND

FIGURE 2 – AERIAL IMAGE

S:\Pawtucket RI_Pawtucket No 107 Sub_6 Thornton St\5675.F – HBMA\Figures\5675.F_Aerial.mxd

LEGEND

ICS-01-01 <0.1 — CONCRETE SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG

PS-01 10.9 — PAINT SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG

WS-01-01 <0.5 — WIPE SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN ug/100cm²

ICS-01-33	
0.0–0.5"	8.9
0.5–1"	<0.1
1–2"	<0.1
2–3"	<0.1

CONCRETE SAMPLE LOCATION, IDENTIFICATION, DEPTH IN INCHES, AND PCB CONCENTRATION IN MG/KG

DOORWAY

NOTES:

SAMPLES COLLECTED FROM VERTICAL SURFACES ARE DEPICTED BY A HALF SYMBOL. ORIENTATION OF SYMBOL DENOTES THE SIDE OF THE STRUCTURE FROM WHICH THE SAMPLE WAS COLLECTED

GREEN SYMBOL INDICATES PCB CONCENTRATIONS <1 MG/KG
RED SYMBOL INDICATES PCB CONCENTRATION ≥1 MG/KG

CONECO

INSET 1
SCALE: 1"=2'

CW-01-09 <0.1; PS-130 16.7; ICS-01-88 0.4; RAILING; ICS-01-89 0.4; ICS-01-86 0.9; ICS-01-71 1.2; ICS-01-45 <0.2; CW-01-12 0.6; PS-226 8.7; WS-01-02 <1.0; ICS-01-87 0.8; ICS-01-69 1.0; CW-01-08 <0.1; ICS-01-70 1.7; CW-01-07 0.1; CW-01-06 <0.1; PS-16 4.3; ICS-01-34 0.2; ICS-01-47 0.8; ICS-01-35 <0.09; STAIRS

SAMPLE ID	HEIGHT	PCB CONC.
PS-159	8'	11.6
PS-160	5'	11.0
PS-161	4'	10.5
PS-162	2'	6.6

PS-117 5.8; PS-118 1.9; ICS-01-29 0.3; PS-240 1.9; PS-239 1.6; ICS-01-31 0.4; ICS-01-90 <0.1; ICS-01-64 0.1; ICS-01-48 0.8; PS-127 5.5; CW-01-02 0.7; PS-15 12.7; ICS-01-51 <0.2; PS-129 5.5; CW-01-05 <0.1

SAMPLE ID	HEIGHT	PCB CONC.
PS-155	7'	2.2
PS-156	5'	1.8
PS-157	4'	5.1
PS-158	2'	5.8

PS-128 4.2; ICS-01-28 0.2; CW-01-03 <0.1; PS-126 4.4; ICS-01-32 0.9; CW-01-01 0.8; ICS-01-91 <0.1

ICS-01-33	
0.0–0.5"	8.9
0.5–1"	<0.1
1–2"	<0.1
2–3"	<0.1

ROOM 9 (LOCKER & TOILET ROOM); ICS-01-92 <0.1; CW-01-04 0.1; ICS-01-63 0.3; ICS-01-27 0.3; ICS-01-46 0.6; ICS-01-30 0.4; ICS-01-50 <0.2; ICS-01-49 0.6; ROOM 8

INSET 2
SCALE: 1"=2'

ICS-01-79 0.5; ICS-01-82 <0.09; ICS-01-98 0.3; ICS-03 0.8; ICS-01-78 0.5; ICS-01-83 4.0; ICS-01-101 0.6; ICS-01-97 5.8; ICS-01-96 <0.1; ICS-01-80 <0.1; ICS-01-99 <0.1; ICS-01-100 <0.1; ICS-01-102 1.0; ICS-01-68 <0.1; ICS-01-104 <0.1; STAIRS (DOWN); ICS-01-67 1.4; ICS-01-77 0.3; ICS-01-103 <0.1; ICS-01-76 <0.1; FIRE ESCAPE STAIRS

TURBINE ROOM FILLED IN (SOIL/GRAVEL) TO GRADE LEVEL

PS-60 <1.0; PS-62 4.0; PS-59 1.6; PS-69 4.9; ICS-01-95 <0.09 PS-225 2.2; WS-01-01 <0.5; METAL STRUCTURE; ICS-01-94 0.2 PS-224 1.9; CONCRETE STRUCTURE; PS-51 4.0; TURBINE ROOM (OPEN TO FIFTH FLOOR CEILING); CONCRETE TURBINE FOUNDATION; ICS-01-93 <0.1 PS-223 2.1; ICS-01-52 0.1; PS-49 2.1; METAL STRUCTURE; CONCRETE TURBINE FOUNDATION; ICS-01-55 0.2; ICS-01-53 0.2; ICS-01-54 0.2; ICS-01-56 0.2; PS-254 11.6; PS-256 18.2; PS-255 8.8; STAIRS; RAILING; STAIRS; ICS-01-84 <0.1; ICS-01-81 0.6; ICS-01-85 0.5; CW-01-10 <0.1; PS-50 5.8; ICS-01-72 0.5; ICS-01-25 0.6; PS-116 2.0; PS-237 1.6; PS-238 3.7; ICS-01-23 0.2; PS-236 1.8; PS-233 1.1; PS-234 0.7; PS-232 1.4; ROOM 2; PS-113 5.1; ROOM 1 (FUEL OIL ROOM); PS-114 5.8; ICS-01-05 <0.1; ICS-01-04 <0.1; ICS-01-15 0.2; ICS-01-59 0.2; METAL STRUCTURE; METAL STRUCTURE; ICS-01-57 0.5; ICS-01-58 0.2; ICS-01-24 0.3; CW-01-11 0.2; ICS-01-73 0.3; PS-115 4.2; ICS-01-26 0.4; AIR COMPRESSOR; ICS-01-22 0.1; ICS-01-20 <0.1; ICS-01-21 0.4; PS-235 0.9; ROOM 4; ICS-01-18 0.2; ROOM 3; PS-231 2.1; ICS-01-17 0.5; ICS-01-16 <0.1; ICS-01-19 0.3; ROOM 7; ROOM 6; ROOM 5; ICS-01-61 0.3; ICS-01-14 <0.1; ICS-01-10 <0.1; PS-229 5.0; PS-230 3.4; ICS-01-60 0.3; ICS-01-12 1.2; ICS-01-62 0.3; ICS-01-11 0.2; ICS-01-13 0.4; ICS-01-09 <0.1; ICS-01-08 <0.1; ICS-01-07 0.3; ICS-01-06 0.4; ICS-01-03 <0.1; ICS-01-02 <0.1; ICS-01-01 <0.1; PS-68 2.6; SEE INSET 1; ROOM 9 (LOCKER & TOILET ROOM); ROOM 8; ICS-02 <0.2

SAMPLE ID	HEIGHT	PCB CONC.
PS-142	9'	2.3
PS-144	6'	2.6
PS-143	5'	4.1
PS-145	4.5'	4.2

SEE INSET 2; ICS-01-36 <0.09; ICS-01-37 <0.1; ICS-01-38 <0.09; CABLE VAULT; ICS-01-39 <0.09; PS-02 7.0; PS-03 1.8; PS-14 25.3; POTHEAD FOR CABLES; POTHEAD FOR CABLES; ICS-01-40 0.3; PS-04 14.2; POTHEAD FOR CABLES; PS-01 10.9; PS-58 3.2; PS-57 0.8; HOIST WELL; WS-01-03 <0.5; AIR HANDLER; ICS-01-41 <0.1; PS-12 6.8; PS-13 0.7; PS-10 7.9; PS-11 4.0; POTHEAD FOR CABLES; ICS-01-42 0.1; POTHEAD FOR CABLES; PS-05 12.5; PS-07 8.5; PS-09 8.6; PS-08 4.1; PS-150 13.6; PS-06 4.7; ICS-01-43 <0.1; POTHEAD FOR CABLES; ICS-01-65 0.1; ICS-01-75 0.2; ICS-01-66 0.3; ICS-01-44 0.6; ICS-01-74 0.2; STAIRS (DOWN); FIRE ESCAPE STAIRS; PS-61 0.4; ICS-01 <0.2

SAMPLE ID	HEIGHT	PCB CONC.
PS-147	7.5'	0.9
PS-149	5'	1.2
PS-146	4.5'	3.8
PS-148	3.5'	3.1

SAMPLE ID	HEIGHT	PCB CONC.
PS-151	8'	0.8
PS-152	5.5'	1.6
PS-153	4.5'	5.1
PS-154	3'	3.7

6' 0 6' 12'
SCALE IN FEET

NOTE: THE LOCATION AND DIMENSIONS OF THE SITE AND VICINITY FEATURES ARE APPROXIMATE AND BASED UPON A PLAN TITLED "SWITCH HOUSE GENERAL ARRANGEMENT PLAN" FROM TNEC AND CONECO FIELD OBSERVATIONS

REVISIONS

NO.	DATE	DESCRIPTION	DR/CK

PREPARED FOR:

THE NARRAGANSETT
ELECTRIC COMPANY
280 MELROSE STREET
PROVIDENCE, RHODE ISLAND

DRAWING:

SAMPLING RESULTS PLAN:
FIRST FLOOR

PROJECT:

PAWTUCKET 1 NO. 107 SUBSTATION
CONTROL HOUSE
6 THORNTON STREET
PAWTUCKET, RHODE ISLAND

CONECO
Engineers & Scientists
4 FIRST STREET, BRIDGEWATER, MASSACHUSETTS 02324
PHONE 508-697-3191 OR 800-548-3355; FAX 508-697-5996
WEBSITE: www.coneco.com

DATE	12/13/21
DRAFTED: WCB	CHECKED: MAZ
SCALE:	1" = 6'
PROJECT NO.	5675.F.101
FIGURE	3

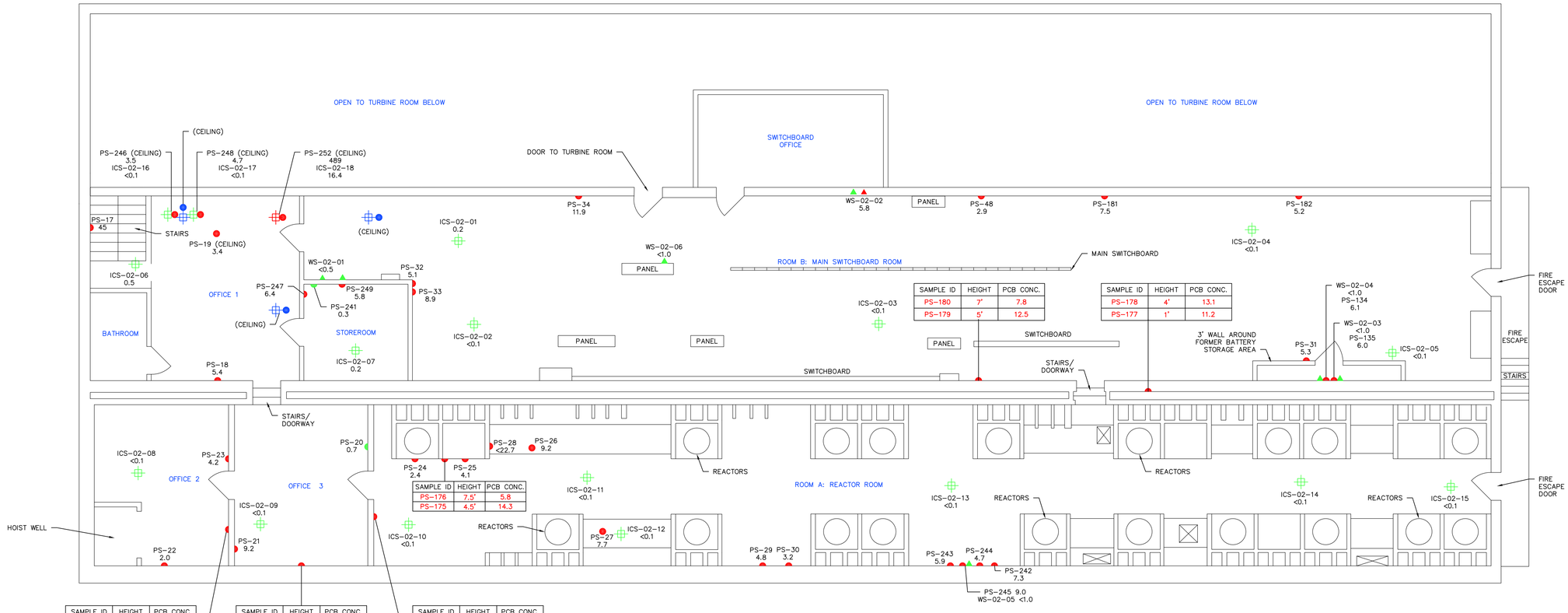
LEGEND

ICS-01-01 <0.1	CONCRETE SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG
	PROPOSED CONCRETE SAMPLE LOCATION
PS-01 10.9	PAINT SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG
	PROPOSED PAINT SAMPLE LOCATION
WS-01-01 <0.5	WIPE SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN ug/100cm^2
	DOORWAY

NOTES:

SAMPLES COLLECTED FROM VERTICAL SURFACES ARE DEPICTED BY A HALF SYMBOL. ORIENTATION OF SYMBOL DENOTES THE SIDE OF THE STRUCTURE FROM WHICH THE SAMPLE WAS COLLECTED

GREEN SYMBOL INDICATES PCB CONCENTRATIONS <1 MG/KG
RED SYMBOL INDICATES PCB CONCENTRATION ≥1 MG/KG



SAMPLE ID	HEIGHT	PCB CONC.
PS-180	7'	7.8
PS-179	5'	12.5

SAMPLE ID	HEIGHT	PCB CONC.
PS-178	4'	13.1
PS-177	1'	11.2

SAMPLE ID	HEIGHT	PCB CONC.
PS-176	7.5'	5.8
PS-175	4.5'	14.3

SAMPLE ID	HEIGHT	PCB CONC.
PS-163	6.5'	2.4
PS-164	4.5'	9.2
PS-165	3'	5.0
PS-166	2'	5.0

SAMPLE ID	HEIGHT	PCB CONC.
PS-167	7.5'	10.2
PS-168	5'	9.7
PS-169	4'	8.9
PS-170	3'	4.0

SAMPLE ID	HEIGHT	PCB CONC.
PS-171	7'	2.6
PS-172	6'	4.5
PS-173	4.5'	4.8
PS-174	3'	6.8

NOTE: THE LOCATION AND DIMENSIONS OF THE SITE AND VICINITY FEATURES ARE APPROXIMATE AND BASED UPON A PLAN TITLED "SWITCH HOUSE GENERAL ARRANGEMENT PLAN" FROM TNEC AND CONECO FIELD OBSERVATIONS

6' 0 6' 12'
SCALE IN FEET

CONECO

REVISIONS

NO.	DATE	DESCRIPTION	DR/CK

PREPARED FOR:

PROJECT:
PAWTUCKET 1 NO. 107 SUBSTATION
CONTROL HOUSE
6 THORNTON STREET
PAWTUCKET, RHODE ISLAND

DRAWING:
SAMPLING RESULTS PLAN:
SECOND FLOOR

THE NARRAGANSETT
ELECTRIC COMPANY
280 MELROSE STREET
PROVIDENCE, RHODE ISLAND

CONECO Engineers & Scientists
4 FIRST STREET, BRIDGEWATER, MASSACHUSETTS 02324
PHONE 508-697-3191 OR 800-548-3355; FAX 508-697-5996
WEBSITE: www.coneco.com

DATE	12/13/21
DRAFTED: WCB	CHECKED: MAZ
SCALE:	1" = 6'
PROJECT NO.	5675.F.101
FIGURE	4

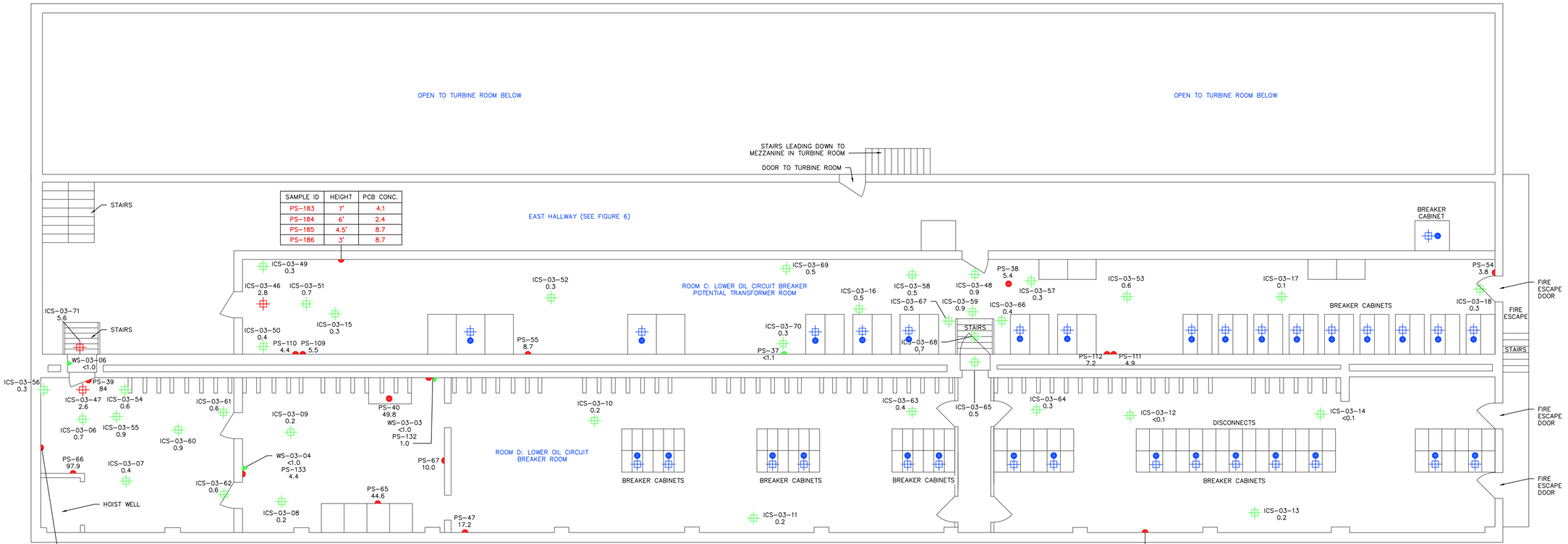
LEGEND

ICS-01-01 <0.1	CONCRETE SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG
	PROPOSED CONCRETE SAMPLE LOCATION
PS-01 10.9	PAINT SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG
	PROPOSED PAINT SAMPLE LOCATION
WS-01-01 <0.5	WIPE SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN ug/100cm²
	DOORWAY

NOTES:

SAMPLES COLLECTED FROM VERTICAL SURFACES ARE DEPICTED BY A HALF SYMBOL. ORIENTATION OF SYMBOL DENOTES THE SIDE OF THE STRUCTURE FROM WHICH THE SAMPLE WAS COLLECTED

GREEN SYMBOL INDICATES PCB CONCENTRATIONS <1 MG/KG
RED SYMBOL INDICATES PCB CONCENTRATION ≥1 MG/KG



SAMPLE ID	HEIGHT	PCB CONC.
PS-183	7'	4.1
PS-184	6'	2.4
PS-185	4.5'	8.7
PS-186	3'	8.7

SAMPLE ID	HEIGHT	PCB CONC.
PS-190	8'	11.7
PS-189	5'	12.9
PS-188	4'	13.8
PS-187	2'	14.1

SAMPLE ID	HEIGHT	PCB CONC.
PS-191	7.5'	3.1
PS-192	5'	3.6
PS-193	4.5'	6.5
PS-194	3.5'	9.3

NOTE: THE LOCATION AND DIMENSIONS OF THE SITE AND VICINITY FEATURES ARE APPROXIMATE AND BASED UPON A PLAN TITLED "FLOOR PLANS" FROM STONE & WEBSTER INC. AND CONECO FIELD OBSERVATIONS

6' 0 6' 12'
SCALE IN FEET

CONECO

REVISIONS

NO.	DATE	DESCRIPTION	DR/CK

PREPARED FOR:
THE NARRAGANSETT ELECTRIC COMPANY
280 MELROSE STREET
PROVIDENCE, RHODE ISLAND

DRAWING:
SAMPLING RESULTS PLAN: THIRD FLOOR

PROJECT:
PAWTUCKET 1 NO. 107 SUBSTATION
CONTROL HOUSE
6 THORNTON STREET
PAWTUCKET, RHODE ISLAND

CONECO Engineers & Scientists
4 FIRST STREET, BRIDGEWATER, MASSACHUSETTS 02324
PHONE 508-697-3191 OR 800-548-3355; FAX 508-697-5996
WEBSITE: www.coneco.com

DATE	12/13/21
DRAFTED: WCB	CHECKED: MAZ
SCALE:	1" = 6'
PROJECT NO.	5675.F.101
FIGURE	5

LEGEND

ICS-01-01 <0.1	CONCRETE SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG
	PROPOSED CONCRETE SAMPLE LOCATION
PS-01 10.9	PAINT SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG
	PROPOSED PAINT SAMPLE LOCATION
WS-01-01 <0.5	WIPE SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN ug/100cm²
BR-03-01 1.4	BRICK WALL SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG

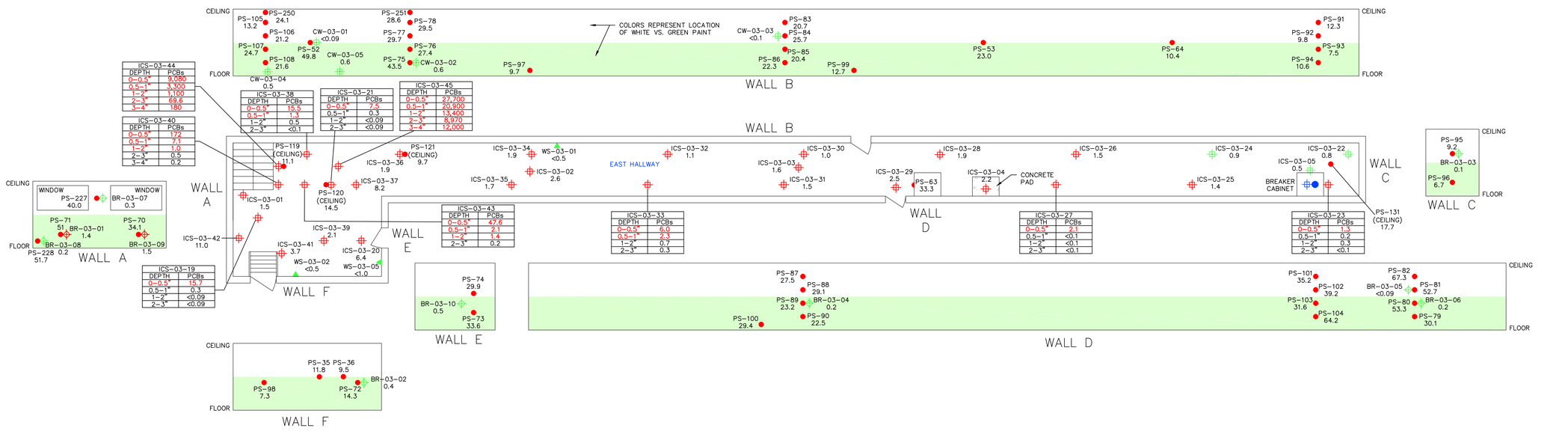
ICS-01-33	
0.0-0.5"	8.9
0.5-1"	<0.1
1-2"	<0.1
2-3"	<0.1

CONCRETE SAMPLE LOCATION, IDENTIFICATION, DEPTH IN INCHES, AND PCB CONCENTRATION IN MG/KG

DOORWAY

NOTES:
GREEN SYMBOL INDICATES PCB CONCENTRATIONS <1 MG/KG
RED SYMBOL INDICATES PCB CONCENTRATION ≥1 MG/KG

THE COLOR OF THE WALLS REPRESENTS GREEN VS. WHITE PAINT.



NOTE: THE LOCATION AND DIMENSIONS OF THE SITE AND VICINITY FEATURES ARE APPROXIMATE AND BASED UPON A PLAN TITLED "FLOOR PLANS" FROM STONE & WEBSTER INC. AND CONECO FIELD OBSERVATIONS

REVISIONS

NO.	DATE	DESCRIPTION	DR/CK

PREPARED FOR:
THE NARRAGANSETT ELECTRIC COMPANY
280 MELROSE STREET
PROVIDENCE, RHODE ISLAND

DRAWING:
SAMPLING RESULTS PLAN:
THIRD FLOOR (EAST HALLWAY)

PROJECT:
PAWTUCKET 1 NO. 107 SUBSTATION
CONTROL HOUSE
6 THORNTON STREET
PAWTUCKET, RHODE ISLAND

CONECO Engineers & Scientists
4 FIRST STREET, BRIDGEWATER, MASSACHUSETTS 02324
PHONE 508-697-3191 OR 800-548-3355; FAX 508-697-5996
WEBSITE: www.coneco.com

DATE	12/13/21
DRAFTED: WCB	CHECKED: MAZ
SCALE:	1" = 8'
PROJECT NO.	5675.F.101
FIGURE	6

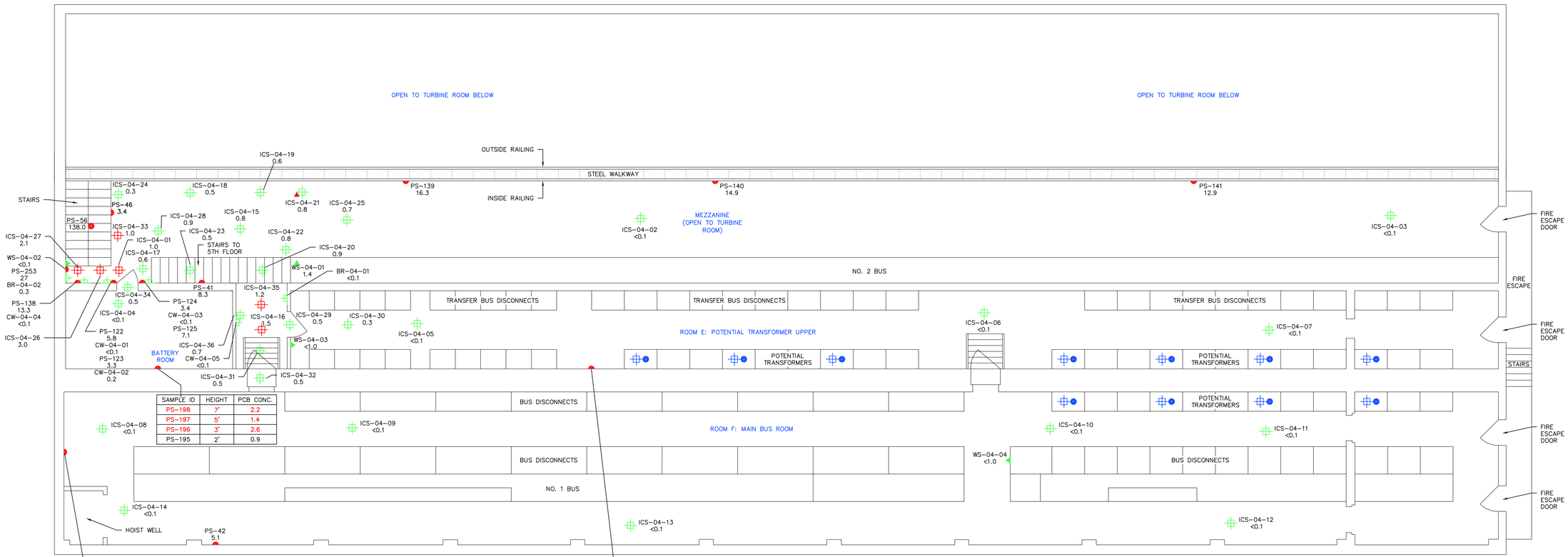
LEGEND

ICS-01-01 <0.1	CONCRETE SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG
	PROPOSED CONCRETE SAMPLE LOCATION
PS-01 10.9	PAINT SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG
	PROPOSED PAINT SAMPLE LOCATION
WS-01-01 <0.5	WIPE SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN ug/100cm²
BR-03-01 1.4	BRICK WALL SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG
	DOORWAY

NOTES:

SAMPLES COLLECTED FROM VERTICAL SURFACES ARE DEPICTED BY A HALF SYMBOL. ORIENTATION OF SYMBOL DENOTES THE SIDE OF THE STRUCTURE FROM WHICH THE SAMPLE WAS COLLECTED

GREEN SYMBOL INDICATES PCB CONCENTRATIONS <1 MG/KG
RED SYMBOL INDICATES PCB CONCENTRATION ≥1 MG/KG



SAMPLE ID	HEIGHT	PCB CONC.
PS-198	7'	2.2
PS-197	5'	1.4
PS-196	3'	2.6
PS-195	2'	0.9

SAMPLE ID	HEIGHT	PCB CONC.
PS-199	7'	4.6
PS-200	5.5'	6.0
PS-201	4.5'	6.2
PS-202	3'	4.1

SAMPLE ID	HEIGHT	PCB CONC.
PS-206	9'	1.2
PS-205	5'	1.1
PS-204	4'	2.1
PS-203	1'	2.0

NOTE: THE LOCATION AND DIMENSIONS OF THE SITE AND VICINITY FEATURES ARE APPROXIMATE AND BASED UPON CONECO FIELD OBSERVATIONS

6' 0 6' 12'
SCALE IN FEET

CONECO

REVISIONS

NO.	DATE	DESCRIPTION	DR/CK

PREPARED FOR:
THE NARRAGANSETT ELECTRIC COMPANY
280 MELROSE STREET
PROVIDENCE, RHODE ISLAND

DRAWING:
SAMPLING RESULTS PLAN: FOURTH FLOOR

PROJECT:
PAWTUCKET 1 NO. 107 SUBSTATION
CONTROL HOUSE
6 THORNTON STREET
PAWTUCKET, RHODE ISLAND

CONECO
Engineers & Scientists
4 FIRST STREET, BRIDGEWATER, MASSACHUSETTS 02324
PHONE 508-697-3191 OR 800-548-3355; FAX 508-697-5996
WEBSITE: www.coneco.com

DATE	12/13/21
DRAFTED: WCB	CHECKED: MAZ
SCALE:	1" = 6'
PROJECT NO.	5675.F.101
FIGURE	7

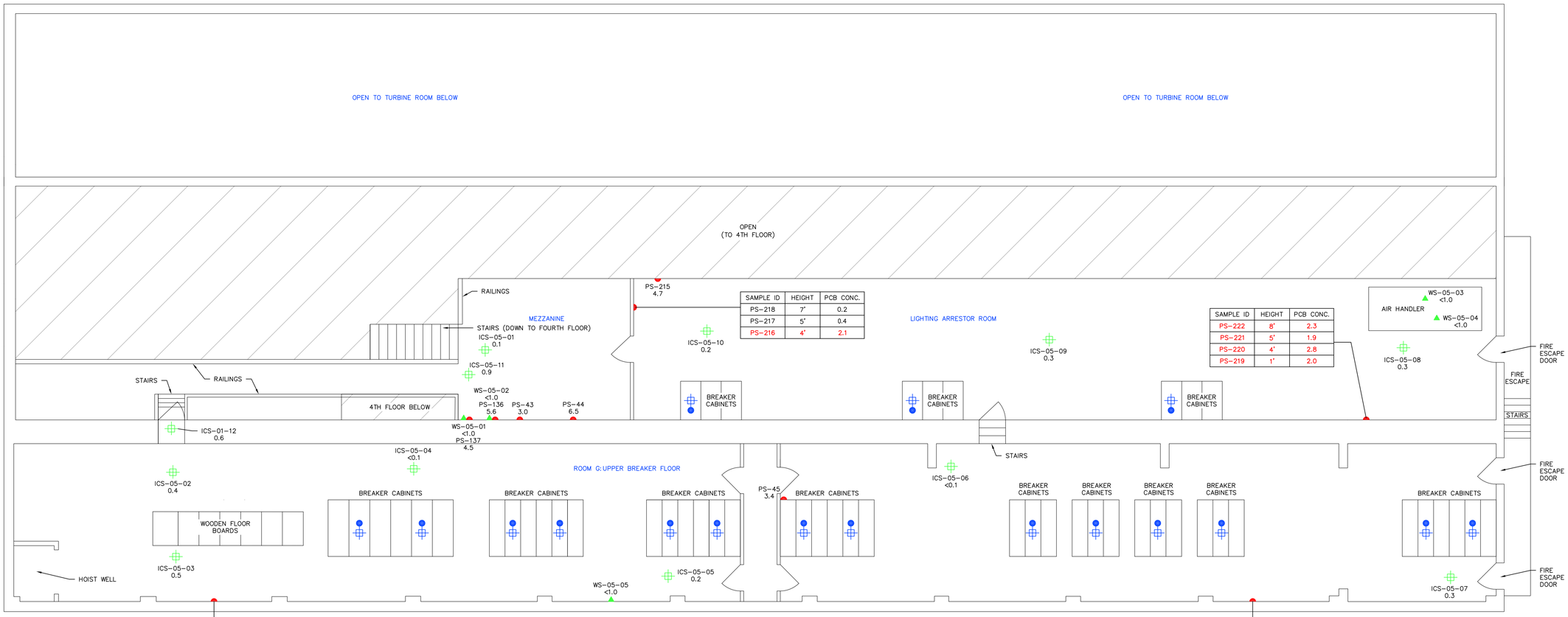
LEGEND

ICS-01-01 <0.1	CONCRETE SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG
	PROPOSED CONCRETE SAMPLE LOCATION
PS-01 10.9	PAINT SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN MG/KG
	PROPOSED PAINT SAMPLE LOCATION
WS-01-01 <0.5	WIPE SAMPLE LOCATION, IDENTIFICATION, AND PCB CONCENTRATION IN ug/100cm²
	DOORWAY

NOTES:

SAMPLES COLLECTED FROM VERTICAL SURFACES ARE DEPICTED BY A HALF SYMBOL. ORIENTATION OF SYMBOL DENOTES THE SIDE OF THE STRUCTURE FROM WHICH THE SAMPLE WAS COLLECTED

GREEN SYMBOL INDICATES PCB CONCENTRATIONS <1 MG/KG
RED SYMBOL INDICATES PCB CONCENTRATION ≥1 MG/KG



SAMPLE ID	HEIGHT	PCB CONC.
PS-218	7'	0.2
PS-217	5'	0.4
PS-216	4'	2.1

SAMPLE ID	HEIGHT	PCB CONC.
PS-222	8'	2.3
PS-221	5'	1.9
PS-220	4'	2.8
PS-219	1'	2.0

SAMPLE ID	HEIGHT	PCB CONC.
PS-207	8'	1.3
PS-208	5'	1.6
PS-209	5'	3.2
PS-210	1'	1.3

SAMPLE ID	HEIGHT	PCB CONC.
PS-211	8'	1.3
PS-212	5.5'	2.0
PS-213	4.5'	4.0
PS-214	3.5'	3.5

NOTE: THE LOCATION AND DIMENSIONS OF THE SITE AND VICINITY FEATURES ARE APPROXIMATE AND BASED UPON CONECO FIELD OBSERVATIONS

6' 0 6' 12'
SCALE IN FEET

REVISIONS

NO.	DATE	DESCRIPTION	DR/CK

PREPARED FOR:
THE NARRAGANSETT ELECTRIC COMPANY
280 MELROSE STREET
PROVIDENCE, RHODE ISLAND

DRAWING:
SAMPLING RESULTS PLAN:
FIFTH FLOOR

PROJECT:
PAWTUCKET 1 NO. 107 SUBSTATION
CONTROL HOUSE
6 THORNTON STREET
PAWTUCKET, RHODE ISLAND

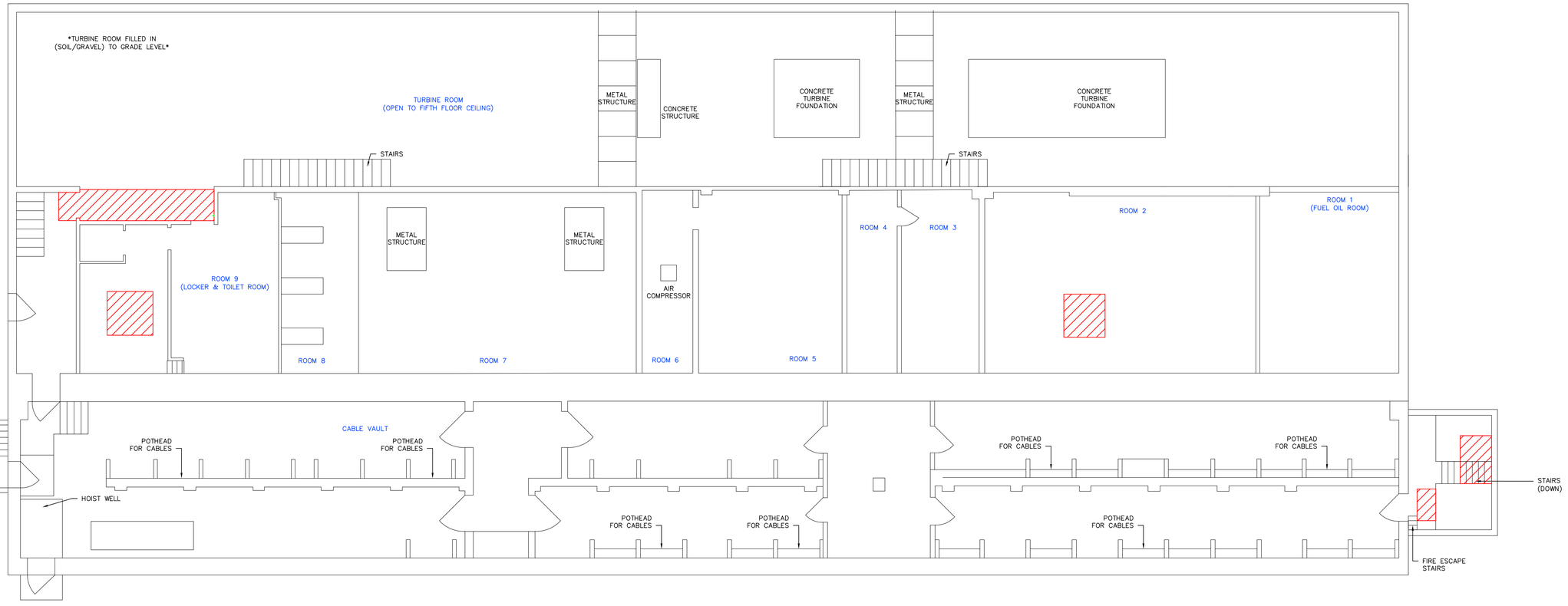
CONECO Engineers & Scientists
4 FIRST STREET, BRIDGEWATER, MASSACHUSETTS 02324
PHONE 508-697-3191 OR 800-548-3355; FAX 508-697-5996
WEBSITE: www.coneco.com

DATE	12/13/21
DRAFTED: WCB	CHECKED: MAZ
SCALE:	1" = 6'
PROJECT NO.	5675.F.101
FIGURE	8

LEGEND

INFERRED AREA OF PCB REMEDIATION WASTE

DOORWAY



NOTE: THE LOCATION AND DIMENSIONS OF THE SITE AND VICINITY FEATURES ARE APPROXIMATE AND BASED UPON A PLAN TITLED "SWITCH HOUSE GENERAL ARRANGEMENT PLAN" FROM TNEC AND CONECO FIELD OBSERVATIONS

6' 0 6' 12'
SCALE IN FEET

REVISIONS

NO.	DATE	DESCRIPTION	DR/CK

PREPARED FOR:
THE NARRAGANSETT ELECTRIC COMPANY
280 MELROSE STREET
PROVIDENCE, RHODE ISLAND

DRAWING:
PCB REMEDIATION WASTE PLAN: FIRST FLOOR

PROJECT:
PAWTUCKET 1 NO. 107 SUBSTATION
CONTROL HOUSE
6 THORNTON STREET
PAWTUCKET, RHODE ISLAND

CONECO Engineers & Scientists
4 FIRST STREET, BRIDGEWATER, MASSACHUSETTS 02324
PHONE 508-697-3191 OR 800-548-3355; FAX 508-697-5996
WEBSITE: www.coneco.com

DATE	12/13/21
DRAFTED: WCB	CHECKED: MAZ
SCALE:	1" = 6'
PROJECT NO.	5675.F.101
FIGURE	9

LEGEND

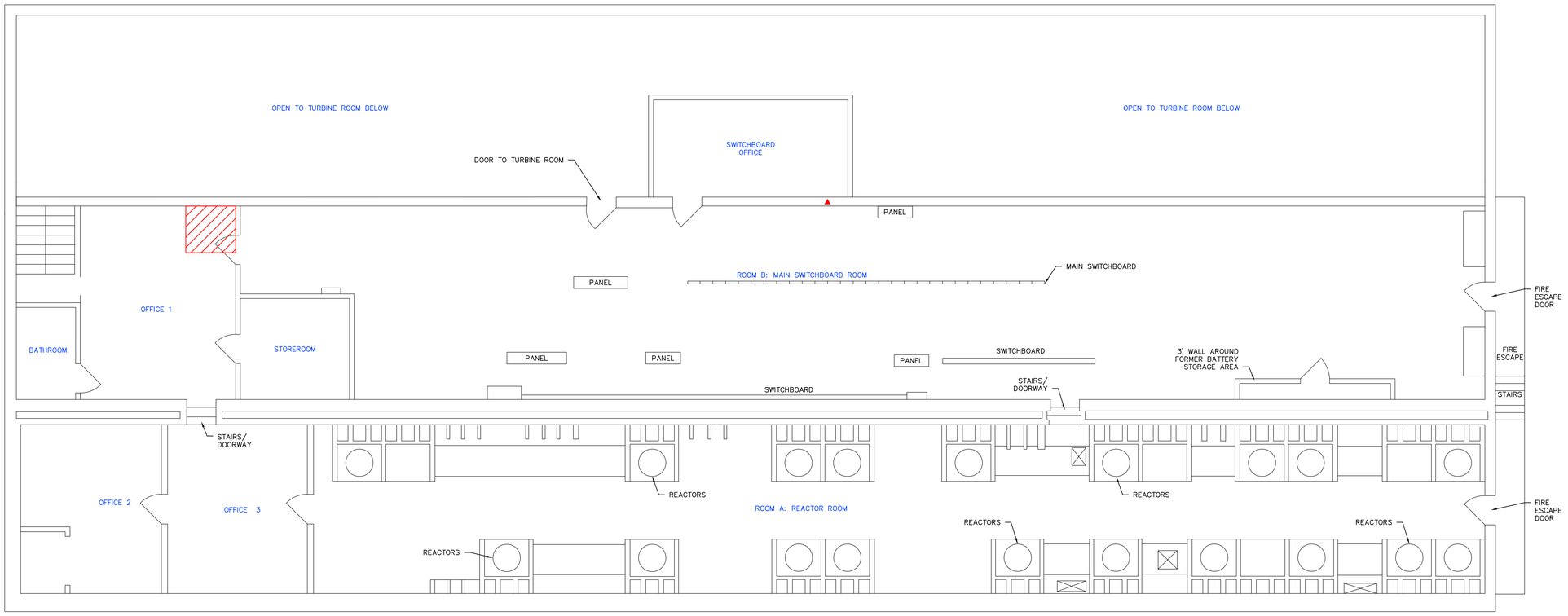
INFERRED AREA OF PCB REMEDIATION WASTE

DOORWAY

NOTES:

SAMPLES COLLECTED FROM VERTICAL SURFACES ARE DEPICTED BY A HALF SYMBOL. ORIENTATION OF SYMBOL DENOTES THE SIDE OF THE STRUCTURE FROM WHICH THE SAMPLE WAS COLLECTED

GREEN SYMBOL INDICATES PCB CONCENTRATIONS <1 MG/KG
RED SYMBOL INDICATES PCB CONCENTRATION ≥1 MG/KG



NOTE: THE LOCATION AND DIMENSIONS OF THE SITE AND VICINITY FEATURES ARE APPROXIMATE AND BASED UPON A PLAN TITLED "SWITCH HOUSE GENERAL ARRANGEMENT PLAN" FROM TNEC AND CONECO FIELD OBSERVATIONS

6' 0 6' 12'
SCALE IN FEET

REVISIONS

NO.	DATE	DESCRIPTION	DR/CK

PREPARED FOR:
THE NARRAGANSETT ELECTRIC COMPANY
280 MELROSE STREET
PROVIDENCE, RHODE ISLAND

DRAWING:
PCB REMEDIATION WASTE PLAN: SECOND FLOOR

PROJECT:
PAWTUCKET 1 NO. 107 SUBSTATION
CONTROL HOUSE
6 THORNTON STREET
PAWTUCKET, RHODE ISLAND

CONECO Engineers & Scientists
4 FIRST STREET, BRIDGEWATER, MASSACHUSETTS 02324
PHONE 508-697-3191 OR 800-548-3355; FAX 508-697-5996
WEBSITE: www.coneco.com

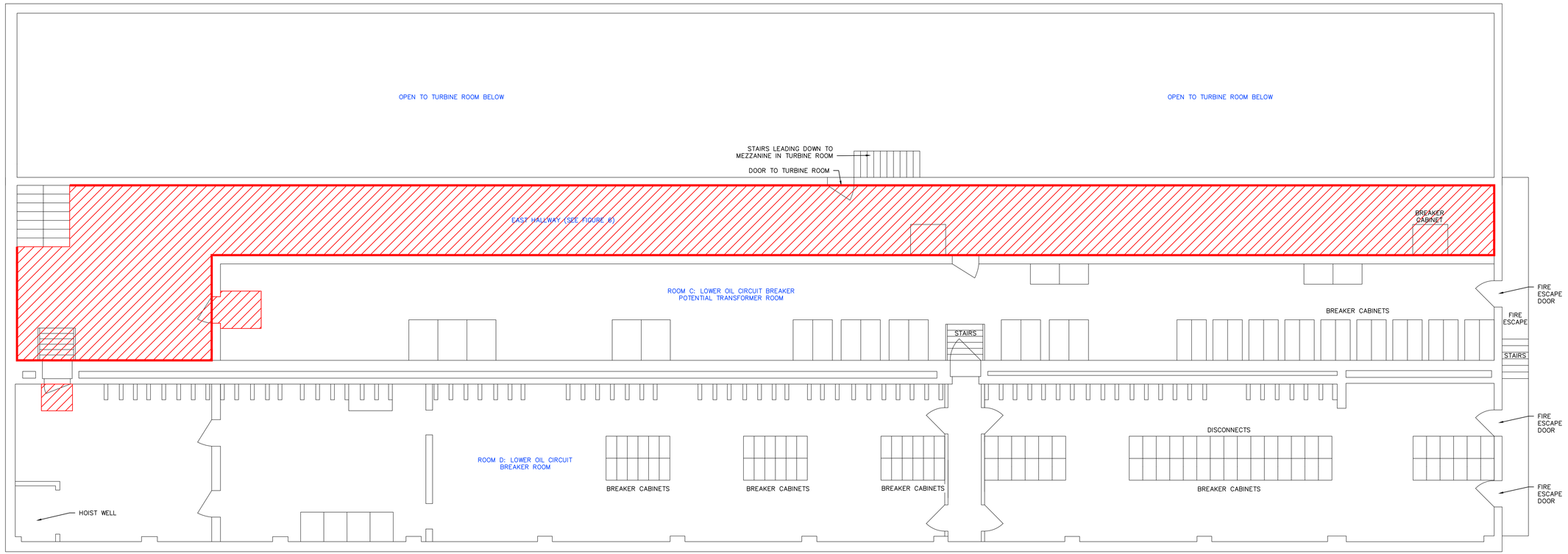
DATE	12/13/21
DRAFTED: WCB	CHECKED: MAZ
SCALE:	1" = 6'
PROJECT NO.	5675.F.101
FIGURE	10

LEGEND

INFERRED AREA OF PCB REMEDIATION WASTE (FLOOR ONLY)

PCB REM WASTE EXTENDS FROM FLOOR TO WALL FACE AND INCLUDES CEILING

DOORWAY



NOTE: THE LOCATION AND DIMENSIONS OF THE SITE AND VICINITY FEATURES ARE APPROXIMATE AND BASED UPON A PLAN TITLED "FLOOR PLANS" FROM STONE & WEBSTER INC. AND CONECO FIELD OBSERVATIONS

6' 0 6' 12'
SCALE IN FEET

REVISIONS

NO.	DATE	DESCRIPTION	DR/CK

PREPARED FOR:
THE NARRAGANSETT ELECTRIC COMPANY
280 MELROSE STREET
PROVIDENCE, RHODE ISLAND

DRAWING:
PCB REMEDIATION WASTE PLAN: THIRD FLOOR

PROJECT:
PAWTUCKET 1 NO. 107 SUBSTATION
CONTROL HOUSE
6 THORNTON STREET
PAWTUCKET, RHODE ISLAND

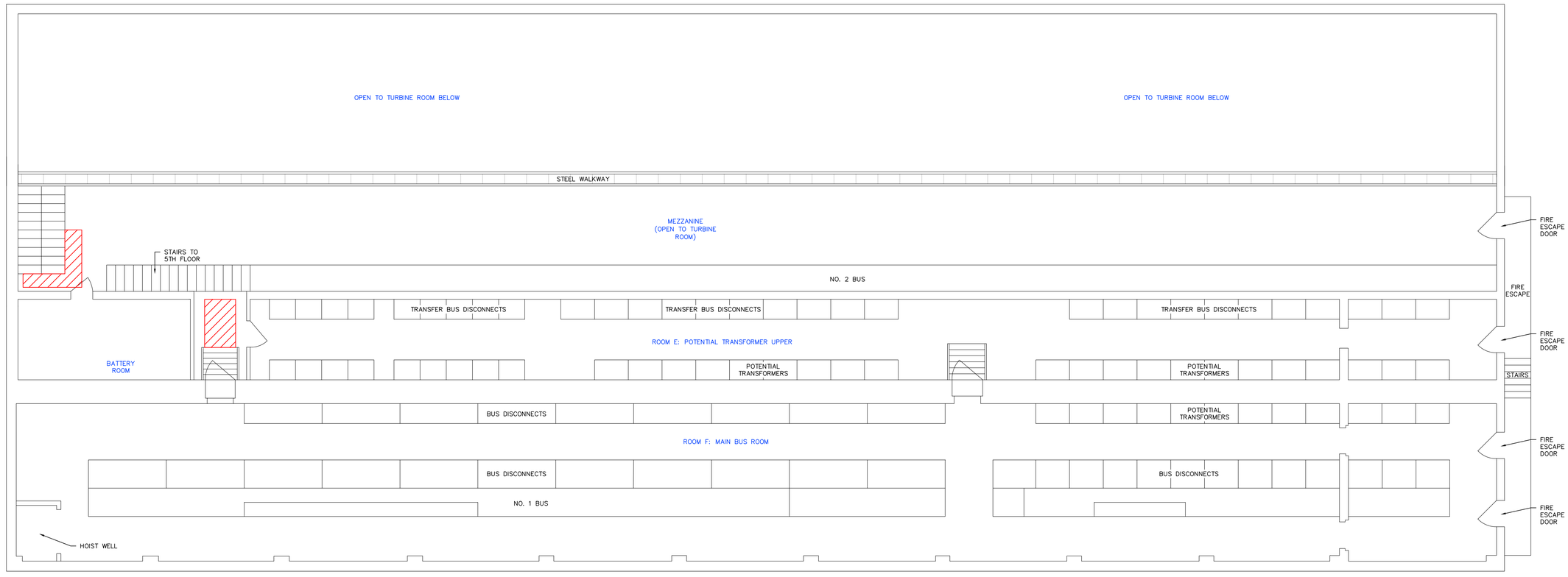
CONECO Engineers & Scientists
4 FIRST STREET, BRIDGEWATER, MASSACHUSETTS 02324
PHONE 508-697-3191 OR 800-548-3355; FAX 508-697-5996
WEBSITE: www.coneco.com

DATE	12/13/21
DRAFTED: WCB	CHECKED: MAZ
SCALE:	1" = 6'
PROJECT NO.	5675.F.101
FIGURE	11

LEGEND

INFERRED AREA OF PCB REMEDIATION WASTE

DOORWAY



NOTE: THE LOCATION AND DIMENSIONS OF THE SITE AND VICINITY FEATURES ARE APPROXIMATE AND BASED UPON CONECO FIELD OBSERVATIONS

6' 0 6' 12'
SCALE IN FEET

REVISIONS

NO.	DATE	DESCRIPTION	DR/CK

PREPARED FOR:
THE NARRAGANSETT
ELECTRIC COMPANY
280 MELROSE STREET
PROVIDENCE, RHODE ISLAND

DRAWING:
PCB REMEDIATION WASTE PLAN:
FOURTH FLOOR

PROJECT:
PAWTUCKET 1 NO. 107 SUBSTATION
CONTROL HOUSE
6 THORNTON STREET
PAWTUCKET, RHODE ISLAND

CONECO
Engineers & Scientists
4 FIRST STREET, BRIDGEWATER, MASSACHUSETTS 02324
PHONE 508-697-3191 OR 800-548-3355; FAX 508-697-5996
WEBSITE: www.coneco.com

DATE	12/13/21
DRAFTED: WCB	CHECKED: MAZ
SCALE:	1" = 6'
PROJECT NO.	5675.F.101
FIGURE	12

TABLES

Table 1 - Concrete Floor and Ceiling Analytical Results

Sample ID	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
ICS-01 (0-0.5)	10/30/2018	11/5/2018	48	<0.2	<0.2	<0.2	<0.2	<0.2
ICS-02 (0-0.5)	10/30/2018	11/5/2018	63	<0.2	<0.2	<0.2	<0.2	<0.2
ICS-03 (0-0.5)	10/31/2018	11/5/2018	66	<0.2	0.8	<0.2	<0.2	0.8
ICS-01-01 (0-0.5)	10/1/2018	10/8/2018	54	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-02 (0-0.5)	10/1/2018	10/8/2018	60	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-03 (0-0.5)	10/1/2018	10/8/2018	53	<0.1	0.1	<0.1	0.2	0.3
ICS-01-04 (0-0.5)	10/1/2018	10/8/2018	44	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-05 (0-0.5)	10/1/2018	10/8/2018	55	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-06 (0-0.5)	10/1/2018	10/8/2018	47	0.4	<0.1	<0.1	<0.1	0.4
ICS-01-07 (0-0.5)	10/1/2018	10/8/2018	47	0.2	0.1	<0.1	<0.1	0.3
ICS-01-08 (0-0.5)	10/1/2018	10/8/2018	47	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-09 (0-0.5)	10/1/2018	10/9/2018	48	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-10 (0-0.5)	10/1/2018	10/9/2018	45	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-11 (0-0.5)	10/1/2018	10/9/2018	55	<0.1	0.2	<0.1	<0.1	0.2
ICS-01-12 (0-0.5)	10/1/2018	10/9/2018	73	0.9	0.3	<0.1	<0.1	**1.2**
ICS-01-13 (0-0.5)	10/1/2018	10/9/2018	64	<0.1	0.4	<0.1	<0.1	0.4
ICS-01-14 (0-0.5)	10/1/2018	10/9/2018	98	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-15 (0-0.5)	10/1/2018	10/9/2018	92	<0.1	0.2	<0.1	<0.1	0.2
ICS-01-16 (0-0.5)	10/1/2018	10/9/2018	46	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-17 (0-0.5)	10/1/2018	10/9/2018	75	0.3	0.2	<0.1	<0.1	0.5
ICS-01-18 (0-0.5)	10/1/2018	10/9/2018	63	<0.1	0.2	<0.1	<0.1	0.2
ICS-01-19 (0-0.5)	10/1/2018	10/9/2018	83	<0.1	0.1	<0.1	<0.1	0.3
ICS-01-20 (0-0.5)	10/1/2018	10/9/2018	62	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-21 (0-0.5)	10/1/2018	10/9/2018	56	0.3	0.1	<0.1	<0.01	0.4
ICS-01-22 (0-0.5)	10/1/2018	10/9/2018	52	0.1	<0.1	<0.1	<0.1	0.1
ICS-01-23 (0-0.5)	10/1/2018	10/9/2018	50	0.2	<0.9	<0.09	<0.9	0.2
ICS-01-24 (0-0.5)	10/1/2018	10/9/2018	81	0.3	<0.1	<0.1	<0.1	0.3
ICS-01-25 (0-0.5)	10/1/2018	10/9/2018	60	0.6	<0.1	<0.1	<0.1	0.6
ICS-01-26 (0-0.5)	10/1/2018	10/9/2018	53	0.2	0.2	<0.1	<0.1	0.4
ICS-01-27 (0-0.5)	10/1/2018	10/9/2018	69	0.2	0.1	<0.1	<0.1	0.3
EPA Standard								*1*
RDEC								*10*

Notes:
1. Sample ID includes depth in inches collected below grade.
2. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
3. Analytical results are reported in milligrams per kilogram (mg/kg).
4. < denotes analyte was not detected above the laboratory detection limit.
5. **Bold** indicates an exceedance of the applicable disposal action level.
6. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
7. SD indicates surrogate recovery percentage diluted below laboratory quantification limit.
8. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
9. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in

Table 1 - Concrete Floor and Ceiling Analytical Results (Continued)

Sample ID	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
ICS-01-28 (0-0.5)	10/1/2018	10/9/2018	50	0.1	0.1	<0.1	<0.1	0.2
ICS-01-29 (0-0.5)	10/1/2018	10/9/2018	60	<0.09	0.3	<0.09	<0.09	0.3
ICS-01-30 (0-0.5)	10/1/2018	10/9/2018	62	0.2	0.2	<0.09	<0.09	0.4
ICS-01-31 (0-0.5)	10/1/2018	10/9/2018	43	0.2	0.2	<0.1	<0.1	0.4
ICS-01-32 (0-0.5)	10/1/2018	10/9/2018	79	0.6	0.3	<0.09	<0.09	0.9
ICS-01-33 (0-0.5)	10/1/2018	10/9/2018	68	8.9	<0.01	<0.1	<0.1	**8.9**
ICS-01-33 (0.5-1)	4/28/2021	5/5/2021	101	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-33 (1-2)	4/28/2021	5/5/2021	98	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-33 (2-3)	4/28/2021	5/5/2021	95	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-34 (0-0.5)	10/1/2018	10/9/2018	87	0.2	<0.1	<0.1	<0.1	0.2
ICS-01-35 (0-0.5)	10/1/2018	10/9/2018	71	<0.09	<0.9	<0.09	<0.9	<0.09
ICS-01-36 (0-0.5)	10/1/2018	10/9/2018	69	<0.09	<0.9	<0.09	<0.9	<0.09
ICS-01-37 (0-0.5)	10/1/2018	10/9/2018	51	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-38 (0-0.5)	10/1/2018	10/9/2018	81	<0.09	<0.9	<0.09	<0.9	<0.09
ICS-01-39 (0-0.5)	10/1/2018	10/9/2018	85	<0.09	<0.9	<0.09	<0.9	<0.09
ICS-01-40 (0-0.5)	10/1/2018	10/9/2018	101	0.2	0.1	<0.09	<0.09	0.3
ICS-01-41 (0-0.5)	10/1/2018	10/12/2018	37	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-42 (0-0.5)	10/1/2018	10/11/2018	72	0.1	<0.1	<0.1	<0.1	0.1
ICS-01-43 (0-0.5)	10/1/2018	10/11/2018	65	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-44 (0-0.5)	10/1/2018	10/11/2018	38	0.3	0.3	<0.1	<0.1	0.6
ICS-01-45 (0-0.5)	10/30/2018	11/5/2018	68	<0.2	<0.2	<0.2	<0.2	<0.2
ICS-01-46 (0-0.5)	10/31/2018	11/5/2018	70	0.3	0.3	<0.2	<0.2	0.6
ICS-01-47 (0-0.5)	10/31/2018	11/5/2018	71	0.4	0.4	<0.2	<0.2	0.8
ICS-01-48 (0-0.5)	10/31/2018	11/5/2018	70	0.4	0.4	<0.2	<0.2	0.8
ICS-01-49 (0-0.5)	10/31/2018	11/5/2018	76	0.6	<0.2	<0.2	<0.2	0.6
ICS-01-50 (0-0.5)	10/31/2018	11/5/2018	65	<0.2	<0.2	<0.2	<0.2	<0.2
ICS-01-51 (0-0.5)	10/31/2018	11/5/2018	64	<0.2	<0.2	<0.2	<0.2	<0.2
ICS-01-52 (0-0.5)	10/31/2018	11/6/2018	77	<0.1	0.1	<0.1	<0.1	0.1
ICS-01-53 (0-0.5)	10/31/2018	11/6/2018	59	<0.1	0.2	<0.1	<0.1	0.2
ICS-01-54 (0-0.5)	10/31/2018	11/6/2018	52	<0.1	0.2	<0.1	<0.1	0.2
EPA Standard								*1*
RDEC								*10*

Notes:
1. Sample ID includes depth in inches collected below grade.
2. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
3. Analytical results are reported in milligrams per kilogram (mg/kg).
4. < denotes analyte was not detected above the laboratory detection limit.
5. **Bold** indicates an exceedance of the applicable disposal action level.
6. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
7. SD indicates surrogate recovery percentage diluted below laboratory quantification limit.
8. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
9. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in

Table 1 - Concrete Floor and Ceiling Analytical Results (Continued)

Sample ID	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
ICS-01-55 (0-0.5)	10/31/2018	11/6/2018	79	<0.1	0.2	<0.1	<0.1	0.2
ICS-01-56 (0-0.5)	10/31/2018	11/6/2018	66	<0.1	0.2	<0.1	<0.1	0.2
ICS-01-57 (0-0.5)	10/31/2018	11/6/2018	63	<0.1	0.5	<0.1	<0.1	0.5
ICS-01-58 (0-0.5)	10/31/2018	11/6/2018	67	<0.1	0.2	<0.1	<0.1	0.2
ICS-01-59 (0-0.5)	10/31/2018	11/6/2018	33	<0.1	0.2	<0.1	<0.1	0.2
ICS-01-60 (0-0.5)	9/27/2019	10/7/2019	94	<0.09	0.3	<0.09	<0.09	0.3
ICS-01-61 (0-0.5)	9/27/2019	10/7/2019	91	<0.09	0.3	<0.09	<0.09	0.3
ICS-01-62 (0-0.5)	9/27/2019	10/7/2019	92	<0.09	0.3	<0.09	<0.09	0.3
ICS-01-63 (0-0.5)	9/27/2019	10/7/2019	77	<0.1	0.3	<0.1	<0.09	0.3
ICS-01-64 (0-0.5)	9/27/2019	10/7/2019	75	<0.09	0.1	<0.09	<0.09	0.1
ICS-01-65 (0-0.5)	1/3/2020	1/10/2020	93	<0.1	0.1	<0.1	<0.1	0.1
ICS-01-66 (0-0.5)	1/3/2020	1/10/2020	103	<0.1	0.3	<0.1	<0.1	0.3
ICS-01-67 (0-0.5)	1/3/2020	1/10/2020	88	<0.1	1.4	<0.1	<0.1	**1.4**
ICS-01-68 (0-0.5)	1/3/2020	1/10/2020	59	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-69 (0-0.5)	1/3/2020	1/10/2020	81	0.4	0.6	<0.1	<0.1	**1.0**
ICS-01-70 (0-0.5)	1/3/2020	1/10/2020	76	0.7	1.0	<0.1	<0.1	**1.7**
ICS-01-71 (0-0.5)	1/3/2020	1/10/2020	75	0.5	0.7	<0.1	<0.1	**1.2**
ICS-01-72 (0-0.5)	1/3/2020	1/10/2020	84	0.2	<0.1	0.3	<0.1	0.5
ICS-01-73 (0-0.5)	1/3/2020	1/14/2020	51	0.2	0.1	<0.1	<0.1	0.3
ICS-01-74 (0-0.5)	5/28/2020	6/9/2020	83	<0.1	0.2	<0.1	<0.1	0.2
ICS-01-75 (0-0.5)	5/28/2020	6/9/2020	74	<0.1	0.2	<0.1	<0.1	0.2
ICS-01-76 (0-0.5)	5/28/2020	6/9/2020	89	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-77 (0-0.5)	5/28/2020	6/9/2020	94	<0.1	0.3	<0.1	<0.1	0.3
ICS-01-78 (0-0.5)	5/28/2020	6/9/2020	48	<0.1	0.5	<0.1	<0.1	0.5
ICS-01-79 (0-0.5)	5/28/2020	6/9/2020	85	<0.1	0.5	<0.1	<0.1	0.5
ICS-01-80 (0-0.5)	5/28/2020	6/9/2020	95	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-81 (0-0.5)	5/28/2020	6/9/2020	45	<0.1	0.6	<0.1	<0.1	0.6
ICS-01-82 (0-0.5)	9/2/2020	9/9/2020	68	<0.09	<0.09	<0.09	<0.09	<0.09
ICS-01-83 (0-0.5)	9/2/2020	9/9/2020	77	<0.1	4.0	<0.1	<0.1	**4.0**
ICS-01-84 (0-0.5)	9/2/2020	9/9/2020	79	<0.1	<0.1	<0.1	<0.1	<0.1
EPA Standard								*1*
RDEC								*10*

Notes:
1. Sample ID includes depth in inches collected below grade.
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3. Analytical results are reported in milligrams per kilogram (mg/kg).
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Table 1 - Concrete Floor and Ceiling Analytical Results (Continued)

Sample ID	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
ICS-01-85 (0-0.5)	9/2/2020	9/9/2020	59	<0.1	0.5	<0.1	<0.1	0.5
ICS-01-86 (0-0.5)	9/2/2020	9/9/2020	67	<0.1	0.9	<0.1	<0.1	0.9
ICS-01-87 (0-0.5)	4/27/2021	5/5/2021	78	0.3	0.5	<0.1	<0.1	0.8
ICS-01-88 (0-0.5)	4/27/2021	5/5/2021	72	0.2	0.2	<0.09	<0.09	0.4
ICS-01-89 (0-0.5)	4/27/2021	5/5/2021	75	0.2	0.2	<0.09	<0.09	0.4
ICS-01-90 (0-0.5)	4/27/2021	5/5/2021	83	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-91 (0-0.5)	4/27/2021	5/5/2021	84	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-92 (0-0.5)	4/27/2021	5/5/2021	87	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-93 (0-0.5)	4/27/2021	5/5/2021	78	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-94 (0-0.5)	4/27/2021	5/5/2021	65	0.2	<0.1	<0.1	<0.1	0.2
ICS-01-95 (0-0.5)	4/27/2021	5/5/2021	80	<0.09	<0.09	<0.09	<0.09	<0.09
ICS-01-96 (0-0.5)	4/27/2021	5/5/2021	92	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-97 (0-0.5)	4/27/2021	5/4/2021	97	<0.1	5.8	<0.1	<0.1	**5.8**
ICS-01-98 (0-0.5)	9/1/2021	9/7/2021	76	<0.1	0.3	<0.1	<0.1	0.3
ICS-01-99 (0-0.5)	9/1/2021	9/7/2021	75	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-100 (0-0.5)	9/1/2021	9/7/2021	82	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-101 (0-0.5)	9/1/2021	9/7/2021	89	<0.1	0.6	<0.1	<0.1	0.6
ICS-01-102 (0-0.5)	9/1/2021	9/7/2021	86	<0.1	1.0	<0.1	<0.1	**1.0**
ICS-01-103 (0-0.5)	9/1/2021	9/7/2021	82	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-01-104 (0-0.5)	10/21/2021	10/25/2021	111	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-02-01 (0-0.5)	10/2/2018	10/11/2018	76	0.2	<0.1	<0.1	<0.1	0.2
ICS-02-02 (0-0.5)	10/2/2018	10/11/2018	65	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-02-03 (0-0.5)	10/2/2018	10/11/2018	66	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-02-04 (0-0.5)	10/2/2018	10/11/2018	59	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-02-05 (0-0.5)	10/2/2018	10/11/2018	78	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-02-06 (0-0.5)	10/2/2018	10/11/2018	69	<0.1	0.5	<0.1	<0.1	0.5
ICS-02-07 (0-0.5)	10/2/2018	10/11/2018	69	<0.1	0.2	<0.1	<0.1	0.2
ICS-02-08 (0-0.5)	10/2/2018	10/11/2018	74	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-02-09 (0-0.5)	10/2/2018	10/11/2018	86	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-02-10 (0-0.5)	10/2/2018	10/11/2018	56	<0.1	<0.1	<0.1	<0.1	<0.1
EPA Standard								*1*
RDEC								*10*

Notes:
1. Sample ID includes depth in inches collected below grade.
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3. Analytical results are reported in milligrams per kilogram (mg/kg).
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5. **Bold** indicates an exceedance of the applicable disposal action level.
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7. SD indicates surrogate recovery percentage diluted below laboratory quantification limit.
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Table 1 - Concrete Floor and Ceiling Analytical Results (Continued)

Sample ID	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
ICS-02-11 (0-0.5)	10/2/2018	10/11/2018	60	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-02-12 (0-0.5)	10/2/2018	10/11/2018	72	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-02-13 (0-0.5)	10/2/2018	10/11/2018	75	0.1	<0.1	<0.1	<0.1	0.1
ICS-02-14 (0-0.5)	10/2/2018	10/11/2018	79	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-02-15 (0-0.5)	10/2/2018	10/11/2018	77	<0.1	0.1	<0.1	<0.1	0.1
ICS-02-16 (0-0.5)	9/1/2021	9/11/2021	66	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-02-17 (0-0.5)	9/1/2021	9/11/2021	73	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-02-18 (0-0.5)	9/1/2021	9/11/2021	84	**16.4**	<0.1	<0.1	<0.1	**16.4**
ICS-03-01 (0-0.5)	10/2/2018	10/11/2018	68	<0.1	1.5	<0.1	<0.1	**1.5**
ICS-03-02 (0-0.5)	10/2/2018	10/11/2018	72	1.4	1.2	<0.1	<0.1	**2.6**
ICS-03-03 (0-0.5)	10/2/2018	10/11/2018	76	0.7	0.9	<0.1	<0.1	**1.6**
ICS-03-04 (0-0.5)	10/2/2018	10/11/2018	59	1.2	1.0	<0.1	<0.1	**2.2**
ICS-03-05 (0-0.5)	10/2/2018	10/11/2018	77	<0.1	0.5	<0.1	<0.1	0.5
ICS-03-06 (0-0.5)	10/2/2018	10/11/2018	81	<0.1	0.7	<0.1	<0.1	0.7
ICS-03-07 (0-0.5)	10/2/2018	10/11/2018	80	<0.1	0.4	<0.1	<0.1	0.4
ICS-03-08 (0-0.5)	10/2/2018	10/11/2018	81	<0.1	0.2	<0.1	<0.1	0.2
ICS-03-09 (0-0.5)	10/2/2018	10/11/2018	81	<0.1	0.2	<0.1	<0.1	0.2
ICS-03-10 (0-0.5)	10/2/2018	10/11/2018	87	<0.1	0.2	<0.1	<0.1	0.2
ICS-03-11 (0-0.5)	10/2/2018	10/11/2018	84	<0.1	0.2	<0.1	<0.1	0.2
ICS-03-12 (0-0.5)	10/2/2018	10/11/2018	80	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-03-13 (0-0.5)	10/2/2018	10/11/2018	76	<0.1	0.2	<0.1	<0.1	0.2
ICS-03-14 (0-0.5)	10/2/2018	10/11/2018	81	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-03-15 (0-0.5)	10/2/2018	10/11/2018	70	<0.1	0.3	<0.1	<0.1	0.3
ICS-03-16 (0-0.5)	10/2/2018	10/11/2018	49	<0.1	0.5	<0.1	<0.1	0.5
ICS-03-17 (0-0.5)	10/2/2018	10/11/2018	80	<0.1	0.1	<0.1	<0.1	0.1
ICS-03-18 (0-0.5)	10/2/2018	10/11/2018	83	<0.1	0.3	<0.1	<0.1	0.3
ICS-03-19 (0-0.5)	10/30/2018	11/6/2018	84	<0.1	15.7	<0.1	<0.1	**15.7**
ICS-03-19 (0.5-1)	9/26/2019	10/3/2019	78	<0.09	0.3	<0.09	<0.09	0.3
ICS-03-19 (1-2)	9/26/2019	10/3/2019	83	<0.09	<0.09	<0.09	<0.09	<0.09
ICS-03-19 (2-3)	9/26/2019	10/3/2019	48	<0.09	<0.09	<0.09	<0.09	<0.09
EPA Standard								*1*
RDEC								*10*

Notes:
1. Sample ID includes depth in inches collected below grade.
2. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
3. Analytical results are reported in milligrams per kilogram (mg/kg).
4. < denotes analyte was not detected above the laboratory detection limit.
5. **Bold** indicates an exceedance of the applicable disposal action level.
6. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
7. SD indicates surrogate recovery percentage diluted below laboratory quantification limit.
8. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
9. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in

Table 1 - Concrete Floor and Ceiling Analytical Results (Continued)

Sample ID	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
ICS-03-20 (0-0.5)	10/30/2018	11/6/2018	82	<0.1	6.4	<0.1	<0.1	**6.4**
ICS-03-21 (0-0.5)	10/30/2018	11/6/2018	75	<0.1	7.5	<0.1	<0.1	**7.5**
ICS-03-21 (0.5-1)	9/26/2019	10/3/2019	81	<0.1	0.3	<0.1	<0.1	0.3
ICS-03-21 (1-2)	9/26/2019	10/3/2019	83	<0.09	<0.09	<0.09	<0.09	<0.09
ICS-03-21 (2-3)	9/26/2019	10/3/2019	85	<0.09	<0.09	<0.09	<0.09	<0.09
ICS-03-22 (0-0.5)	2/28/2019	3/6/2019	94	<0.1	0.8	<0.1	<0.1	0.8
ICS-03-23 (0-0.5)	2/28/2019	3/6/2019	93	<0.09	1.3	<0.09	<0.09	**1.3**
ICS-03-23 (0.5-1)	1/13/2020	1/13/2020	93	<0.1	0.2	<0.1	<0.1	0.2
ICS-03-23 (1-2)	1/3/2020	1/13/2020	89	<0.1	0.3	<0.1	<0.1	0.3
ICS-03-23 (2-3)	1/3/2020	1/13/2020	94	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-03-24 (0-0.5)	2/28/2019	3/6/2019	68	<0.01	0.9	<0.1	<0.1	0.9
ICS-03-25 (0-0.5)	2/28/2019	3/6/2019	87	<0.09	1.4	<0.1	<0.09	**1.4**
ICS-03-26 (0-0.5)	2/28/2019	3/6/2019	52	<0.09	1.5	<0.09	<0.09	**1.5**
ICS-03-27 (0-0.5)	2/28/2019	3/6/2019	82	<0.1	2.1	<0.1	<0.1	**2.1**
ICS-03-27 (0.5-1)	1/3/2020	1/13/2020	85	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-03-27 (1-2)	1/3/2020	1/13/2020	84	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-03-27 (2-3)	1/3/2020	1/13/2020	63	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-03-28 (0-0.5)	2/28/2019	3/6/2019	68	<0.09	1.9	<0.09	<0.09	**1.9**
ICS-03-29 (0-0.5)	2/28/2019	3/6/2019	72	<0.09	2.5	<0.09	<0.09	**2.5**
ICS-03-30 (0-0.5)	2/28/2019	3/6/2019	90	<0.09	1.0	<0.09	<0.09	**1.0**
ICS-03-31 (0-0.5)	2/28/2019	3/6/2019	68	<0.09	1.5	<0.09	<0.09	**1.5**
ICS-03-32 (0-0.5)	2/28/2019	3/5/2019	59	<0.1	1.1	<0.1	<0.1	**1.1**
ICS-03-33 (0-0.5)	2/28/2019	3/5/2019	77	<0.1	6.0	<0.1	<0.1	**6.0**
ICS-03-33 (1-2)	1/3/2020	1/13/2020	79	0.4	0.3	<0.1	<0.1	0.7
ICS-03-33 (2-3)	1/3/2020	1/13/2020	83	0.2	0.1	<0.1	<0.1	0.3
ICS-03-34 (0-0.5)	2/28/2019	3/5/2019	78	<0.1	1.9	<0.1	<0.1	**1.9**
ICS-03-35 (0-0.5)	2/28/2019	3/5/2019	59	<0.1	1.7	<0.1	<0.1	**1.7**
ICS-03-36 (0-0.5)	2/28/2019	3/5/2019	68	<0.09	1.9	<0.09	<0.09	**1.9**
ICS-03-37 (0-0.5)	2/28/2019	3/6/2019	69	<0.1	8.2	<0.1	<0.1	**8.2**
ICS-03-38 (0-0.5)	2/28/2019	3/6/2019	57	<0.1	15.5	<0.1	<0.1	**15.5**
EPA Standard								*1*
RDEC								*10*

Notes:
1. Sample ID includes depth in inches collected below grade.
2. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
3. Analytical results are reported in milligrams per kilogram (mg/kg).
4. < denotes analyte was not detected above the laboratory detection limit.
5. **Bold** indicates an exceedance of the applicable disposal action level.
6. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
7. SD indicates surrogate recovery percentage diluted below laboratory quantification limit.
8. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
9. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in

Table 1 - Concrete Floor and Ceiling Analytical Results (Continued)

Sample ID	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
ICS-03-38 (0.5-1)	9/26/2019	10/3/2019	76	<0.1	1.3	<0.1	<0.1	**1.3**
ICS-03-38 (1-2)	9/26/2019	10/3/2019	81	<0.09	0.5	<0.9	<0.09	0.5
ICS-03-38 (2-3)	9/26/2019	10/3/2019	89	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-03-39 (0-0.5)	2/28/2019	3/6/2019	77	<0.09	2.1	<0.09	<0.09	**2.1**
ICS-03-40 (0-0.5)	2/28/2019	3/7/2019	SD	<5.0	172	<5.0	<5.0	**172**
ICS-03-40 (0.5-1)	9/26/2019	10/3/2019	91	<0.1	7.1	<0.1	<0.1	**7.1**
ICS-03-40 (1-2)	9/26/2019	10/3/2019	88	<0.09	1.0	<0.09	<0.09	**1.0**
ICS-03-40 (2-3)	9/26/2019	10/7/2019	95	<0.1	0.5	<0.1	<0.1	0.5
ICS-03-40 (3-4)	9/26/2019	10/7/2019	106	<0.1	0.2	<0.1	<0.1	0.2
ICS-03-41 (0-0.5)	2/28/2019	3/6/2019	84	<0.1	3.7	<0.1	<0.1	**3.7**
ICS-03-42 (0-0.5)	2/28/2019	3/6/2019	82	<0.1	11	<0.1	<0.1	**11.0**
ICS-03-43 (0-0.5)	9/26/2019	10/7/2019	SD	<2.0	47.6	<2.0	<2.0	**47.6**
ICS-03-43 (0.5-1)	9/26/2019	10/3/2019	80	<0.09	2.1	<0.09	<0.09	**2.1**
ICS-03-43 (1-2)	9/26/2019	10/3/2019	82	<0.1	1.4	<0.1	<0.1	**1.4**
ICS-03-43 (2-3)	9/26/2019	10/3/2019	91	<0.1	0.2	<0.1	<0.1	0.2
ICS-03-44 (0-0.5)	9/26/2019	10/8/2019	SD	<500	9080	<500	<500	**9,080**
ICS-03-44 (0.5-1)	1/3/2020	1/13/2020	SD	<1010	3,300	<1010	<1010	**3,300**
ICS-03-44 (1-2)	1/3/2019	1/13/2020	SD	<99.3	1,100	<99.3	<99.3	**1,100**
ICS-03-44 (2-3)	1/3/2020	1/13/2020	SD	<2.0	69.6	<2.0	<2.0	**69.6**
ICS-03-44 (3-4)	1/3/2020	1/14/2020	SD	<24.5	180	<24.5	<24.5	**180.0**
ICS-03-45 (0-0.5)	9/29/2019	10/8/2019	SD	<930	27,700	<930	<930	**27,700**
ICS-03-45 (0.5-1)	1/3/2020	1/13/2020	SD	<1020	20,900	<1020	<1020	**20,900**
ICS-03-45 (1-2)	1/3/2020	1/13/2020	SD	<1000	13,400	<1000	<1000	**13,400**
ICS-03-45 (2-3)	1/3/2020	1/13/2020	SD	<1000	8,970	<1000	<1000	**8,970**
ICS-03-45 (3-4)	1/3/2020	1/13/2020	SD	<993	12,000	<993	<993	**12,000**
ICS-03-46 (0-0.5)	9/29/2019	10/7/2019	95	<0.1	2.8	<0.1	<0.1	**2.8**
ICS-03-47 (0-0.5)	9/26/2019	10/7/2019	83	<0.1	2.6	<0.1	<0.1	2.6
ICS-03-48 (0-0.5)	9/26/2019	10/7/2019	83	<0.09	0.9	<0.09	<0.09	0.9
ICS-03-49 (0-0.5)	1/3/2020	1/13/2020	82	<0.1	0.3	<0.1	<0.1	0.3
ICS-03-50 (0-0.5)	1/3/2020	1/13/2020	88	<0.1	0.4	<0.1	<0.1	0.4
EPA Standard								*1*
RDEC								*10*

Notes:
1. Sample ID includes depth in inches collected below grade.
2. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
3. Analytical results are reported in milligrams per kilogram (mg/kg).
4. < denotes analyte was not detected above the laboratory detection limit.
5. **Bold** indicates an exceedance of the applicable disposal action level.
6. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
7. SD indicates surrogate recovery percentage diluted below laboratory quantification limit.
8. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
9. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in

Table 1 - Concrete Floor and Ceiling Analytical Results (Continued)

Sample ID	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
ICS-03-51 (0-0.5)	1/3/2020	1/13/2020	86	<0.1	0.7	<0.1	<0.1	0.7
ICS-03-52 (0-0.5)	1/3/2020	1/10/2020	81	<0.1	0.3	<0.1	<0.1	0.3
ICS-03-53 (0-0.5)	1/3/2020	1/10/2020	83	<0.1	0.6	<0.1	<0.1	0.6
ICS-03-54 (0-0.5)	1/3/2020	1/10/2020	88	<0.1	0.6	<0.1	<0.1	0.6
ICS-03-55 (0-0.5)	1/3/2020	1/10/2020	71	<0.1	0.9	<0.1	<0.1	0.9
ICS-03-56 (0-0.5)	1/3/2020	1/10/2020	77	<0.1	0.3	<0.1	<0.1	0.3
ICS-03-57 (0-0.5)	5/28/2020	6/9/2020	113	<0.1	0.3	<0.1	<0.1	0.3
ICS-03-58 (0-0.5)	5/28/2020	6/9/2020	76	<0.1	0.5	<0.1	<0.1	0.5
ICS-03-59 (0-0.5)	5/28/2020	6/9/2020	77	<0.1	0.9	<0.1	<0.1	0.9
ICS-03-60 (0-0.5)	5/28/2020	6/9/2020	85	<0.1	0.9	<0.1	<0.1	0.9
ICS-03-61 (0-0.5)	9/2/2020	9/10/2020	66	<0.1	0.6	<0.1	<0.1	0.6
ICS-03-62 (0-0.5)	9/2/2020	9/10/2020	58	<0.1	0.6	<0.1	<0.1	0.6
ICS-03-63 (0-0.5)	9/2/2020	9/10/2020	66	<0.1	0.4	<0.1	<0.1	0.4
ICS-03-64 (0-0.5)	9/2/2020	9/10/2020	66	<0.1	0.3	<0.1	<0.1	0.3
ICS-03-65 (0-0.5)	9/2/2020	9/10/2020	67	<0.1	0.5	<0.1	<0.1	0.5
ICS-03-66 (0-0.5)	9/2/2020	9/10/2020	54	<0.1	0.4	<0.1	<0.1	0.4
ICS-03-67 (0-0.5)	9/2/2020	9/10/2020	53	<0.1	0.5	<0.1	<0.1	0.5
ICS-03-68 (0-0.5)	9/2/2020	9/10/2020	64	<0.1	0.7	<0.1	<0.1	0.7
ICS-03-69 (0-0.5)	9/2/2020	9/10/2020	53	<0.1	0.5	<0.1	<0.1	0.5
ICS-03-70 (0-0.5)	9/2/2020	9/10/2020	52	<0.1	0.3	<0.1	<0.1	0.3
ICS-03-71 (0-0.5)	4/27/2021	5/4/2021	90	<0.1	5.6	<0.1	<0.1	**5.6**
ICS-04-01 (0-0.5)	10/2/2018	10/11/2018	72	<0.1	1	<0.1	<0.1	**1.0**
ICS-04-02 (0-0.5)	10/2/2018	10/11/2018	80	<0.1	0.1	<0.1	<0.1	0.1
ICS-04-03 (0-0.5)	10/2/2018	10/11/2018	65	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-04-04 (0-0.5)	10/3/2018	10/12/2018	57	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-04-05 (0-0.5)	10/3/2018	10/12/2018	69	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-04-06 (0-0.5)	10/3/2018	10/12/2018	70	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-04-07 (0-0.5)	10/3/2018	10/12/2018	90	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-04-08 (0-0.5)	10/3/2018	10/12/2018	86	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-04-09 (0-0.5)	10/3/2018	10/12/2018	88	<0.1	<0.1	<0.1	<0.1	<0.1
EPA Standard								*1*
RDEC								*10*

Notes:
1. Sample ID includes depth in inches collected below grade.
2. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
3. Analytical results are reported in milligrams per kilogram (mg/kg).
4. < denotes analyte was not detected above the laboratory detection limit.
5. **Bold** indicates an exceedance of the applicable disposal action level.
6. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
7. SD indicates surrogate recovery percentage diluted below laboratory quantification limit.
8. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
9. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in

Table 1 - Concrete Floor and Ceiling Analytical Results (Continued)

Sample ID	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
ICS-04-10 (0-0.5)	10/3/2018	10/12/2018	95	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-04-11 (0-0.5)	10/3/2018	10/12/2018	90	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-04-12 (0-0.5)	10/3/2018	10/12/2018	95	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-04-13 (0-0.5)	10/3/2018	10/12/2018	83	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-04-14 (0-0.5)	10/3/2018	10/12/2018	93	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-04-15 (0-0.5)	10/30/2018	11/6/2018	78	<0.1	0.8	<0.1	<0.1	0.8
ICS-04-16 (0-0.5)	10/30/2018	11/6/2018	80	<0.1	1.5	<0.1	<0.1	**1.5**
ICS-04-17 (0-0.5)	9/27/2019	10/7/2019	75	<0.09	0.6	<0.09	<0.09	0.6
ICS-04-18 (0-0.5)	9/27/2019	10/7/2019	66	<0.1	0.5	<0.1	<0.1	0.5
ICS-04-19 (0-0.5)	9/27/2019	10/7/2019	73	<0.1	0.6	<0.1	<0.1	0.6
ICS-04-20 (0-0.5)	9/27/2019	10/7/2019	75	<0.1	0.9	<0.1	<0.1	0.9
ICS-04-21 (0-0.5)	1/3/2020	1/10/2020	77	0.3	0.5	<0.1	<0.1	0.8
ICS-04-22 (0-0.5)	1/3/2020	1/10/2020	83	0.4	0.4	<0.1	<0.1	0.8
ICS-04-23 (0-0.5)	1/3/2020	1/10/2020	81	0.2	0.3	<0.1	<0.1	0.5
ICS-04-24 (0-0.5)	1/3/2020	1/10/2020	76	<0.1	0.3	<0.1	<0.1	0.3
ICS-04-25 (0-0.5)	5/29/2020	6/9/2020	76	<0.1	0.7	<0.1	<0.1	0.7
ICS-04-26 (0-0.5)	5/29/2020	6/9/2020	67	<0.1	3.0	<0.1	<0.1	**3.0**
ICS-04-27 (0-0.5)	5/29/2020	6/9/2020	86	<0.1	2.1	<0.1	<0.1	**2.1**
ICS-04-28 (0-0.5)	9/2/2020	9/10/2020	47	<0.1	0.9	<0.1	<0.1	0.9
ICS-04-29 (0-0.5)	9/2/2020	9/10/2020	56	<0.1	0.5	<0.1	<0.1	0.5
ICS-04-30 (0-0.5)	9/2/2020	9/10/2020	47	<0.1	0.3	<0.1	<0.1	0.3
ICS-04-31 (0-0.5)	9/2/2020	9/10/2020	53	<0.1	0.5	<0.1	<0.1	0.5
ICS-04-32 (0-0.5)	9/2/2020	9/10/2020	59	<0.1	0.5	<0.1	<0.1	0.5
ICS-04-33 (0-0.5)	4/27/2021	5/4/2021	84	0.5	0.5	<0.1	<0.1	**1.0**
ICS-04-34 (0-0.5)	4/27/2021	5/4/2021	68	0.2	0.3	<0.1	<0.1	0.5
ICS-04-35 (0-0.5)	4/27/2021	5/4/2021	77	0.5	0.7	<0.1	<0.1	**1.2**
ICS-04-36 (0-0.5)	4/27/2021	5/5/2021	79	0.3	0.4	<0.1	<0.1	0.7
ICS-05-01 (0-0.5)	10/3/2018	10/12/2018	93	<0.1	0.1	<0.1	<0.1	0.1
ICS-05-02 (0-0.5)	10/3/2018	10/12/2018	96	<0.1	0.4	<0.1	<0.1	0.4
ICS-05-03 (0-0.5)	10/3/2018	10/12/2018	76	<0.1	0.5	<0.1	<0.1	0.5
EPA Standard								*1*
RDEC								*10*

Notes:
1. Sample ID includes depth in inches collected below grade.
2. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
3. Analytical results are reported in milligrams per kilogram (mg/kg).
4. < denotes analyte was not detected above the laboratory detection limit.
5. **Bold** indicates an exceedance of the applicable disposal action level.
6. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
7. SD indicates surrogate recovery percentage diluted below laboratory quantification limit.
8. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
9. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in

Table 1 - Concrete Floor and Ceiling Analytical Results (Continued)

Sample ID	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
ICS-05-04 (0-0.5)	10/3/2018	10/12/2018	79	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-05-05 (0-0.5)	10/3/2018	10/12/2018	88	<0.1	0.2	<0.1	<0.1	0.2
ICS-05-06 (0-0.5)	10/3/2018	10/12/2018	91	<0.1	<0.1	<0.1	<0.1	<0.1
ICS-05-07 (0-0.5)	10/3/2018	10/12/2018	87	<0.1	0.3	<0.1	<0.1	0.3
ICS-05-08 (0-0.5)	10/3/2018	10/12/2018	80	<0.1	0.3	<0.1	<0.1	0.3
ICS-05-09 (0-0.5)	10/3/2018	10/12/2018	81	<0.1	0.3	<0.1	<0.1	0.3
ICS-05-10 (0-0.5)	10/3/2018	10/10/2018	75	<0.1	0.2	<0.1	<0.1	0.2
ICS-05-11 (0-0.5)	4/27/2021	5/5/2021	92	0.3	0.6	<0.1	<0.1	0.9
ICS-05-12 (0-0.5)	4/27/2021	5/5/2021	91	<0.1	0.6	<0.1	<0.1	0.6
EPA Standard								*1*
RDEC								*10*

Notes:
1. Sample ID includes depth in inches collected below grade.
2. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
3. Analytical results are reported in milligrams per kilogram (mg/kg).
4. < denotes analyte was not detected above the laboratory detection limit.
5. **Bold** indicates an exceedance of the applicable disposal action level.
6. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
7. SD indicates surrogate recovery percentage diluted below laboratory quantification limit.
8. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
9. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in

Table 2 - Concrete Wall Analytical Results

Sample ID	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor-1254	Aroclor-1260	Aroclor-1268	Total PCBs
CW-01-01	5/28/2020	6/10/2020	89	0.5	0.3	<0.1	0.8
CW-01-02	5/28/2020	6/10/2020	76	0.5	0.2	<0.1	0.7
CW-01-03	5/28/2020	6/10/2020	86	<0.1	<0.1	<0.1	<0.1
CW-01-04	5/28/2020	6/10/2020	82	0.1	<0.1	<0.1	0.1
CW-01-05	5/28/2020	6/10/2020	79	<0.1	<0.1	<0.1	<0.1
CW-01-06	5/28/2020	6/10/2020	80	<0.1	<0.1	<0.1	<0.1
CW-01-07	5/28/2020	6/10/2020	89	<0.1	0.1	<0.1	0.1
CW-01-08	5/28/2020	6/10/2020	88	<0.1	<0.1	<0.1	<0.1
CW-01-09	5/28/2020	6/10/2020	82	<0.1	<0.1	<0.1	<0.1
CW-01-10	9/2/2020	9/9/2020	86	<0.1	<0.1	<0.1	<0.1
CW-01-11	9/2/2020	9/9/2020	81	0.2	<0.1	<0.1	0.2
CW-01-12	4/27/2021	5/6/2021	83	0.3	0.3	<0.09	0.6
CW-03-01	9/27/2019	10/7/2019	83	<0.09	<0.09	<0.09	<0.09
CW-03-02	9/27/2019	10/7/2019	94	<0.1	0.6	<0.1	0.6
CW-03-03	9/27/2019	10/7/2019	90	<0.1	<0.1	<0.1	<0.1
CW-03-04	5/28/2020	6/10/2020	89	<0.1	0.5	<0.1	0.5
CW-03-05	5/28/2020	6/10/2020	96	<0.1	0.6	<0.1	0.6
CW-04-01	1/3/2020	1/9/2020	61	<0.1	<0.1	<0.1	<0.1
CW-04-02	1/3/2020	1/9/2020	68	<0.1	0.2	<0.1	0.2
CW-04-03	1/3/2020	1/9/2020	65	<0.1	<0.1	<0.1	<0.1
CW-04-04	5/29/2020	6/10/2020	92	<0.1	<0.1	<0.1	<0.1
CW-04-05	9/2/2020	9/9/2020	80	<0.1	<0.1	<0.1	<0.1
EPA Standard							*1*
RDEC							*10*

Notes:
1. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
2. Analytical results are reported in milligrams per kilogram (mg/kg).
3. < denotes analyte was not detected above the laboratory detection limit.
4. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
5. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in

Table 3 - Brick Wall Analytical Results

Sample ID	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor-1254	Aroclor-1260	Aroclor-1268	Total PCBs
BR-03-01	9/27/2019	10/3/2019	86	<0.1	1.4	<0.1	**1.4**
BR-03-02	9/27/2019	10/3/2019	84	<0.09	0.4	<0.09	0.4
BR-03-03	9/27/2019	10/3/2019	78	<0.1	0.1	<0.1	0.1
BR-03-04	9/27/2019	10/4/2019	84	<0.09	0.2	<0.2	0.2
BR-03-05	9/27/2019	10/4/2019	83	<0.09	<0.09	<0.09	<0.09
BR-03-06	9/27/2019	10/4/2019	80	<0.1	0.2	<0.1	0.2
BR-03-07	4/27/2021	5/5/2021	69	<0.1	0.3	<0.1	0.3
BR-03-08	4/27/2021	5/5/2021	85	<0.09	0.2	<0.09	0.2
BR-03-09	4/27/2021	5/5/2021	60	<0.1	1.5	<0.1	**1.5**
BR-03-10	9/2/2021	9/7/2021	87	<0.1	0.5	<0.1	0.5
Brick-04-01	9/2/2020	9/9/2020	74	<0.1	<0.1	<0.1	<0.1
BR-04-02	9/2/2021	9/7/2021	87	<0.1	0.3	<0.1	0.3
EPA Standard							*1*
RDEC							*10*

1. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
2. < indicates analyte was not detected above the laboratory detection limit.
3. Analytical results are reported in milligrams per kilogram (mg/kg).
4. **Bold** indicates an exceedance of the EPA action level for unrestricted future Site use.
5. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
6. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in Sec

Table 4 - Paint Analytical Results

Sample ID	Description	Floor	Location	Substrate	Total Cadmium	Total Chromium	Total Lead	Aroclor-1242	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
PS-01	Dark Green Paint	1	Cable Vault - East Hallway, Southern Door	Metal	3.2	**10,800**	**107,000**	<0.05	4.7	5.5	<0.05	0.7	**10.9**
PS-02	Dark Green Paint	1	Cable Vault - East Hallway, Lower Portion of Wall	Brick	3.52	**8,710**	**50,600**	<0.05	5.1	1.6	<0.05	0.3	**7.0**
PS-03	White Paint	1	Cable Vault - East Hallway, Upper Portion of Wall	Brick	10.1	<3.7	**175**	<0.05	1.3	0.5	<0.05	<0.05	**1.8**
PS-04	Gray Paint Underlain by Black and Red Paint	1	Cable Vault - Cabinet Doors	Composite	**588**	21.7	**64,900**	<0.05	10.4	3.8	<0.05	<0.05	**14.2**
PS-05	Orange Paint Underlain by Black and Red Paint	1	Cable Vault - Cabinet Doors	Composite	12.0	**26,100**	**88,800**	<0.05	7.4	5.1	<0.05	<0.05	**12.5**
PS-06	Yellow Paint Underlain by Red and Green Paint	1	Cable Vault - Fire Extinguisher Marking	Brick	**51.8**	**11,200**	**47,300**	<0.05	3.3	1.4	<0.05	<0.05	**4.7**
PS-07	Dark Green Paint	1	Cable Vault - Green Door	Metal	**37.9**	**6,980**	**41,500**	<0.05	4.6	3.9	<0.05	<0.05	**8.5**
PS-08	Cream Paint Underlain By Dark Green Paint	1	Cable Vault - West Hallway, Wall	Concrete	11.9	**8,820**	**50,300**	<0.05	2.4	1.4	<0.05	0.3	**4.1**
PS-09	Dark Green Paint	1	Cable Vault - West Hallway, Green Door	Metal	3.83	**7,610**	**82,300**	<0.05	4.5	3.3	<0.05	0.8	**8.6**
PS-10	Dark Green Paint	1	Cable Vault - West Hallway, Wall	Concrete	5.49	**10,700**	**62,700**	<0.05	4.1	3.8	<0.05	<0.05	**7.9**
PS-11	White Paint	1	Cable Vault - West Hallway, Wall	Concrete	**22.0**	40.8	**572**	<0.05	2.4	1.6	<0.05	<0.05	**4.0**
PS-12	Brown Paint	1	Cable Vault - West Door to Elevator Shaft	Wood	6.12	**6,910**	**35,800**	<0.05	3.2	3.6	<0.05	<0.05	**6.8**
PS-13	Gray Paint	1	Cable Vault - Elevator Shaft Wall	Concrete	<4.17	**178**	**964**	<0.05	0.3	0.4	<0.05	<0.05	0.7
PS-14	Dark Green Paint	1	Cable Vault - Stairs	Concrete	**23.0**	**3,470**	**24,500**	<0.05	6.8	18.5	<0.05	<0.05	**25.3**
PS-15	Light Green Paint	1	Locker Room - Foyer, Lower Wall	Concrete	1.98	**9,250**	**49,800**	<0.05	<0.05	12.7	<0.05	<0.05	**12.7**
PS-16	White Paint	1	Locker Room - Foyer, Upper Wall	Concrete	9.1	**3,840**	**21,800**	<0.05	<0.05	4.3	<0.05	<0.05	**4.3**
PS-17	Dark Green Paint	2	Landing - Stair Handrail	Concrete	9.89	**14,100**	**81,200**	<0.05	<0.05	45.0	<0.05	<0.05	**45.0**
PS-18	Tan Paint Underlain by White and Light Green Paint	2	Office 1 - West Wall	Brick	5.46	**4,010**	**21,800**	<0.05	1.7	3.1	<0.05	0.6	**5.4**
PS-19	White Paint	2	Office 1 - Ceiling	Concrete	9.18	11.0	**220**	<0.05	1.2	1.7	<0.05	0.5	**3.4**
PS-20	White Paint	2	Office 3 - South Wall	Concrete	**22.3**	<3.64	32.3	<0.05	0.3	0.3	<0.05	0.1	0.7
PS-21	Light Green Paint Underlain by White and Black Paint	2	Office 3 - North Wall	Concrete	10.3	**9,400**	**60,400**	<0.05	3.2	4.9	<0.05	1.1	**9.2**
PS-22	Green Paint Underlain by White Paint	2	Office 2 - West Wall, Former Cabinet Marking	Concrete	18.4	**4,880**	**32,100**	<0.3	0.9	1.1	<0.3	<0.3	**2.0**
PS-23	Black Paint Underlain by Red and Green Paint	2	Office 2 - South Baseboard	Wood	10.2	**5,890**	**32,900**	0.4	1.8	2.4	<0.1	0.5	**4.2**
PS-24	Gray Paint	2	Room A: Reactor Room - Cabinet	Composite	140	8.48	**77,900**	<0.05	1.1	0.9	<0.05	0.3	**2.4**
PS-25	Orange Paint	2	Room A: Reactor Room - Cabinet	Composite	10.3	**8,390**	**62,700**	<0.07	1.9	1.7	<0.07	0.5	**4.1**
PS-26	Yellow Paint Underlain by Gray and Light Green Paint	2	Room A: Reactor Room - Concrete Shelf	Concrete	9.84	**9,060**	**44,600**	<0.3	3.5	4.3	<0.3	1.4	**9.2**
PS-27	Gray Paint	2	Room A: Reactor Room - Concrete Shelf	Concrete	7.39	**4,150**	**23,600**	<0.8	3.5	3.2	<0.8	1	**7.7**
PS-28	Red Paint	2	Room A: Reactor Room - Fire Extinguisher Marking	Brick	*<45.5*	**11,400**	**64,100**	<22.7	<22.7	<22.7	<22.7	<22.7	*<22.7*
PS-29	Dark Green Paint	2	Room A: Reactor Room - East Wall Behind Air Ducts	Brick	6.52	**10,400**	**66,100**	<2.6	4.8	<2.6	<2.6	<2.6	**4.8**
Disposal Action Level					*20*	*100*	*100*						*1*
EPA Standard													*1*
RDEC													*10*

Notes:
1. Concentrations are presented in milligrams per kilogram (mg/kg).
2. **Bold** indicates an exceedance of the applicable Disposal Action Level.
3. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
4. < indicates the analyte was not detected above the specified laboratory detection limit.
5. NT indicates not tested for the specific analyte.
6. *Italics* indicates the specified laboratory detection limit exceeds the EPA action level for unrestricted future Site use.
7. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
8. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in Section 3.1.

Table 4 - Paint Analytical Results (Continued)

Sample ID	Description	Floor	Location	Substrate	Total Cadmium	Total Chromium	Total Lead	Aroclor-1242	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
PS-30	Cream Paint	2	Room A: Reactor Room - East Wall Behind Air Ducts	Brick	7.6	57.2	**615**	<2.2	3.2	<2.2	<2.2	<2.2	**3.2**
PS-31	Yellow Paint	2	Room B: Main Switchboard Room - Battery Box	Wood	<2.3	27.2	69.6	<1.1	2.9	2.4	<1.1	<1.1	**5.3**
PS-32	White Paint Underlain by Dark Green Paint	2	Room B: Main Switchboard Room - North Wall	Concrete	**133**	**2,330**	**30,900**	<0.05	1.2	3.0	<0.05	0.9	**5.1**
PS-33	Light Green Paint Underlain by Dark Green Paint	2	Room B: Main Switchboard Room - North Wall	Concrete	**139**	**4,210**	**44,700**	<0.05	1.7	5.0	<0.05	2.2	**8.9**
PS-34	Tan Paint Underlain by Yellow Red and Black Paint	2	Room C: Lower OCB Potential Transformer Room - West Wall	Concrete	9.44	**10,400**	**47,200**	<0.05	3.1	7.0	<0.05	1.8	**11.9**
PS-35	Dark Green Paint	3	East Hallway - West Wall	Concrete	**38.5**	**3,460**	**43,500**	<0.05	<0.05	11.8	<0.05	<0.05	**11.8**
PS-36	Gray Paint Underlain by Light Tan Paint	3	East Hallway - West Wall	Brick	**80.5**	14.0	**7,880**	<0.08	<0.08	9.5	<0.08	<0.08	**9.5**
PS-37	Orange Paint	3	Room C: Lower OCB Potential Transformer Room - West Wall Cabinet	Metal	<3.23	**23,600**	**101,000**	<1.1	<1.1	<1.1	<1.1	<1.1	*<1.1*
PS-38	White Paint Underlain by Black Paint	3	Room C: Lower OCB Potential Transformer Room - Concrete Step	Concrete	11.9	**2,530**	**9,880**	<1.4	<1.4	5.4	<1.4	<1.4	**5.4**
PS-39	Black Paint Underlain by Dark Green Paint	3	Room D: Lower OCB Room - Northwest Door	Metal	9.27	**3,930**	**98,300**	<4.8	<4.8	84	<4.8	<4.8	**84.0**
PS-40	Dark Green Paint	3	Room D: Lower OCB Room - Storage Cabinet	Metal	<7.69	**19,900**	**97,200**	<0.5	<0.5	49.8	<0.5	<0.5	**49.8**
PS-41	White Paint	4	Room E: Potential Transformer Upper - West Wall	Brick	17.2	**413**	**2,340**	<0.05	< 0.05	8.3	<0.05	< 0.05	**8.3**
PS-42	Gray Paint Underlain by Light Tan Paint	4	Room F: Main Bus Room - West Wall	Brick	**289**	4.52	**403**	<0.05	1.6	3.5	<0.05	< 0.05	**5.1**
PS-43	Light Green Paint	5	Mezzanine - South Wall	Brick	**76.3**	**2,870**	**35,900**	<0.05	1.1	1.6	<0.05	0.3	**3.0**
PS-44	White Paint	5	Mezzanine - South Wall	Brick	**67.5**	**4,750**	**39,500**	<0.05	< 0.05	6.5	<0.05	< 0.05	**6.5**
PS-45	Dark Green Paint	5	Room G: Upper Breaker Floor - Door	Wood	2.48	**5,560**	**61,500**	<0.05	1.6	3.3	<0.05	< 0.05	**4.9**
PS-46	Pink Paint	4	Mezzanine - Temporary Wall to Stairwell	Wood	NT	NT	NT	<0.1	<0.1	3.4	<0.1	< 0.1	**3.4**
PS-47	Silver Paint	3	Room D: Lower OCB - West Hallway, West Wall	Brick	NT	NT	NT	<1.4	<1.4	11.6	<1.4	5.6	**17.2**
PS-48	Brown Paint	2	Room B: Main Switchboard Room - East Wall	Metal	NT	NT	NT	< 2.3	<2.3	2.9	<2.3	< 2.3	**2.9**
PS-49	Gray Paint Underlain by White Paint	1	Turbine Room - Concrete Structure	Concrete	19.0	**1,050**	**15,700**	< 0.05	1.0	0.9	<0.05	0.2	**2.1**
PS-50	Intermixed White, Green, and Light Green Paint	1	Turbine Room - West Wall	Concrete	18.4	**4,400**	**111,000**	< 0 05	1.8	3.6	<0.05	0.4	**5.8**
PS-51	Black Paint	1	Turbine Room - Staircase	Metal	6.82	**2,630**	**97,400**	< 0 05	< 0 05	4.0	<0.05	< 0 05	**4.0**
PS-52	White Paint Underlain by Light Green Paint	3	East Hallway - East Wall	Concrete	NT	NT	NT	<2.5	<2.5	49.8	<2.5	<2.5	**49.8**
PS-53	White Paint Underlain by Light Green Paint	3	East Hallway - East Wall	Metal	NT	NT	NT	<1.0	<1.0	23.0	<1.0	<1.0	**23.0**
PS-54	Dark Green Paint	3	Room C: Lower OCB Potential Transformer Room - South Wall	Brick	NT	NT	NT	< 0 05	< 0 05	3.8	<0.05	< 0 05	**3.8**
PS-55	Dark Green Paint	3	Room C: Lower OCB Potential Transformer Room - West Wall	Concrete	NT	NT	NT	<0.08	<0.08	8.7	<0.08	<0.08	**8.7**
PS-56	Dark Green Paint	4	Landing - Stair Handrail	Metal	NT	NT	NT	<6.2	<6.2	138.0	<6.2	<6.2	**138.0**
Disposal Action Level					*20*	*100*	*100*						*1*
EPA Standard													*1*
RDEC													*10*

Notes:
1. Concentrations are presented in milligrams per kilogram (mg/kg).
2. **Bold** indicates an exceedance of the applicable Disposal Action Level.
3. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
4. < indicates the analyte was not detected above the specified laboratory detection limit.
5. NT indicates not tested for the specific analyte.
6. Italics indicates the specified laboratory detection limit exceeds the EPA action level for unrestricted future Site use.
7. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
8. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in Section 3.1.

Table 4 - Paint Analytical Results (Continued)

Sample ID	Description	Floor	Location	Substrate	Total Cadmium	Total Chromium	Total Lead	Aroclor-1242	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
PS-57	Light Green Paint, Underlain by Dark Green Paint	Exterior	Northern Exterior - Door	Wood	NT	NT	NT	<0.09	<0.09	0.8	<0.09	<0.09	0.8
PS-58	Light Green Paint, Underlain by Green Paint	Exterior	Northern Exterior - Handrail	Metal	NT	NT	NT	<0.06	1.2	1.5	<0.06	0.5	**3.2**
PS-59	White Paint Underlain by Gray Paint	Exterior	Northern Exterior - Garage Door	Metal	NT	NT	NT	<0.2	0.9	0.7	<0.2	<0.2	**1.6**
PS-60	White Underlain by Light Green Underlain by Tan	Exterior	Northern Exterior - Window Cover	Metal	NT	NT	NT	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PS-61	White Paint Underlain by Light Green Paint	Exterior	Western Exterior - Door	Metal	NT	NT	NT	<0.3	<0.3	0.4	<0.3	<0.3	0.4
PS-62	White Paint Underlain by Dark Green Paint	Exterior	Northern Exterior - Wall	Brick	NT	NT	NT	<0.05	2.0	2.0	<0.05	<0.05	**4.0**
PS-63	White Paint	3	East Hallway - West Wall	Concrete	NT	NT	NT	<2.7	<2.7	33.3	<2.7	<2.7	**33.3**
PS-64	Light Green Paint	3	East Hallway - East Wall	Concrete	NT	NT	NT	<1.0	<1.0	10.4	<1.0	<1.0	**10.4**
PS-65	Dark Green Paint	3	Room D: Lower OCB Room - West Cabinet	Metal	NT	NT	NT	<2.1	<2.1	44.6	<2.1	<2.1	**44.6**
PS-66	Black Paint	3	Room D: Lower OCB Room - Elevator Shaft Handrail	Metal	NT	NT	NT	<3.7	<3.7	97.9	<3.7	<3.7	**97.9**
PS-67	Dark Green Paint	3	Room D: Lower OCB Room - Center Wall	Concrete	NT	NT	NT	<0.05	<0.05	10.0	<0.05	<0.05	**10.0**
PS-68	Light Green Paint Underlain by Green Paint	Exterior	Exterior South - Fire Escape	Metal	NT	NT	NT	<0.3	<0.3	2.6	<0.3	<0.3	**2.6**
PS-69	Dark Green Paint	1	Turbine Room - Steel Beam	Metal	NT	NT	NT	<0.05	<0.05	4.9	<0.05	<0.05	**4.9**
PS-70	Light Green Paint Underlain by White Paint	3	East Hallway, North Wall	Brick	NT	NT	NT	<0.1	<0.1	31.1	<0.1	3	**34.1**
PS-71	Light Green Paint Underlain by White Paint	3	East Hallway, North Wall	Brick	NT	NT	NT	<2.1	<2.1	44.1	<2.1	6.9	**51**
PS-72	Light Green Paint	3	East Hallway, West Wall	Brick	NT	NT	NT	<0.1	<0.1	13	<0.1	1.3	**14.3**
PS-73	Light Green Paint Underlain by White Paint	3	East Hallway, West Wall	Tan Brick	NT	NT	NT	<0.4	<0.4	30.8	<0.4	2.8	**33.6**
PS-74	White Paint	3	East Hallway, West Wall	Tan Brick	NT	NT	NT	<0.3	<0.3	29.9	<0.3	<0.3	**29.9**
PS-75	Light Green Paint	3	East Hallway, East Wall	Concrete	NT	NT	NT	<0.5	<0.5	38.5	<0.5	5	**43.5**
PS-76	Light Green Paint Underlain by Dark Green Paint	3	East Hallway, East Wall	Concrete	NT	NT	NT	<0.3	<0.3	24.6	<0.3	2.8	**27.4**
PS-77	White Paint	3	East Hallway, East Wall	Concrete	NT	NT	NT	<0.5	<0.5	29.7	<0.5	<0.5	**29.7**
PS-78	White Paint	3	East Hallway, East Wall	Concrete	NT	NT	NT	<0.5	<0.5	29.5	<0.5	<0.5	**29.5**
PS-79	Light Green Paint Underlain by Dark Green Paint	3	East Hallway, West Wall	Tan Brick	NT	NT	NT	<0.4	<0.4	27.5	<0.4	2.6	**30.1**
PS-80	Light Green Paint Underlain by Dark Green Paint	3	East Hallway, West Wall	Tan Brick	NT	NT	NT	<0.5	<0.5	53.3	<0.5	<0.5	**53.3**
PS-81	White Paint	3	East Hallway, West Wall	Tan Brick	NT	NT	NT	<0.3	<0.3	52.7	<0.3	<0.3	**52.7**
PS-82	White Paint	3	East Hallway, West Wall	Tan Brick	NT	NT	NT	<0.5	<0.5	67.3	<0.5	<0.5	**67.3**
PS-83	White Paint	3	East Hallway, East Wall	Steel	NT	NT	NT	<0.09	<0.09	20.7	<0.09	<0.09	**20.7**
PS-84	White Paint	3	East Hallway, East Wall	Steel	NT	NT	NT	<0.1	<0.1	25.7	<0.1	<0.1	**25.7**
PS-85	Light Green Paint	3	East Hallway, East Wall	Steel	NT	NT	NT	<0.2	<0.2	20.4	<0.2	<0.2	**20.4**
PS-86	Light Green Paint	3	East Hallway, East Wall	Steel	NT	NT	NT	<0.1	<0.1	20.3	<0.1	2	**22.3**
Disposal Action Level					*20*	*100*	*100*						*1*
EPA Standard													*1*
RDEC													*10*

Notes:
1. Concentrations are presented in milligrams per kilogram (mg/kg).
2. **Bold** indicates an exceedance of the applicable Disposal Action Level.
3. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
4. < indicates the analyte was not detected above the specified laboratory detection limit.
5. NT indicates not tested for the specific analyte.
6. Italics indicates the specified laboratory detection limit exceeds the EPA action level for unrestricted future Site use.
7. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
8. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in Section 3.1.

Table 4 - Paint Analytical Results (Continued)

Sample ID	Description	Floor	Location	Substrate	Total Cadmium	Total Chromium	Total Lead	Aroclor-1242	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
PS-87	White Paint	3	East Hallway, West Wall	Brick	NT	NT	NT	<0.1	<0.1	27.5	<0.1	<0.1	**27.5**
PS-88	White Paint Underlain by Dark Green Paint	3	East Hallway, West Wall	Brick	NT	NT	NT	<0.2	<0.2	29.1	<0.2	<0.2	**29.1**
PS-89	Light Green Paint Underlain by Dark Green Paint	3	East Hallway, West Wall	Brick	NT	NT	NT	<0.2	<0.2	20.8	<0.2	2.4	**23.2**
PS-90	Light Green Paint	3	East Hallway, West Wall	Brick	NT	NT	NT	<0.2	<0.2	20.2	<0.2	2.3	**22.5**
PS-91	White Paint	3	East Hallway, East Wall	Concrete	NT	NT	NT	<0.4	<0.4	12.3	<0.4	<0.4	**12.3**
PS-92	White Paint	3	East Hallway, East Wall	Concrete	NT	NT	NT	<0.4	<0.4	9.8	<0.4	<0.4	**9.8**
PS-93	Light Green Paint	3	East Hallway, East Wall	Concrete	NT	NT	NT	<0.4	<0.4	7.5	<0.4	<0.4	**7.5**
PS-94	Light Green Paint	3	East Hallway, East Wall	Concrete	NT	NT	NT	<0.4	<0.4	9.3	<0.4	1.3	**10.6**
PS-95	White Paint Underlain by Dark Green Paint	3	East Hallway, South Wall	Brick	NT	NT	NT	<0.1	<0.1	8.3	<0.1	0.9	**9.2**
PS-96	Light Green Paint	3	East Hallway, South Wall	Brick	NT	NT	NT	<0.1	<0.1	6.7	<0.1	<0.1	**6.7**
PS-97	Black Paint	3	East Hallway, East Wall	Concrete	NT	NT	NT	<0.1	<0.1	9	<0.1	0.7	**9.7**
PS-98	Black Paint	3	East Hallway, West Wall	Brick	NT	NT	NT	<0.09	<0.09	7.3	<0.09	<0.09	**7.3**
PS-99	Black Paint	3	East Hallway, East Wall	Brick	NT	NT	NT	<1.1	<1.1	12.7	<1.1	<1.1	**12.7**
PS-100	Black Paint	3	East Hallway, West Wall	Brick	NT	NT	NT	<0.3	<0.3	26.5	<0.3	2.9	**29.4**
PS-101	White Paint Underlain by Black Paint	3	East Hallway, West Wall	Brick	NT	NT	NT	<0.1	<0.1	35.2	<0.1	<0.1	**35.2**
PS-102	White Paint Underlain by Black Paint	3	East Hallway, West Wall	Brick	NT	NT	NT	<0.1	<0.1	39.2	<0.1	<0.1	**39.2**
PS-103	Light Green Paint	3	East Hallway, West Wall	Brick	NT	NT	NT	<0.1	<0.1	31.6	<0.1	<0.1	**31.6**
PS-104	Light Green Paint	3	East Hallway, West Wall	Brick	NT	NT	NT	<0.3	<0.3	64.2	<0.3	<0.3	**64.2**
PS-105	White Paint	3	East Hallway, East Wall	Concrete	NT	NT	NT	<0.1	<0.1	13.2	<0.1	<0.1	**13.2**
PS-106	White Paint	3	West Hallway, East Wall	Concrete	NT	NT	NT	<0.2	<0.2	21.2	<0.2	<0.2	**21.2**
PS-107	Light Green Paint	3	East Hallway, East Wall	Concrete	NT	NT	NT	<0.1	<0.1	24.7	<0.1	<0.1	**24.7**
PS-108	Light Green Paint	3	East Hallway, East Wall	Concrete	NT	NT	NT	<0.1	<0.1	21.6	<0.1	<0.1	**21.6**
PS-109	White Paint	3	Room C: Lower OCB Potential Transformer Room - West Wall	Brick	NT	NT	NT	<0.09	3.0	2.5	<0.09	<0.09	**5.5**
PS-110	Dark Green Paint	3	Room C: Lower OCB Potential Transformer Room - West Wall	Brick	NT	NT	NT	<0.09	1.9	2.5	<0.09	<0.09	**4.4**
PS-111	White Paint	3	Room C: Lower OCB Potential Transformer Room - West Wall	Brick	NT	NT	NT	<0.1	2.4	2.5	<0.1	<0.1	**4.9**
PS-112	Dark Green Paint	3	Room C: Lower OCB Potential Transformer Room - West Wall	Brick	NT	NT	NT	<0.3	3.2	4.0	<0.3	<0.3	**7.2**
PS-113	Dark Green Paint	1	Room 2 - South Wall	Concrete	NT	NT	NT	<0.09	2.7	2.1	<0.09	0.3	**5.1**
Disposal Action Level					*20*	*100*	*100*						*1*
EPA Standard													*1*
RDEC													*10*

Notes:
1. Concentrations are presented in milligrams per kilogram (mg/kg).
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3. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
4. < indicates the analyte was not detected above the specified laboratory detection limit.
5. NT indicates not tested for the specific analyte.
6. Italics indicates the specified laboratory detection limit exceeds the EPA action level for unrestricted future Site use.
7. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
8. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in Section 3.1.

Table 4 - Paint Analytical Results (Continued)

Sample ID	Description	Floor	Location	Substrate	Total Cadmium	Total Chromium	Total Lead	Aroclor-1242	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
PS-114	White Paint	1	Room 2 - South Wall	Concrete	NT	NT	NT	<0.09	3.4	2.4	<0.09	<0.09	**5.8**
PS-115	Dark Green Paint	1	Room 7 - South Wall	Concrete	NT	NT	NT	<0.1	2.2	1.8	<0.1	0.2	**4.2**
PS-116	Silver Paint	1	Room 7- South Wall	Concrete	NT	NT	NT	<0.1	1.3	0.7	<0.1	<0.1	**2.0**
PS-117	Dark Green Paint	1	Room 9 - South Wall	Concrete	NT	NT	NT	<0.1	3.7	2.1	<0.1	<0.1	**5.8**
PS-118	White Paint	1	Room 9 - South Wall	Concrete	NT	NT	NT	<0.09	1.3	0.6	<0.09	<0.09	**1.9**
PS-119	White Paint	3	East Hallway, Ceiling	Concrete	NT	NT	NT	<0.1	<0.1	11.1	<0.1	<0.1	**11.1**
PS-120	White Paint	3	East Hallway, Ceiling	Concrete	NT	NT	NT	<0.1	<0.1	14.5	<0.1	<0.1	**14.5**
PS-121	White Paint	3	East Hallway, Ceiling	Concrete	NT	NT	NT	<0.1	<0.1	9.7	<0.1	<0.1	**9.7**
PS-122	White Paint	4	Mezzanine Room - West Wall	Concrete	NT	NT	NT	<0.1	<0.1	5.8	<0.1	<0.1	**5.8**
PS-123	Green Paint	4	Mezzanine Room - West Wall	Concrete	NT	NT	NT	<0.1	<0.1	3.3	<0.1	<0.1	**3.3**
PS-124	White Paint	4	Mezzanine Room - West Wall	Concrete	NT	NT	NT	<0.1	<0.1	3.4	<0.1	<0.1	**3.4**
PS-125	Dark Green Paint	4	Mezzanine Room - West Wall	Concrete	NT	NT	NT	0.2	<0.1	6.9	<0.1	<0.1	**7.1**
PS-126	Dark Green Paint	1	Room 9 - Locker Room & Toilet	Concrete	NT	NT	NT	<0.1	2.9	1.5	<0.1	<0.1	**4.4**
PS-127	Dark Green Paint	1	Room 9 - Locker Room & Toilet	Concrete	NT	NT	NT	<0.1	3.5	2.0	<0.1	<0.1	**5.5**
PS-128	Dark Green Paint	1	Room 9 - Locker Room & Toilet	Concrete	NT	NT	NT	<0.1	2.9	1.3	<0.1	<0.1	**4.2**
PS-129	Dark Green Paint	1	Room 9 - Locker Room & Toilet	Concrete	NT	NT	NT	<0.1	3.9	1.6	<0.1	<0.1	**5.5**
PS-130	Light Green Paint	1	Front Entry, Lower Wall	Concrete	NT	NT	NT	<0.1	6.6	10.1	<0.1	<0.1	**16.7**
PS-131	White Paint	3	Ceiling - South End of East Hallway	Steel	NT	NT	NT	<0.5	6.8	10.9	<0.1	<0.1	**17.7**
PS-132	White Paint	3	Room D - Upper Wall	Brick	NT	NT	NT	<0.1	0.4	0.6	<0.1	<0.1	**1.0**
PS-133	Dark Green Paint	3	Room D - Lower Wall	Brick	NT	NT	NT	<0.1	2.2	2.2	<0.1	<0.1	**4.4**
PS-134	White Paint	2	Room B - Battery Box	Steel	NT	NT	NT	<0.1	2.7	3.4	<0.1	<0.1	**6.1**
PS-135	Light Green Paint	2	Room B - Battery Box	Steel	NT	NT	NT	<0.1	2.5	3.3	<0.1	<0.1	**6.0**
PS-136	White Paint	5	Mezzanine - Upper Wall	Brick	NT	NT	NT	<0.1	2.2	3.4	<0.1	<0.1	**5.6**
PS-137	Light Green Paint	5	Mezzanine - Lower Wall	Brick	NT	NT	NT	<0.1	2.1	2.4	<0.1	<0.1	**4.5**
PS-138	Light Green Paint	4	Stairwell Into 4th floor	Concrete	NT	NT	NT	<0.1	3.3	10.0	<0.1	<0.1	**13.3**
PS-139	Dark Green Paint	4	Mezzanine Railing	Steel	14.2	**7,200**	**53,200**	<0.1	6.0	10.3	<0.1	<0.1	**16.3**
PS-140	Dark Green Paint	4	Mezzanine Railing	Steel	NT	NT	NT	<0.1	5.6	9.3	<0.1	<0.1	**14.9**
PS-141	Dark Green Paint	4	Mezzanine Railing	Steel	NT	NT	NT	<0.1	5.4	7.5	<0.1	<0.1	**12.9**
PS-142	White Paint	1	Cable Vault - East Hallway, Upper Wall	Brick	NT	NT	NT	<0.1	1.3	1	<0.1	<0.1	**2.3**
PS-143	Dark Green Paint	1	Cable Vault - East Hallway, Lower Wall	Brick	NT	NT	NT	<0.1	2.3	1.8	<0.1	<0.1	**4.1**
Disposal Action Level					*20*	*100*	*100*						*1*
EPA Standard													*1*
RDEC													*10*

Notes:
1. Concentrations are presented in milligrams per kilogram (mg/kg).
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7. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
8. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in Section 3.1.

Table 4 - Paint Analytical Results (Continued)

Sample ID	Description	Floor	Location	Substrate	Total Cadmium	Total Chromium	Total Lead	Aroclor-1242	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
PS-144	White Paint	1	Cable Vault - East Hallway, Upper Wall	Brick	NT	NT	NT	<0.1	1.5	1.1	<0.1	<0.1	**2.6**
PS-145	Dark Green Paint	1	Cable Vault - East Hallway, Mid Wall	Brick	NT	NT	NT	<0.1	2.4	1.8	<0.1	<0.1	**4.2**
PS-146	Dark Green Paint	1	Cable Vault - East Hallway, Mid Wall	Concrete	NT	NT	NT	<0.1	2.2	1.6	<0.1	<0.1	**3.8**
PS-147	White Paint	1	Cable Vault - East Hallway, Upper Wall	Brick	NT	NT	NT	<0.1	0.6	0.3	<0.1	<0.1	0.9
PS-148	Dark Green Paint	1	Cable Vault - East Hallway, Lower Wall	Concrete	NT	NT	NT	<0.1	1.8	1.3	<0.1	<0.1	**3.1**
PS-149	White Paint	1	Cable Vault - East Hallway, Mid Wall	Brick	NT	NT	NT	<0.1	0.8	0.4	<0.1	<0.1	**1.2**
PS-150	Yellow Paint Underlain by Red and Green Paint	1	Cable Vault - Fire Extinguisher Marking	Brick	NT	NT	NT	<0.1	10.7	3	<0.1	<0.1	**13.7**
PS-151	Dark Green Paint	1	Cable Vault - East Hallway, Upper Wall	Brick	NT	NT	NT	<0.1	0.6	0.2	<0.1	<0.1	0.8
PS-152	White Paint	1	Cable Vault - East Hallway, Mid Wall	Brick	NT	NT	NT	<0.1	1.2	0.4	<0.1	<0.1	**1.6**
PS-153	Dark Green Paint	1	Cable Vault - East Hallway, Mid Wall	Brick	NT	NT	NT	<0.09	3.1	1.6	<0.09	0.4	**5.1**
PS-154	Dark Green Paint	1	Cable Vault - East Hallway, Lower Wall	Brick	NT	NT	NT	<0.1	2.7	1	<0.1	<0.1	**3.7**
PS-155	White Paint	1	Room 9 - Locker Room & Toilet, Upper Wall	Concrete	NT	NT	NT	<0.1	1.7	0.5	<0.1	<0.1	**2.2**
PS-156	White Paint Underlain by Dark Green Paint	1	Room 9 - Locker Room & Toilet, Mid Wall	Concrete	NT	NT	NT	<0.1	1.4	0.4	<0.1	<0.1	**1.8**
PS-157	Dark Green Paint underlain by Dark Green Paint	1	Room 9 - Locker Room & Toilet, Mid Wall	Concrete	NT	NT	NT	<0.1	3.8	1.3	<0.1	<0.1	**5.1**
PS-158	Dark Green Paint underlain by Dark Green Paint	1	Room 9 - Locker Room & Toilet, Lower Wall	Concrete	NT	NT	NT	<0.1	4.6	1.2	<0.1	<0.1	**5.8**
PS-159	White Underlain by Light Yellow Paint	1	Locker Room - Foyer, Upper Wall	Concrete	NT	NT	NT	<0.1	3.6	8	<0.1	<0.1	**11.6**
PS-160	White Paint Underlaind by Dark Green Paint	1	Locker Room - Foyer, Mid Wall	Concrete	NT	NT	NT	<0.1	2.9	8.1	<0.1	<0.1	**11.0**
PS-161	Light Green Paint Underlain by Dark Green Paint	1	Locker Room - Foyer, Mid Wall	Concrete	NT	NT	NT	<0.1	2.9	7.6	<0.1	<0.1	**10.5**
PS-162	Light Green Paint Underlain by Dark Green Paint	1	Locker Room - Foyer, Lower Wall	Concrete	NT	NT	NT	<0.09	2	4.6	<0.09	<0.09	**6.6**
PS-163	White Paint	2	Office 2 - South Wall, Upper Wall	Concrete	NT	NT	NT	<0.09	1.2	<0.09	1.2	<0.09	**2.4**
PS-164	White Paint Underlain by Light Green Paint Underlain by Dark Green Paint	2	Office 2 - South Wall, Mid Wall	Concrete	NT	NT	NT	<0.1	4.5	<0.1	4.7	<0.1	**9.2**
PS-165	Light Green Paint Underlain by Brown Paint	2	Office 2 - South Wall, Mid Wall	Concrete	NT	NT	NT	<0.1	2.3	<0.1	2.7	<0.1	**5.0**
PS-166	Light Green Paint Underlain by Brown Paint	2	Office 2 - South Wall, Lower Wall	Concrete	NT	NT	NT	<0.1	2.2	<0.1	2.8	<0.1	**5.0**
PS-167	White Paint	2	Office 3 - West Wall, Lower Wall, and Upper Wall	Brick	NT	NT	NT	<0.1	4.4	5.8	<0.6	<0.6	**10.2**
PS-168	White Paint Underlain by Green Paint underlain by Dark Green Paint	2	Office 3 - West Wall, Mid Wall	Brick	NT	NT	NT	<0.1	3.2	<0.1	6.5	<0.1	**9.7**
PS-169	Light Green Paint Underlain by White Paint Underlain by Dark Green Paint	2	Office 3 - West Wall, Mid Wall	Brick	NT	NT	NT	<0.1	3.5	4.1	<0.1	1.3	**8.9**
PS-170	Light Green Underlain by White Paint	2	Office 3 - West Wall, Lower Wall	Brick	NT	NT	NT	<0.3	2.2	<0.3	1.8	<0.3	**4.0**
PS-171	White Paint	2	Room A: Reactor Room - North Wall, Upper Wall	Concrete	NT	NT	NT	<0.1	1.7	<0.1	0.9	<0.1	**2.6**
Disposal Action Level					*20*	*100*	*100*						*1*
EPA Standard													*1*
RDEC													*10*

Notes:
1. Concentrations are presented in milligrams per kilogram (mg/kg).
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4. < indicates the analyte was not detected above the specified laboratory detection limit.
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8. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in Section 3.1.

Table 4 - Paint Analytical Results (Continued)

Sample ID	Description	Floor	Location	Substrate	Total Cadmium	Total Chromium	Total Lead	Aroclor-1242	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
PS-172	White Paint	2	Room A: Reactor Room - North Wall, Mid Wall	Concrete	NT	NT	NT	<0.1	2.9	<0.1	1.6	<0.1	**4.5**
PS-173	Light Green Paint	2	Room A: Reactor Room - North Wall, Mid Wall	Concrete	NT	NT	NT	<0.1	1.7	1.4	<0.1	1.7	**4.8**
PS-174	Light Green Paint	2	Room A: Reactor Room - North Wall, Lower Wall	Concrete	NT	NT	NT	<0.1	2.3	2.1	<0.1	2.4	**6.8**
PS-175	Orange Paint	2	Room A: Reactor Room - Cabinet	Composite	NT	NT	NT	<0.1	7.8	6.6	<0.1	<0.1	**14.3**
PS-176	Gray Paint	2	Room A: Reactor Room - Cabinet	Composite	NT	NT	NT	<0.1	3.2	<0.1	2.6	<0.1	**5.8**
PS-177	Light Green Paint	2	Room B: Main Switchboard Room - West Wall, Lower Wall	Brick	NT	NT	NT	<0.1	2.7	5.7	<0.1	2.8	**11.2**
PS-178	Light Green Paint	2	Room B: Main Switchboard Room - West Wall, Mid Wall	Brick	NT	NT	NT	<0.09	2.8	7.9	<0.09	2.4	**13.1**
PS-179	White Paint Underlain by Dark Green Paint	2	Room B: Main Switchboard Room - West Wall, Mid Wall	Brick	NT	NT	NT	<0.1	2.5	8.1	<0.1	1.9	**12.5**
PS-180	White Paint Underlain by Dark Green Paint	2	Room B: Main Switchboard Room - West Wall, Upper Wall	Brick	NT	NT	NT	<0.1	2.4	<0.1	5.4	<0.1	**7.8**
PS-181	Brown Paint	2	Room B: Main Switchboard Room - East Wall, Mid Wall	Metal	NT	NT	NT	<0.1	3.8	<0.1	3.7	<0.1	**7.5**
PS-182	Brown Paint	2	Room B: Main Switchboard Room - East Wall, Mid Wall	Metal	NT	NT	NT	<0.09	2	<0.09	3.2	<0.09	**5.2**
PS-183	White Paint	3	Room C: Lower OCB Potential Transformer Room - East Wall, Upper Wall	Brick	NT	NT	NT	<0.1	1.4	2.7	<0.1	<0.1	**4.1**
PS-184	White Paint	3	Room C: Lower OCB Potential Transformer Room - East Wall, Mid Wall	Brick	NT	NT	NT	<0.1	0.9	1.5	<0.1	<0.1	**2.4**
PS-185	Dark Green Paint	3	Room C: Lower OCB Potential Transformer Room - East Wall, Mid Wall	Brick	NT	NT	NT	<0.1	3.4	5.3	<0.1	<0.1	**8.7**
PS-186	Dark Green Paint	3	Room C: Lower OCB Potential Transformer Room - East Wall, Lower Wall	Brick	NT	NT	NT	<0.1	3.2	5.5	<0.1	<0.1	**8.7**
PS-187	White Paint	3	Room D: Lower OCB Room - North Wall, Lower Wall	Brick	NT	NT	NT	<0.1	5.2	8.9	<0.1	<0.1	**14.1**
PS-188	White Paint	3	Room D: Lower OCB Room - North Wall, Mid Wall	Brick	NT	NT	NT	<0.1	5.4	8.4	<0.1	<0.1	**13.8**
PS-189	Dark Green Paint	3	Room D: Lower OCB Room - North Wall, Mid Wall	Brick	NT	NT	NT	<0.09	2.9	10	<0.09	<0.09	**12.9**
PS-190	Dark Green Paint	3	Room D: Lower OCB Room - North Wall, Upper Wall	Brick	NT	NT	NT	<0.1	2.5	9.2	<0.1	<0.1	**11.7**
PS-191	White Paint	3	Room D: Lower OCB Room - West Wall, Upper Wall	Brick	NT	NT	NT	<0.09	1.1	2	<0.09	<0.09	**3.1**
PS-192	White Paint	3	Room D: Lower OCB Room - West Wall, Mid Wall	Brick	NT	NT	NT	<0.1	1.4	2.2	<0.1	<0.1	**3.6**
PS-193	Dark Green Paint	3	Room D: Lower OCB Room - West Wall, Mid Wall	Brick	NT	NT	NT	<0.1	2.7	3.8	<0.1	<0.1	**6.5**
PS-194	Dark Green Paint	3	Room D: Lower OCB Room - West Wall, Lower Wall	Brick	NT	NT	NT	<0.2	3.6	5.7	<0.2	<0.2	**9.3**
PS-195	White Paint	4	Battery Room - West Wall, Lower Wall	Metal	NT	NT	NT	<0.1	0.3	0.3	<0.1	0.3	0.9
PS-196	White Paint	4	Battery Room - West Wall, Mid Wall	Metal	NT	NT	NT	<0.1	0.4	0.6	<0.1	1.6	**2.6**
PS-197	Light Green Paint	4	Battery Room - West Wall, Mid Wall	Metal	NT	NT	NT	<0.09	0.6	0.8	<0.09	<0.09	**1.4**
PS-198	Light Green Paint	4	Battery Room - West Wall, Upper Wall	Metal	NT	NT	NT	<0.1	1.1	1.1	<0.1	<0.1	**2.2**
Disposal Action Level					*20*	*100*	*100*						*1*
EPA Standard													*1*
RDEC													*10*

Notes:
1. Concentrations are presented in milligrams per kilogram (mg/kg).
2. **Bold** indicates an exceedance of the applicable Disposal Action Level.
3. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
4. < indicates the analyte was not detected above the specified laboratory detection limit.
5. NT indicates not tested for the specific analyte.
6. Italics indicates the specified laboratory detection limit exceeds the EPA action level for unrestricted future Site use.
7. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
8. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in Section 3.1.

Table 4 - Paint Analytical Results (Continued)

Sample ID	Description	Floor	Location	Substrate	Total Cadmium	Total Chromium	Total Lead	Aroclor-1242	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
PS-199	White Paint	4	Room F: Main Bus Room - West Wall, North Wall, and Upper Wall	Brick	NT	NT	NT	<0.1	2	2.6	<0.1	<0.1	**4.6**
PS-200	White Paint	4	Room F: Main Bus Room - West Wall, North Wall, and Mid Wall	Brick	NT	NT	NT	<0.09	2.5	3.5	<0.1	<0.1	**6.0**
PS-201	Dark Green Paint	4	Room F: Main Bus Room - West Wall, North Wall, and Mid Wall	Brick	NT	NT	NT	<0.1	3.4	2.8	<0.1	<0.1	**6.2**
PS-202	Dark Green Paint	4	Room F: Main Bus Room - West Wall, North Wall, and Lower Wall	Brick	NT	NT	NT	<0.1	2.1	2	<0.1	<0.1	**4.1**
PS-203	Dark Green Paint	4	Room E: Potential Transformer Upper - West Wall, Lower Wall	Brick	NT	NT	NT	<0.09	1.2	0.8	<0.09	<0.09	**2.0**
PS-204	Dark Green Paint	4	Room E: Potential Transformer Upper - West Wall, Mid Wall	Brick	NT	NT	NT	<0.09	1.4	0.7	<0.9	<0.9	**2.1**
PS-205	White Paint Underlain by Yellow Paint	4	Room E: Potential Transformer Upper - West Wall, Mid Wall	Brick	NT	NT	NT	<0.1	1.2	0.7	<0.1	<0.1	**1.1**
PS-206	White Paint Underlain by Yellow Paint	4	Room E: Potential Transformer Upper - West Wall, Upper Wall	Brick	NT	NT	NT	<0.1	0.9	0.3	<0.1	<0.1	**1.2**
PS-207	White Paint	5	Room G: Upper Breaker Floor - West Wall, Upper Wall	Brick	NT	NT	NT	<0.09	0.4	0.9	<0.09	<0.09	**1.3**
PS-208	White Paint	5	Room G: Upper Breaker Floor - West Wall, Mid Wall	Brick	NT	NT	NT	<0.1	0.5	1.1	<0.1	<0.1	**1.6**
PS-209	Dark Green Paint	5	Room G: Upper Breaker Floor - West Wall, Mid Wall	Brick	NT	NT	NT	<0.1	1.3	1.9	<0.1	<0.1	**3.2**
PS-210	Dark Green Paint	5	Room G: Upper Breaker Floor - West Wall, Lower Wall	Brick	NT	NT	NT	<0.1	0.5	0.8	<0.1	<0.1	**1.3**
PS-211	White Paint	5	Room G: Upper Breaker Floor - West Wall, Upper Wall	Brick	NT	NT	NT	<0.09	0.4	0.9	<0.09	<0.09	**1.3**
PS-212	White Paint	5	Room G: Upper Breaker Floor - West Wall, Mid Wall	Brick	NT	NT	NT	<0.09	0.7	1.3	<0.09	<0.09	**2.0**
PS-213	Dark Green Paint	5	Room G: Upper Breaker Floor - West Wall, Mid Wall	Brick	NT	NT	NT	<0.1	1.6	2.4	<0.1	<0.1	**4.0**
PS-214	Dark Green Paint	5	Room G: Upper Breaker Floor - West Wall, Lower Wall	Brick	NT	NT	NT	<0.1	1.5	2	<0.1	<0.1	**3.5**
PS-215	Dark Green Paint	5	Lighting Arrestor Room - East Wall, Lower Wall	Concrete	NT	NT	NT	<0.1	2	2.7	<0.1	<0.1	**4.7**
PS-216	Dark Green Paint	5	Lighting Arrestor Room - North Wall, Mid Wall	Concrete	NT	NT	NT	<0.1	0.9	1.2	<0.1	<0.1	**2.1**
PS-217	White Paint	5	Lighting Arrestor Room - North Wall, Mid Wall	Concrete	NT	NT	NT	<0.1	0.2	0.2	<0.1	<0.1	0.4
PS-218	White Paint	5	Lighting Arrestor Room - North Wall, Upper Wall	Concrete	NT	NT	NT	<0.1	<0.1	0.2	<0.1	<0.1	0.2
PS-219	Dark Green Paint	5	Lighting Arrestor Room - West Wall, Lower Wall	Metal	NT	NT	NT	<0.09	1	1	<0.09	<0.9	**2.0**
PS-220	Dark Green Paint	5	Lighting Arrestor Room - West Wall, Mid Wall	Metal	NT	NT	NT	<0.1	1.1	1.7	<0.1	<0.1	**2.8**
PS-221	White Paint	5	Lighting Arrestor Room - West Wall, Mid Wall	Brick	NT	NT	NT	<0.1	0.9	1	<0.1	<0.1	**1.9**
PS-222	White Paint	5	Lighting Arrestor Room - West Wall, Upper Wall	Brick	NT	NT	NT	<0.1	1.1	<0.1	1.2	<0.1	**2.3**
PS-223	Gray Paint Underlain by White Paint Underlain by Green Paint	1	Turbine Room - Concrete Structure	Concrete	NT	NT	NT	<0.1	1.2	0.9	<0.1	<0.1	**2.1**
Disposal Action Level					*20*	*100*	*100*						*1*
EPA Standard													*1*
RDEC													*10*

Notes:
1. Concentrations are presented in milligrams per kilogram (mg/kg).
2. **Bold** indicates an exceedance of the applicable Disposal Action Level.
3. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
4. < indicates the analyte was not detected above the specified laboratory detection limit.
5. NT indicates not tested for the specific analyte.
6. Italics indicates the specified laboratory detection limit exceeds the EPA action level for unrestricted future Site use.
7. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
8. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in Section 3.1.

Table 4 - Paint Analytical Results (Continued)

Sample ID	Description	Floor	Location	Substrate	Total Cadmium	Total Chromium	Total Lead	Aroclor-1242	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
PS-224	Gray Paint Underlain by White Paint Underlain by Green Paint	1	Turbine Room - Concrete Structure	Concrete	NT	NT	NT	<0.1	1.3	0.6	<0.1	<0.1	**1.9**
PS-225	Gray Paint Underlain by White Paint Underlain by Green Paint	1	Turbine Room - Concrete Structure	Concrete	NT	NT	NT	<0.1	1.2	1	<0.1	<0.1	**2.2**
PS-226	Light Green Paint	1	Front Entry, West Wall, Lower Wall	Concrete	NT	NT	NT	<0.09	2.9	5.8	<0.09	<0.1	**8.7**
PS-227	Light Green Paint Underlain by White Paint Underlain by Green Paint	3	East Hallway - North Wall, Mid Wall	Brick	NT	NT	NT	<0.09	12.2	27.8	<0.09	<0.1	**40**
PS-228	Light Green Underlain by Dark Green	3	East Hallway - North Wall, Lower Wall	Brick	NT	NT	NT	<0.1	16.8	34.9	<0.1	<0.1	**51.7**
PS-229	Dark Metallic Gray Paint	1	Room 1, North Wall	Concrete	NT	NT	NT	<0.1	2.2	2.8	<0.1	<0.1	**5**
PS-230	Light Metallic Gray Paint	1	Room 1, North Wall	Concrete	NT	NT	NT	<0.1	1.6	1.8	<0.1	<0.1	**3.4**
PS-231	Metallic Gray Paint	1	Room 3, South Wall	Concrete	NT	NT	NT	<0.1	1.3	0.8	<0.1	<0.1	**2.1**
PS-232	Metallic Gray Paint	1	Room 3, South Wall	Concrete	NT	NT	NT	<0.1	0.9	0.5	<0.1	<0.1	**1.4**
PS-233	Metallic Gray Paint	1	Room 4, South Wall	Concrete	NT	NT	NT	<0.1	0.6	0.5	<0.1	<0.1	**1.1**
PS-234	Metallic Gray Paint	1	Room 4, South Wall	Concrete	NT	NT	NT	<0.1	0.5	0.2	<0.1	<0.1	0.7
PS-235	White Paint	1	Room 5, South Wall	Concrete	NT	NT	NT	<0.1	0.6	<0.1	0.3	<0.1	0.9
PS-236	Dark Green Paint	1	Room 5, South Wall	Concrete	NT	NT	NT	<0.1	1.0	0.8	<0.1	<0.1	**1.8**
PS-237	White Paint	1	Room 6, North Wall	Concrete	NT	NT	NT	<0.1	0.9	<0.1	0.7	<0.1	**1.6**
PS-238	Dark Green Paint	1	Room 6, North Wall	Concrete	NT	NT	NT	<0.1	2.0	1.7	<0.1	<0.1	**3.7**
PS-239	White Paint	1	Room 8, South Wall	Concrete	NT	NT	NT	<0.1	0.8	<0.1	0.8	<0.1	**1.6**
PS-240	Dark Green Paint	1	Room 8, South Wall	Concrete	NT	NT	NT	<0.1	1.5	1.4	<0.1	<0.1	**1.9**
PS-241	White Paint	2	Store Room	Concrete	NT	NT	NT	<0.1	0.2	<0.1	0.1	<0.1	0.3
PS-242	White Paint	2	Reactor Room, West Wall	Brick	NT	NT	NT	<0.5	4.6	2.7	<0.5	<0.5	**7.3**
PS-243	White Paint	2	Reactor Room, West Wall	Brick	NT	NT	NT	<0.1	3.6	2.3	<0.1	<0.1	**5.9**
PS-244	Dark Green Brick	2	Reactor Room, West Wall	Brick	NT	NT	NT	<0.1	2.4	1.6	<0.1	0.7	**4.7**
PS-245	Dark Green Brick	2	Reactor Room, West Wall	Brick	NT	NT	NT	<0.1	4.1	3.1	<0.1	1.6	**9.0**
PS-246	White Paint	2	Office 1	Concrete	NT	NT	NT	<0.09	1.7	<0.09	1.8	<0.09	**3.5**
PS-247	Black Paint underlain by Green Paint underlain by White Paint	2	Store Room	Concrete	NT	NT	NT	2.9	<0.1	<0.1	3.5	<0.1	**6.4**
PS-248	White Paint	2	Office 1	Concrete	NT	NT	NT	<0.1	1.9	<0.1	2.8	<0.1	**4.7**
PS-249	Green Paint	2	Store Room	Metal	NT	NT	NT	<0.09	2.6	<0.09	3.2	<0.09	**5.8**
PS-250	White Paint	3	Wall B	Concrete	NT	NT	NT	<0.1	<0.1	24.1	<0.1	<0.1	**24.1**
PS-251	White Paint	3	Wall B	Concrete	NT	NT	NT	<0.1	<0.1	28.6	<0.1	<0.1	**28.6**
Disposal Action Level					*20*	*100*	*100*						*1*
EPA Standard													*1*
RDEC													*10*

Notes:
1. Concentrations are presented in milligrams per kilogram (mg/kg).
2. **Bold** indicates an exceedance of the applicable Disposal Action Level.
3. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
4. < indicates the analyte was not detected above the specified laboratory detection limit.
5. NT indicates not tested for the specific analyte.
6. Italics indicates the specified laboratory detection limit exceeds the EPA action level for unrestricted future Site use.
7. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
8. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in Section 3.1.

Table 4 - Paint Analytical Results (Continued)

Sample ID	Description	Floor	Location	Substrate	Total Cadmium	Total Chromium	Total Lead	Aroclor-1242	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268	Total PCBs
PS-252	White Paint	2	Office 1 Ceiling	Concrete	NT	NT	NT	<9.9	282	207	<9.9	<9.9	**489**
PS-253	Gray Paint	3	Stairwell Into 4th floor	Brick	NT	NT	NT	<0.1	<0.1	27	<0.1	<0.1	**27**
PS-254	White Paint	1	Turbine Room - Eastern portion of back southern wall	Brick	NT	NT	NT	<0.1	3.8	7.8	<0.1	<0.1	**11.6**
PS-255	White Paint	1	Turbine Room - Eastern portion of back southern wall	Brick	NT	NT	NT	<0.09	2.1	6.7	<0.09	<0.09	**8.8**
PS-256	White Paint	1	Turbine Room - Eastern portion of back southern wall	Metal	NT	NT	NT	<0.1	7.3	10.9	<0.1	<0.1	**18.2**
Disposal Action Level					*20*	*100*	*100*						*1*
EPA Standard													*1*
RDEC													*10*

Notes:
1. Concentrations are presented in milligrams per kilogram (mg/kg).
2. **Bold** indicates an exceedance of the applicable Disposal Action Level.
3. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective.
4. < indicates the analyte was not detected above the specified laboratory detection limit.
5. NT indicates not tested for the specific analyte.
6. Italics indicates the specified laboratory detection limit exceeds the EPA action level for unrestricted future Site use.
7. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
8. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in Section 3.1.

Table 5 - Bulk Material Analytical Results

Sample ID	Location	Floor	Description	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor 1242	Aroclor 1254	Aroclor 1260	Araclor 1262	Aroclor 1268	Total PCBs	Asbestos Content
012	Roof	Roof	Grey Caulk	10/30/2018	11/6/2018	79	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Negative
013	Roof	Roof	Black Caulk	10/30/2018	11/6/2018	79	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	Negative
014	Roof	Roof	Roofing Material	10/30/2018	11/6/2018	24	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	Negative
016	Roof	Roof	Tar Paper	10/30/2018	11/6/2018	129	<1.1	<1.1	<1.1	<1.1	1.2	**1.2**	Negative
019	Roof	Roof	Silver Roof Coating	10/30/2018	11/6/2018	59	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	Negative
022	Northern Exterior - East Doorway	Exterior	White Caulk*	10/30/2018	11/6/2018	66	<0.5	1.2	<0.5	<0.5	<0.5	**1.2**	Negative
022A	Northern Exterior - East Doorway	Exterior	White Caulk*	9/1/2021	9/7/2021	63	<0.2	1.0	<0.2	0.5	<0.2	**1.5**	NT
022B	Northern Exterior - East Doorway	Exterior	White Caulk*	9/1/2021	9/7/2021	43	<0.2	0.7	<0.2	0.4	<0.2	0.9	NT
023	Northern Exterior - East Doorway	Exterior	Window Glazing	10/30/2018	11/6/2018	56	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	2% Chrysotile
024	Northern Exterior - West Doorway	Exterior	White Caulk	10/30/2018	11/6/2018	20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	3% Chrysotile
028	Northern Exterior - Expansion Joint	Exterior	White Caulk	10/30/2018	11/6/2018	49	<0.2	1.3	0.9	<0.2	<0.2	**2.2**	Trace (< 1% Chrysolite)
028A	Northern Exterior - Expansion Joint	Exterior	White Caulk	9/1/2021	9/7/2021	88	<0.2	0.5	<0.2	<0.2	<0.2	0.5	NT
028B	Northern Exterior - Expansion Joint	Exterior	White Caulk	9/1/2021	9/7/2021	84	<0.2	0.6	<0.2	<0.2	<0.2	0.6	NT
029	Southern Exterior - Expansion Joint	Exterior	Black Caulk	10/30/2018	11/6/2018	67	<0.2	0.3	<0.2	<0.2	<0.2	0.3	8% Chrysotile
1009	Cable Vault	1	Grey Caulk*	10/1/2018	10/10/2018	59	0.4	1.9	<0.2	<0.2	<0.2	**2.3**	8% Chrysotile
1009A	Cable Vault	1	Grey Caulk*	9/1/2021	9/7/2021	87	<0.2	3.7	<0.2	0.4	<0.2	**4.1**	NT
1010	Cable Vault	1	Pothead Gasket	10/1/2018	10/10/2018	83	<3.1	13.9	<3.1	<3.1	<3.1	**13.9**	Negative
1010A	Cable Vault	1	Pothead Gasket	9/1/2021	9/7/2021	96	<0.8	10	2.6	<0.8	<0.8	**12.6**	NT
1010B	Cable Vault	1	Pothead Gasket	9/1/2021	9/7/2021	85	<0.6	11.1	3	<0.6	<0.6	**14.1**	NT
1013	Cable Vault	1	Conduit Putty	10/1/2018	10/10/2018	73	<0.3	2.2	<0.3	<0.3	<0.3	**2.2**	10% Chrysotile
1013A	Cable Vault	1	Conduit Putty	9/1/2021	9/7/2021	71	<0.2	1.3	<0.2	<0.2	<0.2	**1.3**	NT
1024	Locker Room	1	Conduit Putty	10/1/2018	10/10/2018	46	<0.2	5.9	<0.2	<0.2	<0.2	**5.9**	12% Chrysotile
1024A	Locker Room	1	Conduit Putty	9/1/2021	9/7/2021	52	<0.2	26.8	<0.2	<0.2	<0.2	**26.8**	NT
1026	Turbine Room	1	Stair Tread	10/1/2018	10/10/2018	104	<0.1	<0.1	5.1	<0.1	<0.1	**5.1**	3% Chrysotile
1026A	Turbine Room	1	Stair Tread	9/1/2021	9/13/2021	64	<0.2	2.1	5.2	<0.2	<0.2	**7.3**	NT
1026B	Turbine Room	1	Stair Tread	9/1/2021	9/11/2021	65	<0.3	2.9	6.9	<0.3	<0.3	**9.8**	NT
2001	Office 1	2	Table Covering	10/1/2018	10/11/2018	463	<0.1	14.4	5.5	<0.1	<0.1	**19.9**	Negative
2003A	Office 1	2	Rubber Floor Mat (Type 1)	10/1/2018	10/12/2018	SD	<1.9	<1.9	42.3	<1.9	<1.9	**42.3**	Negative
2003B	Office 1	2	Rubber Floor Mat (Type 1)	10/1/2018	10/17/2018	71	3.0	9.4	18.9	<0.2	<0.2	**31.3**	Negative
Disposal Action Level													Asbestos Present
EPA Standard												1	
RDEC												10	

Notes:
1. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
2. Analytical results are reported in milligrams per kilogram (mg/kg).
3. < denotes analyte was not detected above the laboratory detection limit.
4. **Bold** indicates an exceedance of the applicable Disposal Action Level.
5. * symbol denotes paint was observed on the material and was removed to the extent feasible before laboratory submittal.
6. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective
7. SD indicates surrogate recovery percentage diluted below laboratory quantification limit.
8. Disposal Action Level obtained from National Grid EP No. 17.
9. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
10. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in Section 3.1.

Table 5 - Bulk Material Analytical Results (Continued)

Sample ID	Location	Floor	Description	Sample Date	Analysis Date	Surrogate Recovery Percentage	Aroclor 1242	Aroclor 1254	Aroclor 1260	Araclor 1262	Aroclor 1268	Total PCBs	Asbestos Content
2003C	Office 1	2	Rubber Floor Mat (Type 1)	10/30/2018	11/7/2018	67	<0.1	6.1	10.3	<0.1	<0.1	**16.4**	Negative
2004	Bathroom	2	Cove Base Molding	10/1/2018	10/11/2018	45	<0.1	1.1	<0.1	<0.1	<0.1	**1.1**	Negative
2004A	Bathroom	2	Cove Base Molding	9/1/2021	9/11/2021	65	<0.3	3.3	0.6	<0.3	<0.3	**3.9**	NT
2004B	Bathroom	2	Cove Base Molding	9/1/2021	9/11/2021	55	2.0	2.2	0.8	<0.2	<0.2	**5.0**	NT
2011	Office 2	2	Window Glazing*	10/1/2018	10/11/2018	76	<0.2	1.0	1.2	<0.2	0.3	**2.5**	Negative
2011A	Office 2	3	Window Glazing*	9/1/2021	9/7/2021	71	<0.2	0.8	<0.2	0.4	<0.2	**1.2**	NT
2011B	Office 2	4	Window Glazing*	9/1/2021	9/7/2021	103	<0.2	1.9	<0.2	1.1	<0.2	**3**	NT
2012	Office 2	2	Rubber Floor Mat (Type 2)	10/1/2018	10/12/2018	31	<0.1	0.8	0.7	<0.1	<0.1	**1.5**	Negative
2012B	Office 2	2	Rubber Floor Mat (Type 2)	10/30/2018	11/7/2018	60	0.7	1.1	0.9	<0.1	0.2	**2.9**	Negative
2014	Office 3	2	Rubber Floor Mat (Type 2)	10/1/2018	10/11/2018	52	0.9	1.3	1.2	<0.1	<0.1	**3.4**	Negative
2015	Room B: Main Switchboard Room	2	Table Covering	10/1/2018	10/11/2018	57	<0.1	3.5	2.9	<0.1	<0.1	**6.4**	Negative
2016	Room B: Main Switchboard Room	2	Rubber Floor Mat (Type 3)	10/1/2018	10/11/2018	77	<0.1	6.1	7.1	<0.1	<0.1	**13.2**	Negative
2016B	Room B: Main Switchboard Room	2	Rubber Floor Mat (Type 3)	10/30/2018	11/6/2018	54	0.9	3.6	3.1	<0.1	<0.1	**7.6**	Negative
2016C	Room B: Main Switchboard Room	2	Rubber Floor Mat (Type 3)	10/30/2018	11/7/2018	66	7.8	8.4	5.6	<0.1	1.0	**22.8**	Negative
2018	Room B: Main Switchboard Room: Office	2	Cove Base Molding	10/1/2018	10/11/2018	81	2.3	3.7	1.6	<0.1	<0.1	**7.6**	Negative
2018A	Room B: Main Switchboard Room: Office	2	Cove Base Molding	9/1/2021	9/7/2021	58	4.2	<0.2	<0.2	1.9	<0.2	**6.1**	NT
2018B	Room B: Main Switchboard Room: Office	2	Cove Base Molding	9/1/2021	9/7/2021	77	<0.2	5.5	<0.2	1.7	<0.2	**7.2**	NT
2035	Room B: Main Switchboard Room	2	Window Glazing	10/2/2018	10/11/2018	49	1.0	5.7	3.1	<0.2	0.7	**10.5**	Negative
2035B	Room B: Main Switchboard Room	2	Window Glazing	9/1/2021	9/11/2021	62	<0.2	3.8	<0.2	5.5	<0.2	**9.3**	NT
3015	Third Floor Hallway	3	Window Glazing*	10/2/2018	10/11/2018	66	<0.3	<0.3	9.0	<0.3	<0.3	**9.0**	Negative
4006	Battery Room	4	Window Glazing*	10/3/2018	10/11/2018	70	<1.8	5.6	3.7	<1.8	<1.8	**9.3**	Negative
5001	Fifth Floor - Mezzanine	5	Window Glazing*	10/3/2018	10/11/2018	74	<0.2	1.5	0.9	<0.2	<0.2	**2.4**	Negative
5009	Fifth Floor - Air Handler	5	Door Strip	10/31/2018	11/7/2018	129	<0.3	<0.3	0.7	<0.3	0.7	**1.4**	Negative
5009A	Fifth Floor - Air Handler	5	Door Strip	9/1/2021	9/7/2021	971	<0.3	<0.3	9.8	<0.3	6.0	**15.8**	NT
5009B	Fifth Floor - Air Handler	5	Door Strip	9/1/2021	9/7/2021	325	<0.4	<0.4	2.3	<0.4	2.4	**4.7**	NT
5010	Fifth Floor - Air Handler	5	Silver Coating	10/31/2018	11/6/2018	86	<7.1	<7.1	11.8	<7.1	<7.1	**11.8**	Negative
5010A	Fifth Floor - Air Handler	5	Silver Coating	9/1/2021	9/11/2021	74	<0.7	4.0	<0.7	3.9	<0.7	**7.9**	NT
5010B	Fifth Floor - Air Handler	5	Silver Coating	9/1/2021	9/11/2021	76	<0.7	4.1	<0.7	2.9	<0.7	**7.0**	NT
Disposal Action Level													Asbestos Present
EPA Standard												1	
RDEC												10	

Notes:
1. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
2. Analytical results are reported in milligrams per kilogram (mg/kg).
3. < denotes analyte was not detected above the laboratory detection limit.
4. **Bold** indicates an exceedance of the applicable Disposal Action Level.
5. * symbol denotes paint was observed on the material and was removed to the extent feasible before laboratory submittal.
6. **Red** indicates an exceedance of the applicable Method 1 RDEC Objective
7. SD indicates surrogate recovery percentage diluted below laboratory quantification limit.
8. Disposal Action Level obtained from National Grid EP No. 17.
9. EPA action level for unrestricted future Site uses is derived in 40 CFR 761.61.
10. Method 1 Residential Direct Exposure Criteria (RDEC) Objective obtained from Section 1.9.2 of the Remediation Regulations derived in Section 3.1.

Table 6 - Wipe Sample Analytical Results

Sample ID	Location	Wipe Surface	Sample Date	Analysis Date	Surrogate Recovery Percentage	Total PCBs
WS-01-01	Turbine Room	Black Painted Staircase	1/3/2020	1/11/2020	94	<0.5
WS-01-02	Hallway into Turbine Room	Light Green Paint on Concrete	10/21/2021	10/27/2021	90	<1.0
WS-01-03	Cable Vault	Interior of Air Handler	10/21/2021	10/27/2021	92	<1.0
WS-02-01	Switchboard Room	Unpainted Steel Conduit	9/26/2019	9/26/2019	78	<0.5
WS-02-02	Switchboard Room	Brown Painted Office Enclosure	1/3/2020	1/11/2020	100	5.8
WS-02-03	Switchboard Room	White Paint on Battery Box	5/29/2020	6/9/2020	110	<1.0
WS-02-04	Switchboard Room	Light Green Paint on Battery Box	5/29/2020	6/9/2020	108	<1.0
WS-02-05	Reactor Room	Light Green Paint on Brick Wall	10/21/2021	10/27/2021	94	<1.0
WS-02-06	Switchboard Room	White Paint on Metal Panel	10/21/2021	10/27/2021	92	<1.0
WS-03-01	Third Floor Hallway	Unpainted Steel Conduit	9/26/2019	9/26/2019	84	<0.5
WS-03-02	Third Floor Hallway	Unpainted Steel Conduit	9/26/2019	9/26/2019	80	<0.5
WS-03-03	Room D: Lower OCB Room	White Painted Wall	5/29/2020	6/9/2020	107	<1.0
WS-03-04	Room D: Lower OCB Room	Dark Green Painted Wall	5/29/2020	6/9/2020	109	<1.0
WS-03-05	Behind Door to Room C	Light Green Paint on Brick Wall, Behind Duct	10/21/2021	10/27/2021	97	<1.0
WS-03-06	Stariwell to Room D	Light Green Paint on Brick Wall	10/21/2021	10/27/2021	95	<1.0
WS-04-01	Fourth Floor Mezzanine	Unpainted Transite Enclosure	1/3/2020	1/11/2020	103	1.4
WS-04-02	Fourth Floor Mezzanine Stairwell	White Paint on Brick	10/21/2021	10/27/2021	94	<1.0
WS-04-03	Potential Transformer Upper	Black Paint on Brick	10/21/2021	10/27/2021	92	<1.0
WS-04-04	Main Bus Room	Dark Green Paint on Wall, Behind Duct	10/21/2021	10/27/2021	93	<1.0
WS-05-01	Fifth Floor Mezzanine	Light Green Painted Wall	5/29/2020	6/9/2020	104	<1.0
WS-05-02	Fifth Floor Mezzanine	White Painted Wall	5/29/2020	6/9/2020	107	<1.0
WS-05-03	Lightning Arrestor Room	Interior of Air Handler	10/21/2021	10/27/2021	95	<1.0
WS-05-04	Lightning Arrestor Room	Interior of Air Handler	10/21/2021	10/27/2021	89	<1.0
WS-05-05	Upper Breaker Room	Dark Green Paint on Brick Wall, Behind Duct	10/21/2021	10/27/2021	82	<1.0
EPA Standard						*10*

Notes:
1. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
2. Analytical results are reported in µg/100 cm^2 wipe.
3. < denotes analyte was not detected above the laboratory detection limit.
4. Total PCBs are reported as concrentartions of Aroclor 1260; no other aroclors were detected.
5. The applicable EPA decontamination standard is listed in 40 CFR 761.125(c)(4)(iv).

Table 7 - Quality Assurance and Quality Control Results

Sample Type	Sample Identification	Sample Date	Analysis Date	Surrogate Recovery Percentage	Total PCBs
Concrete Floor Characterization	ICS-01-16	10/1/2018	10/10/2018	46	<0.1
Collocated Duplicate	DUP-01	10/1/2018	10/10/2018	57	<0.1
Concrete Floor Characterization	ICS-01-36	10/1/2018	10/9/2018	69	<0.09
Collocated Duplicate	DUP-02	10/1/2018	10/10/2018	75	<0.1
Concrete Floor Characterization	ICS-04-14	10/3/2018	10/15/2018	90	<0.1
Collocated Duplicate	DUP-03	10/3/2018	10/10/2018	70	<0.1
Concrete Floor Characterization	ICS-01-28	10/1/2018	10/9/2018	50	0.2
Collocated Duplicate	DUP-04	10/1/2018	10/10/2018	57	0.3
Concrete Floor Characterization	ICS-02-02	10/2/2018	10/11/2018	69	<0.1
Collocated Duplicate	DUP-05	10/2/2018	10/10/2018	41	0.5
Concrete Floor Characterization	ICS-03-09	10/2/2018	10/12/2018	85	0.2
Collocated Duplicate	DUP-06	10/2/2018	10/10/2018	76	0.3
Concrete Floor Characterization	ICS-01-52	10/31/2018	11/6/2018	87	0.1
Collocated Duplicate	DUP-07	10/31/2018	11/6/2018	84	0.1
Concrete Floor Characterization	ICS-03-25	2/28/2019	3/6/2019	87	1.4
Collocated Duplicate	DUP-08	2/28/2019	3/5/2019	71	0.7
Concrete Floor Characterization	ICS-01-63	9/27/2019	10/7/2019	77	0.3
Collocated Duplicate	DUP-09	9/27/2019	10/7/2019	71	0.2
Concrete Floor Characterization	ICS-03-27 (1-2)	1/3/2020	1/13/2020	84	<0.1
Collocated Duplicate	DUP-10	1/3/2020	1/11/2020	80	<0.1
Concrete Floor Characterization	ICS-01-72	1/3/2020	1/10/2020	84	0.5
Collocated Duplicate	DUP-11	1/3/2020	1/11/2020	85	0.7
Concrete Floor Characterization	ICS-03-68	9/2/2020	9/10/2020	64	0.7
Collocated Duplicate	DUP-12	9/2/2020	9/9/2020	75	1.0
Concrete Floor Characterization	ICS-01-84	9/2/2020	9/9/2020	79	<0.1
Collocated Duplicate	DUP-13	9/2/2020	9/9/2020	79	<0.09
Concrete Floor Characterization	ICS-01-93	4/27/2021	5/5/2021	78	<0.1
Collocated Duplicate	DUP-14	4/27/2021	5/5/2021	95	<0.1
Concrete Wall Characterization	CW-DUP-01	5/29/2020	6/10/2020	95	<0.1
Collocated Duplicate	CW-04-04	5/29/2020	6/10/2020	92	<0.1
Concrete Floor Characterization	ICS-01-101	9/1/2021	9/7/2021	89	0.6
Collocated Duplicate	DUP-15	9/1/2021	9/7/2021	67	0.2
Paint Characterization	PS-71	2/28/2019	3/8/2019	N/A	51.0
Collocated Duplicate	DUP-01	2/28/2019	3/7/2019	124	59.3
Paint Characterization	PS-85	2/28/2019	3/6/2019	174	21.6
Collocated Duplicate	DUP-02	2/28/2019	3/5/2019	88	19.8
Paint Characterization	PS-113	9/27/2019	10/3/2019	969	5.1
Collocated Duplicate	DUP-03	9/27/2019	10/3/2019	969	5.7

1. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
2. Analytical results are reported in milligrams per kilograms (mg/kg).
3. < indicates the analyte was not detected above the specified laboratory detection limit.
4. N/A indicates surrogate recovery data not available.

Table 7 - Quality Assurance and Quality Control Results (Continued)

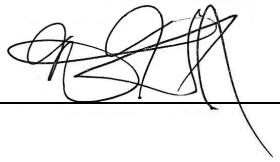
Sample Type	Sample Identification	Sample Date	Analysis Date	Surrogate Recovery Percentage	Total PCBs
Paint Characterization	PS-134	5/29/2020	6/9/2020	89	6.1
Collocated Duplicate	DUP-04	5/29/2020	6/10/2020	66	5.0
Paint Characterization	PS-136	5/29/2020	6/9/2020	76	5.6
Collocated Duplicate	DUP-05	5/29/2020	6/10/2020	199	3.4
Paint Characterization	PS-137	5/29/2020	6/10/2020	262	4.5
Collocated Duplicate	DUP-06	5/29/2020	6/10/2020	70	5.2
Paint Characterization	PS-199	4/29/2021	5/5/2021	66	4.6
Collocated Duplicate	DUP-07	4/29/2021	5/4/2021	95	5.6
Paint Characterization	PS-253	9/2/2021	9/12/2021	69	27
Collocated Duplicate	DUP-07	9/2/2021	9/10/2021	71	26.1
Paint Characterization	PS-215	4/29/2021	5/5/2021	75	4.7
Collocated Duplicate	DUP-08	4/29/2021	5/4/2021	90	4
Paint Characterization	PS-230	9/1/2021	9/10/2021	80	3.4
Collocated Duplicate	DUP-08	9/1/2021	9/10/2021	63	3.8
Paint Characterization	PS-220	4/29/2021	5/6/2021	58	2.8
Collocated Duplicate	DUP-09	4/29/2021	5/4/2021	94	4.6
Paint Characterization	PS-224	4/29/2021	5/4/2021	48	1.9
Collocated Duplicate	DUP-10	4/29/2021	5/4/2021	59	2.3
Paint Characterization	PS-225	4/29/2021	5/4/2021	53	2.2
Collocated Duplicate	DUP-11	4/29/2021	5/4/2021	59	2.3
Brick Characterization	BR-03-10	9/2/2021	9/7/2021	87	0.5
Collocated Duplicate	BR-DUP-01	9/2/2021	9/7/2021	89	0.1

1. Surrogate data is based on recovery percentage of an added concentration of decachlorobiphenyl.
2. Analytical results are reported in milligrams per kilograms (mg/kg).
3. < indicates the analyte was not detected above the specified laboratory detection limit.
4. N/A indicates surrogate recovery data not available.

RESPONSIBLE PARTY CERTIFICATION

Responsible Party Certification

I, William R. Howard, as an authorized representative of The Narragansett Electric Company (TNEC), the party conducting the Self-Implementing Cleanup at the Pawtucket 1 No. 107 Substation, located at 6 Thornton Street in Pawtucket, Rhode Island, hereby certify that: all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental / chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup Site, are on file at TNEC, 280 Melrose Street in Providence, Rhode Island 02907, and are available for EPA inspection.

Signed: 

Title: Principal Environmental Scientist

Date: 4/14/2022

SITE PHOTOGRAPHS

Photo 1
Overview of the east side of the Control House on September 9, 2018, as viewed from the southeast.

Photo 2
Overview of the south side of the Control House on September 9, 2018, as viewed from the south.

Photo 3
Overview of the west side of the Control House on September 9, 2018, as viewed from the southwest.

Photo 4
Overview of the Turbine Room on September 9, 2018, as viewed from the southeast. Note the trap rock covering the floor.

CONECO Engineers & Scientists OFFICES THROUGHOUT NEW ENGLAND (800) 548-3355			SITE PHOTOGRAPHS PAWTUCKET 1 NO. 107 SUBSTATION CONTROL HOUSE 6 THORNTON STREET PAWTUCKET, RHODE ISLAND
PHOTOGRAPHER	DATE	CHECKED	
KML	AS NOTED	MAZ	CONECO PROJECT NO. 5675.F.101

Photo 5
Overview of the turbine room on September 9, 2018, as viewed from the northwest.

Photo 6
Concrete foundations associated with former turbines on September 2, 2021, as viewed from the southwest.

Photo 7
Overview of Room No. 2, located adjacent to the Turbine Room on September 9, 2018, as viewed from the east.

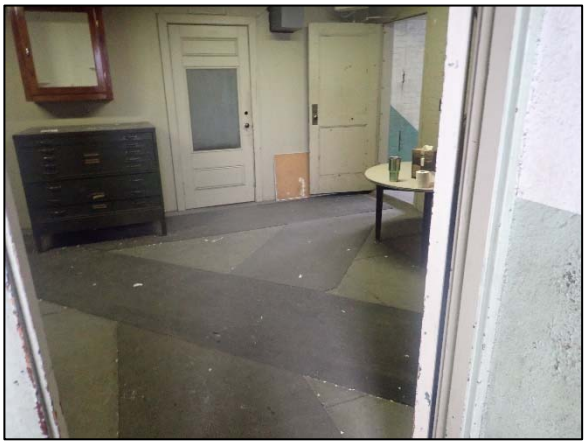


Photo 8
Overview of the second floor Office 1 room, where PCB Remediation Waste has been identified in the ceiling paint and concrete as well as the rubber floor matting, on April 29, 2021, as viewed from the northwest.

CONECO
Engineers & Scientists
OFFICES THROUGHOUT NEW ENGLAND (800) 548-3355

SITE PHOTOGRAPHS

PAWTUCKET 1 NO. 107 SUBSTATION
CONTROL HOUSE
6 THORNTON STREET
PAWTUCKET, RHODE ISLAND

PHOTOGRAPHER	DATE	CHECKED
KML	AS NOTED	MAZ

CONECO PROJECT NO. 5675.F.101

Photo 9
A view of paint and concrete ceiling samples collected from the second floor Office 1 on September 2, 2021.

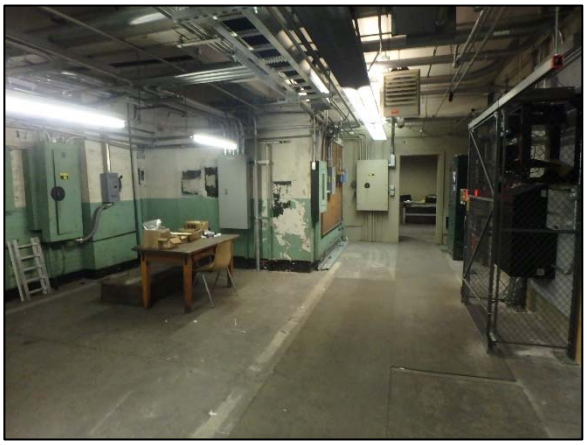


Photo 10
Overview of the northern portion of the main switchboard room located on the second floor on September 9, 2018, as viewed from the southeast.

Photo 11
Overview of the third floor East Hallway, comprising PCB Remediation Waste, on April 29, 2021, as viewed from the north.

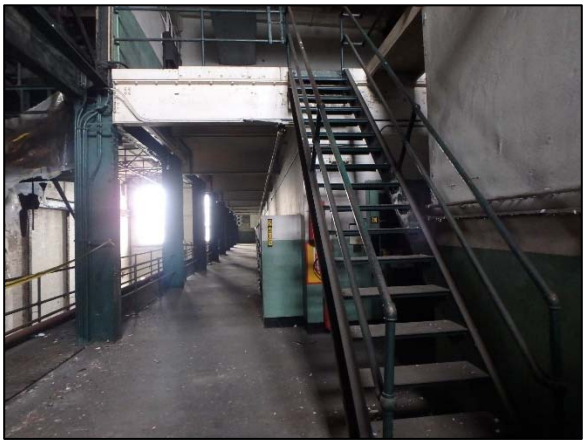


Photo 12
Overview of the mezzanine located on the fourth floor on September 9, 2018, as viewed from the north.

CONECO Engineers & Scientists OFFICES THROUGHOUT NEW ENGLAND (800) 548-3355			SITE PHOTOGRAPHS PAWTUCKET 1 NO. 107 SUBSTATION CONTROL HOUSE 6 THORNTON STREET PAWTUCKET, RHODE ISLAND
PHOTOGRAPHER	DATE	CHECKED	
KML	AS NOTED	MAZ	CONECO PROJECT NO. 5675.F.101

LABORATORY ANALYTICAL DOCUMENTATION

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1810174

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 1:45 pm, Oct 12, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810174

SAMPLE RECEIPT

The following samples were received on October 04, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1810174-01	ICS-01-01	Soil	8082A
1810174-02	ICS-01-02	Soil	8082A
1810174-03	ICS-01-03	Soil	8082A
1810174-04	ICS-01-04	Soil	8082A
1810174-05	ICS-01-05	Soil	8082A
1810174-06	ICS-01-06	Soil	8082A
1810174-07	ICS-01-07	Soil	8082A
1810174-08	ICS-01-08	Soil	8082A
1810174-09	ICS-01-09	Soil	8082A
1810174-10	ICS-01-10	Soil	8082A
1810174-11	ICS-01-11	Soil	8082A
1810174-12	ICS-01-12	Soil	8082A
1810174-13	ICS-01-13	Soil	8082A
1810174-14	ICS-01-14	Soil	8082A
1810174-15	ICS-01-15	Soil	8082A
1810174-16	ICS-01-16	Soil	8082A
1810174-17	ICS-01-17	Soil	8082A
1810174-18	ICS-01-18	Soil	8082A
1810174-19	ICS-01-19	Soil	8082A
1810174-20	ICS-01-20	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810174

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810174

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-01
Date Sampled: 10/01/18 09:00
Percent Solids: 97
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/08/18 19:08		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/08/18 19:08		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/08/18 19:08		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/08/18 19:08		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/08/18 19:08		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/08/18 19:08		CJ80504
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/08/18 19:08		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/08/18 19:08		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/08/18 19:08		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*56 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-02
Date Sampled: 10/01/18 09:05
Percent Solids: 97
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/08/18 19:27		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/08/18 19:27		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/08/18 19:27		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/08/18 19:27		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/08/18 19:27		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/08/18 19:27		CJ80504
Aroclor 1260	ND (0.1)		8082A		1	10/08/18 19:27		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/08/18 19:27		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/08/18 19:27		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*60 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-03
Date Sampled: 10/01/18 09:10
Percent Solids: 97
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/08/18 22:19		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/08/18 22:19		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/08/18 22:19		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/08/18 22:19		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/08/18 22:19		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/08/18 22:19		CJ80504
Aroclor 1260	**0.1** (0.1)		8082A		1	10/08/18 22:19		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/08/18 22:19		CJ80504
Aroclor 1268	**0.2** (0.1)		8082A		1	10/08/18 22:19		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*53 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-04
Date Sampled: 10/01/18 09:15
Percent Solids: 98
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/08/18 22:38		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/08/18 22:38		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/08/18 22:38		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/08/18 22:38		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/08/18 22:38		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/08/18 22:38		CJ80504
Aroclor 1260	ND (0.1)		8082A		1	10/08/18 22:38		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/08/18 22:38		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/08/18 22:38		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*44 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*58 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-05
Date Sampled: 10/01/18 09:20
Percent Solids: 98
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/08/18 22:57		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/08/18 22:57		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/08/18 22:57		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/08/18 22:57		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/08/18 22:57		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/08/18 22:57		CJ80504
Aroclor 1260	ND (0.1)		8082A		1	10/08/18 22:57		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/08/18 22:57		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/08/18 22:57		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-06
Date Sampled: 10/01/18 09:25
Percent Solids: 97
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/08/18 23:16		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/08/18 23:16		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/08/18 23:16		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/08/18 23:16		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/08/18 23:16		CJ80504
Aroclor 1254	**0.4** (0.1)		8082A		1	10/08/18 23:16		CJ80504
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/08/18 23:16		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/08/18 23:16		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/08/18 23:16		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*47 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*51 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*55 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-07
Date Sampled: 10/01/18 09:30
Percent Solids: 97
Initial Volume: 5.15
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/08/18 23:35		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/08/18 23:35		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/08/18 23:35		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/08/18 23:35		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/08/18 23:35		CJ80504
Aroclor 1254 [2C]	**0.2** (0.1)		8082A		1	10/08/18 23:35		CJ80504
Aroclor 1260 [2C]	**0.1** (0.1)		8082A		1	10/08/18 23:35		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/08/18 23:35		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/08/18 23:35		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*47 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*60 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-08
Date Sampled: 10/01/18 09:35
Percent Solids: 97
Initial Volume: 5.14
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/08/18 23:54		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/08/18 23:54		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/08/18 23:54		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/08/18 23:54		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/08/18 23:54		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/08/18 23:54		CJ80504
Aroclor 1260	**0.1** (0.1)		8082A		1	10/08/18 23:54		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/08/18 23:54		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/08/18 23:54		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*47 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-09
Date Sampled: 10/01/18 09:40
Percent Solids: 96
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 0:13		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 0:13		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 0:13		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 0:13		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 0:13		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/09/18 0:13		CJ80504
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/09/18 0:13		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 0:13		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 0:13		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*48 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*51 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*53 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-10
Date Sampled: 10/01/18 09:45
Percent Solids: 97
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 0:33		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 0:33		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 0:33		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 0:33		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 0:33		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/09/18 0:33		CJ80504
Aroclor 1260	ND (0.1)		8082A		1	10/09/18 0:33		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 0:33		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 0:33		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*44 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*48 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-11
Date Sampled: 10/01/18 09:50
Percent Solids: 97
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 0:52		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 0:52		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 0:52		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 0:52		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 0:52		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/09/18 0:52		CJ80504
Aroclor 1260	**0.2** (0.1)		8082A		1	10/09/18 0:52		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 0:52		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 0:52		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-12
Date Sampled: 10/01/18 09:55
Percent Solids: 97
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 1:11		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 1:11		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 1:11		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 1:11		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 1:11		CJ80504
Aroclor 1254 [2C]	**0.9** (0.1)		8082A		1	10/09/18 1:11		CJ80504
Aroclor 1260	**0.3** (0.1)		8082A		1	10/09/18 1:11		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 1:11		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 1:11		CJ80504

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*73 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-13
Date Sampled: 10/01/18 10:00
Percent Solids: 97
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 1:30		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 1:30		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 1:30		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 1:30		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 1:30		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/09/18 1:30		CJ80504
Aroclor 1260	**0.4** (0.1)		8082A		1	10/09/18 1:30		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 1:30		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 1:30		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*64 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-14
Date Sampled: 10/01/18 10:05
Percent Solids: 99
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 1:49		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 1:49		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 1:49		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 1:49		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 1:49		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/09/18 1:49		CJ80504
Aroclor 1260	ND (0.1)		8082A		1	10/09/18 1:49		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 1:49		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 1:49		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*103 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-15
Date Sampled: 10/01/18 10:10
Percent Solids: 98
Initial Volume: 5.12
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 2:08		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 2:08		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 2:08		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 2:08		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 2:08		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/09/18 2:08		CJ80504
Aroclor 1260	**0.2** (0.1)		8082A		1	10/09/18 2:08		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 2:08		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 2:08		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*100 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-16
Date Sampled: 10/01/18 10:15
Percent Solids: 98
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/9/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/10/18 11:20		CJ80912
Aroclor 1221	ND (0.1)		8082A		1	10/10/18 11:20		CJ80912
Aroclor 1232	ND (0.1)		8082A		1	10/10/18 11:20		CJ80912
Aroclor 1242	ND (0.1)		8082A		1	10/10/18 11:20		CJ80912
Aroclor 1248	ND (0.1)		8082A		1	10/10/18 11:20		CJ80912
Aroclor 1254	ND (0.1)		8082A		1	10/10/18 11:20		CJ80912
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/10/18 11:20		CJ80912
Aroclor 1262	ND (0.1)		8082A		1	10/10/18 11:20		CJ80912
Aroclor 1268	ND (0.1)		8082A		1	10/10/18 11:20		CJ80912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*46 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*46 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-17
Date Sampled: 10/01/18 10:20
Percent Solids: 98
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 2:46		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 2:46		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 2:46		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 2:46		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 2:46		CJ80504
Aroclor 1254 [2C]	**0.3** (0.1)		8082A		1	10/09/18 2:46		CJ80504
Aroclor 1260	**0.2** (0.1)		8082A		1	10/09/18 2:46		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 2:46		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 2:46		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-18
Date Sampled: 10/01/18 10:25
Percent Solids: 98
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 3:05		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 3:05		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 3:05		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 3:05		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 3:05		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/09/18 3:05		CJ80504
Aroclor 1260	**0.2** (0.1)		8082A		1	10/09/18 3:05		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 3:05		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 3:05		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*63 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-19
Date Sampled: 10/01/18 10:30
Percent Solids: 98
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 3:24		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 3:24		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 3:24		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 3:24		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 3:24		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/09/18 3:24		CJ80504
Aroclor 1260	**0.1** (0.1)		8082A		1	10/09/18 3:24		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 3:24		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 3:24		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-20
Date Sampled: 10/01/18 10:35
Percent Solids: 97
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810174
ESS Laboratory Sample ID: 1810174-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/5/18 16:56

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 3:44		CJ80504
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 3:44		CJ80504
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 3:44		CJ80504
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 3:44		CJ80504
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 3:44		CJ80504
Aroclor 1254	ND (0.1)		8082A		1	10/09/18 3:44		CJ80504
Aroclor 1260	ND (0.1)		8082A		1	10/09/18 3:44		CJ80504
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 3:44		CJ80504
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 3:44		CJ80504

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*62 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810174

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80504 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0246*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0244*		mg/kg wet	*0.02500*		*98*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		87	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		97	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140			
Surrogate: Decachlorobiphenyl	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0221*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		91	40-140	4	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		90	40-140	4	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		101	40-140	4	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		90	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Batch CJ80912 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810174

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80912 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0199*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0184*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0180*		mg/kg wet	*0.02500*		*72*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		99	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		102	40-140			
Aroclor 1260	0.6	0.02	mg/kg wet	0.5000		110	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0204*		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	0.5	0.02	mg/kg wet	0.5000		95	40-140	4	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		97	40-140	5	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		106	40-140	4	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		95	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0191*		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]	*0.0198*		mg/kg wet	*0.02500*		*79*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810174

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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810174

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1810174
Date Received: 10/4/2018
Project Due Date: 10/12/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	274489	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	274488	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	274487	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	274486	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	274485	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	274484	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	274483	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	274482	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	274481	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	274480	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	274479	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	274478	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	274477	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	274476	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	274475	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	274474	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	274473	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	274472	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
19	274471	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
20	274470	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? Yes / No

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 1810174

Date Received: 10/4/2018

Are all necessary stickers attached? (Yes) No

Completed By: _____ Date & Time: 10/4/18 2134

Reviewed By: _____ Date & Time: 10/4/18 2216

Delivered By: _____ 10/4/18 2216

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1810174

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ◉~~MA MCP~~ ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI
Contact Person	**Address**	
Mark Zoller	4 First Street	
City	**State**	**Zip Code** / **PO #**
Bridgewater	MA	02324 / 5675.F
Telephone Number	**FAX Number**	**Email Address**
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	10/1/2018	9:00 a.m.	Grab	Solid	ICS-01-01	X
02	10/1/2018	9:05 a.m.	Grab	Solid	ICS-01-02	X
03	10/1/2018	9:10 a.m.	Grab	Solid	ICS-01-03	X
04	10/1/2018	9:15 a.m.	Grab	Solid	ICS-01-04	X
05	10/1/2018	9:20 a.m.	Grab	Solid	ICS-01-05	X
06	10/1/2018	9:25 a.m.	Grab	Solid	ICS-01-06	X
07	10/1/2018	9:30 a.m.	Grab	Solid	ICS-01-07	X
08	10/1/2018	9:35 a.m.	Grab	Solid	ICS-01-08	X
09	10/1/2018	9:40 a.m.	Grab	Solid	ICS-01-09	X
10	10/1/2018	9:45 a.m.	Grab	Solid	ICS-01-10	X

Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*	1
	Number of Containers per Sample:	1

Laboratory Use Only

Cooler Present: ✓

Seals Intact: ____

Cooler Temperature: 1.8 +3.2 °C ICE RC

Sampled by : NRH/DJD/MJM

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:30 P.M.	10/4/18 1330	10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

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www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1810174

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ◉MA MCP ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Excel ☑Other (Please Specify →) PDF

Company Name Coneco Engineers and Scientists	**Project #** 5675.F	**Project Name** Pawtucket 1 Control House, 6 Thornton Ave,	
Contact Person Mark Zoller		**Address** 4 First Street	
City Bridgewater	**State** MA	**Zip Code** 02324	**PO #** 5675.F
Telephone Number 508-697-3191	**FAX Number**	**Email Address** jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
11	10/1/2018	9:50 a.m.	Grab	Solid	ICS-01-11	X
12	10/1/2018	9:55 a.m.	Grab	Solid	ICS-01-12	X
13	10/1/2018	10:00 a.m.	Grab	Solid	ICS-01-13	X
14	10/1/2018	10:05 a.m.	Grab	Solid	ICS-01-14	X
15	10/1/2018	10:10 a.m.	Grab	Solid	ICS-01-15	X
16	10/1/2018	10:15 a.m.	Grab	Solid	ICS-01-16	X
17	10/1/2018	10:20 a.m.	Grab	Solid	ICS-01-17	X
18	10/1/2018	10:25 a.m.	Grab	Solid	ICS-01-18	X
19	10/1/2018	10:30 a.m.	Grab	Solid	ICS-01-19	X
20	10/1/2018	10:35 a.m.	Grab	Solid	ICS-01-20	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓

Seals Intact: ____

Cooler Temperature: 1.8+3.2 °C ICE RC

Sampled by : NRH/DJD/MJM

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:30 P.M.	10/4/18 1330	10/4/18 1545	10/4/18 2017
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1810175

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 2:14 pm, Oct 12, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810175

SAMPLE RECEIPT

The following samples were received on October 04, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1810175-01	ICS-01-21	Soil	8082A
1810175-02	ICS-01-22	Soil	8082A
1810175-03	ICS-01-23	Soil	8082A
1810175-04	ICS-01-24	Soil	8082A
1810175-05	ICS-01-25	Soil	8082A
1810175-06	ICS-01-26	Soil	8082A
1810175-07	ICS-01-27	Soil	8082A
1810175-08	ICS-01-28	Soil	8082A
1810175-09	ICS-01-29	Soil	8082A
1810175-10	ICS-01-30	Soil	8082A
1810175-11	ICS-01-31	Soil	8082A
1810175-12	ICS-01-32	Soil	8082A
1810175-13	ICS-01-33	Soil	8082A
1810175-14	ICS-01-34	Soil	8082A
1810175-15	ICS-01-35	Soil	8082A
1810175-16	ICS-01-36	Soil	8082A
1810175-17	ICS-01-37	Soil	8082A
1810175-18	ICS-01-38	Soil	8082A
1810175-19	ICS-01-39	Soil	8082A
1810175-20	ICS-01-40	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810175

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1810175-01	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1260 [2C]
1810175-01	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1260 [2C]
1810175-06	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1260 [2C]
1810175-06	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1260 [2C]

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810175

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-21
Date Sampled: 10/01/18 10:40
Percent Solids: 99
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 14:20		CJ80602
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 14:20		CJ80602
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 14:20		CJ80602
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 14:20		CJ80602
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 14:20		CJ80602
Aroclor 1254 [2C]	**0.3** (0.1)		8082A		1	10/09/18 14:20		CJ80602
Aroclor 1260 [2C]	**LC, P 0.1** (0.1)		8082A		1	10/09/18 14:20		CJ80602
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 14:20		CJ80602
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 14:20		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*57 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-22
Date Sampled: 10/01/18 10:45
Percent Solids: 99
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 14:37		CJ80602
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 14:37		CJ80602
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 14:37		CJ80602
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 14:37		CJ80602
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 14:37		CJ80602
Aroclor 1254	**0.1** (0.1)		8082A		1	10/09/18 14:37		CJ80602
Aroclor 1260	ND (0.1)		8082A		1	10/09/18 14:37		CJ80602
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 14:37		CJ80602
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 14:37		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*53 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*82 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-23
Date Sampled: 10/01/18 10:50
Percent Solids: 99
Initial Volume: 5.63
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/09/18 14:56		CJ80602
Aroclor 1221	ND (0.09)		8082A		1	10/09/18 14:56		CJ80602
Aroclor 1232	ND (0.09)		8082A		1	10/09/18 14:56		CJ80602
Aroclor 1242	ND (0.09)		8082A		1	10/09/18 14:56		CJ80602
Aroclor 1248	ND (0.09)		8082A		1	10/09/18 14:56		CJ80602
Aroclor 1254 [2C]	**0.2** (0.09)		8082A		1	10/09/18 14:56		CJ80602
Aroclor 1260	ND (0.09)		8082A		1	10/09/18 14:56		CJ80602
Aroclor 1262	ND (0.09)		8082A		1	10/09/18 14:56		CJ80602
Aroclor 1268	ND (0.09)		8082A		1	10/09/18 14:56		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-24
Date Sampled: 10/01/18 10:55
Percent Solids: 99
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 15:15		CJ80602
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 15:15		CJ80602
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 15:15		CJ80602
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 15:15		CJ80602
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 15:15		CJ80602
Aroclor 1254 [2C]	**0.3** (0.1)		8082A		1	10/09/18 15:15		CJ80602
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/09/18 15:15		CJ80602
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 15:15		CJ80602
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 15:15		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*102 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-25
Date Sampled: 10/01/18 11:00
Percent Solids: 97
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 13:45		CJ80913
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 13:45		CJ80913
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 13:45		CJ80913
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 13:45		CJ80913
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 13:45		CJ80913
Aroclor 1254 [2C]	**0.6** (0.1)		8082A		1	10/11/18 13:45		CJ80913
Aroclor 1260	ND (0.1)		8082A		1	10/11/18 13:45		CJ80913
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 13:45		CJ80913
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 13:45		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-26
Date Sampled: 10/01/18 11:05
Percent Solids: 96
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 15:54		CJ80602
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 15:54		CJ80602
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 15:54		CJ80602
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 15:54		CJ80602
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 15:54		CJ80602
Aroclor 1254 [2C]	**0.2** (0.1)		8082A		1	10/09/18 15:54		CJ80602
Aroclor 1260 [2C]	**LC, P 0.2** (0.1)		8082A		1	10/09/18 15:54		CJ80602
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 15:54		CJ80602
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 15:54		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*54 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-27
Date Sampled: 10/01/18 11:10
Percent Solids: 97
Initial Volume: 5.25
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 16:13		CJ80602
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 16:13		CJ80602
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 16:13		CJ80602
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 16:13		CJ80602
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 16:13		CJ80602
Aroclor 1254 [2C]	**0.2** (0.1)		8082A		1	10/09/18 16:13		CJ80602
Aroclor 1260	**0.1** (0.1)		8082A		1	10/09/18 16:13		CJ80602
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 16:13		CJ80602
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 16:13		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-28
Date Sampled: 10/01/18 11:15
Percent Solids: 97
Initial Volume: 5.41
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 16:32		CJ80602
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 16:32		CJ80602
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 16:32		CJ80602
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 16:32		CJ80602
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 16:32		CJ80602
Aroclor 1254 [2C]	**0.1** (0.1)		8082A		1	10/09/18 16:32		CJ80602
Aroclor 1260	**0.1** (0.1)		8082A		1	10/09/18 16:32		CJ80602
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 16:32		CJ80602
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 16:32		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*50 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*55 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-29
Date Sampled: 10/01/18 11:20
Percent Solids: 97
Initial Volume: 5.54
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/09/18 16:51		CJ80602
Aroclor 1221	ND (0.09)		8082A		1	10/09/18 16:51		CJ80602
Aroclor 1232	ND (0.09)		8082A		1	10/09/18 16:51		CJ80602
Aroclor 1242	ND (0.09)		8082A		1	10/09/18 16:51		CJ80602
Aroclor 1248	ND (0.09)		8082A		1	10/09/18 16:51		CJ80602
Aroclor 1254	ND (0.09)		8082A		1	10/09/18 16:51		CJ80602
Aroclor 1260	**0.3** (0.09)		8082A		1	10/09/18 16:51		CJ80602
Aroclor 1262	ND (0.09)		8082A		1	10/09/18 16:51		CJ80602
Aroclor 1268	ND (0.09)		8082A		1	10/09/18 16:51		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*60 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-30
Date Sampled: 10/01/18 11:25
Percent Solids: 96
Initial Volume: 5.66
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/09/18 17:10		CJ80602
Aroclor 1221	ND (0.09)		8082A		1	10/09/18 17:10		CJ80602
Aroclor 1232	ND (0.09)		8082A		1	10/09/18 17:10		CJ80602
Aroclor 1242	ND (0.09)		8082A		1	10/09/18 17:10		CJ80602
Aroclor 1248	ND (0.09)		8082A		1	10/09/18 17:10		CJ80602
Aroclor 1254 [2C]	**0.2** (0.09)		8082A		1	10/09/18 17:10		CJ80602
Aroclor 1260	**0.2** (0.09)		8082A		1	10/09/18 17:10		CJ80602
Aroclor 1262	ND (0.09)		8082A		1	10/09/18 17:10		CJ80602
Aroclor 1268	ND (0.09)		8082A		1	10/09/18 17:10		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*62 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-31
Date Sampled: 10/01/18 11:30
Percent Solids: 96
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 14:04		CJ80913
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 14:04		CJ80913
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 14:04		CJ80913
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 14:04		CJ80913
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 14:04		CJ80913
Aroclor 1254 [2C]	**0.2** (0.1)		8082A		1	10/11/18 14:04		CJ80913
Aroclor 1260 [2C]	**0.2** (0.1)		8082A		1	10/11/18 14:04		CJ80913
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 14:04		CJ80913
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 14:04		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*37 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*33 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*40 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-32
Date Sampled: 10/01/18 11:35
Percent Solids: 99
Initial Volume: 5.67
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/09/18 17:49		CJ80602
Aroclor 1221	ND (0.09)		8082A		1	10/09/18 17:49		CJ80602
Aroclor 1232	ND (0.09)		8082A		1	10/09/18 17:49		CJ80602
Aroclor 1242	ND (0.09)		8082A		1	10/09/18 17:49		CJ80602
Aroclor 1248	ND (0.09)		8082A		1	10/09/18 17:49		CJ80602
Aroclor 1254	**0.6** (0.09)		8082A		1	10/09/18 17:49		CJ80602
Aroclor 1260	**0.3** (0.09)		8082A		1	10/09/18 17:49		CJ80602
Aroclor 1262	ND (0.09)		8082A		1	10/09/18 17:49		CJ80602
Aroclor 1268	ND (0.09)		8082A		1	10/09/18 17:49		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-33
Date Sampled: 10/01/18 11:40
Percent Solids: 98
Initial Volume: 5.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 18:08		CJ80602
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 18:08		CJ80602
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 18:08		CJ80602
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 18:08		CJ80602
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 18:08		CJ80602
Aroclor 1254	**8.9** (0.5)		8082A		5	10/10/18 22:13		CJ80602
Aroclor 1260	ND (0.1)		8082A		1	10/09/18 18:08		CJ80602
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 18:08		CJ80602
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 18:08		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-34
Date Sampled: 10/01/18 11:45
Percent Solids: 99
Initial Volume: 5.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 18:27		CJ80602
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 18:27		CJ80602
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 18:27		CJ80602
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 18:27		CJ80602
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 18:27		CJ80602
Aroclor 1254	**0.2** (0.1)		8082A		1	10/09/18 18:27		CJ80602
Aroclor 1260	ND (0.1)		8082A		1	10/09/18 18:27		CJ80602
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 18:27		CJ80602
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 18:27		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-35
Date Sampled: 10/01/18 11:50
Percent Solids: 99
Initial Volume: 5.46
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/09/18 18:46		CJ80602
Aroclor 1221	ND (0.09)		8082A		1	10/09/18 18:46		CJ80602
Aroclor 1232	ND (0.09)		8082A		1	10/09/18 18:46		CJ80602
Aroclor 1242	ND (0.09)		8082A		1	10/09/18 18:46		CJ80602
Aroclor 1248	ND (0.09)		8082A		1	10/09/18 18:46		CJ80602
Aroclor 1254	ND (0.09)		8082A		1	10/09/18 18:46		CJ80602
Aroclor 1260 [2C]	ND (0.09)		8082A		1	10/09/18 18:46		CJ80602
Aroclor 1262	ND (0.09)		8082A		1	10/09/18 18:46		CJ80602
Aroclor 1268	ND (0.09)		8082A		1	10/09/18 18:46		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-36
Date Sampled: 10/01/18 11:55
Percent Solids: 99
Initial Volume: 5.53
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/09/18 19:05		CJ80602
Aroclor 1221	ND (0.09)		8082A		1	10/09/18 19:05		CJ80602
Aroclor 1232	ND (0.09)		8082A		1	10/09/18 19:05		CJ80602
Aroclor 1242	ND (0.09)		8082A		1	10/09/18 19:05		CJ80602
Aroclor 1248	ND (0.09)		8082A		1	10/09/18 19:05		CJ80602
Aroclor 1254	ND (0.09)		8082A		1	10/09/18 19:05		CJ80602
Aroclor 1260	ND (0.09)		8082A		1	10/09/18 19:05		CJ80602
Aroclor 1262	ND (0.09)		8082A		1	10/09/18 19:05		CJ80602
Aroclor 1268	ND (0.09)		8082A		1	10/09/18 19:05		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-37
Date Sampled: 10/01/18 12:00
Percent Solids: 99
Initial Volume: 5.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 19:24		CJ80602
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 19:24		CJ80602
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 19:24		CJ80602
Aroclor 1242	ND (0.1)		8082A		1	10/09/18 19:24		CJ80602
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 19:24		CJ80602
Aroclor 1254	ND (0.1)		8082A		1	10/09/18 19:24		CJ80602
Aroclor 1260	ND (0.1)		8082A		1	10/09/18 19:24		CJ80602
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 19:24		CJ80602
Aroclor 1268	ND (0.1)		8082A		1	10/09/18 19:24		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*51 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-38
Date Sampled: 10/01/18 12:05
Percent Solids: 99
Initial Volume: 5.32
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/09/18 22:16		CJ80602
Aroclor 1221	ND (0.09)		8082A		1	10/09/18 22:16		CJ80602
Aroclor 1232	ND (0.09)		8082A		1	10/09/18 22:16		CJ80602
Aroclor 1242	ND (0.09)		8082A		1	10/09/18 22:16		CJ80602
Aroclor 1248	ND (0.09)		8082A		1	10/09/18 22:16		CJ80602
Aroclor 1254	ND (0.09)		8082A		1	10/09/18 22:16		CJ80602
Aroclor 1260	ND (0.09)		8082A		1	10/09/18 22:16		CJ80602
Aroclor 1262	ND (0.09)		8082A		1	10/09/18 22:16		CJ80602
Aroclor 1268	ND (0.09)		8082A		1	10/09/18 22:16		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-39
Date Sampled: 10/01/18 12:10
Percent Solids: 99
Initial Volume: 5.45
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/09/18 22:36		CJ80602
Aroclor 1221	ND (0.09)		8082A		1	10/09/18 22:36		CJ80602
Aroclor 1232	ND (0.09)		8082A		1	10/09/18 22:36		CJ80602
Aroclor 1242	ND (0.09)		8082A		1	10/09/18 22:36		CJ80602
Aroclor 1248	ND (0.09)		8082A		1	10/09/18 22:36		CJ80602
Aroclor 1254	ND (0.09)		8082A		1	10/09/18 22:36		CJ80602
Aroclor 1260	ND (0.09)		8082A		1	10/09/18 22:36		CJ80602
Aroclor 1262	ND (0.09)		8082A		1	10/09/18 22:36		CJ80602
Aroclor 1268	ND (0.09)		8082A		1	10/09/18 22:36		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-40
Date Sampled: 10/01/18 12:15
Percent Solids: 99
Initial Volume: 5.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810175
ESS Laboratory Sample ID: 1810175-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/09/18 22:55		CJ80602
Aroclor 1221	ND (0.09)		8082A		1	10/09/18 22:55		CJ80602
Aroclor 1232	ND (0.09)		8082A		1	10/09/18 22:55		CJ80602
Aroclor 1242	ND (0.09)		8082A		1	10/09/18 22:55		CJ80602
Aroclor 1248	ND (0.09)		8082A		1	10/09/18 22:55		CJ80602
Aroclor 1254 [2C]	**0.2** (0.09)		8082A		1	10/09/18 22:55		CJ80602
Aroclor 1260	**0.1** (0.09)		8082A		1	10/09/18 22:55		CJ80602
Aroclor 1262	ND (0.09)		8082A		1	10/09/18 22:55		CJ80602
Aroclor 1268	ND (0.09)		8082A		1	10/09/18 22:55		CJ80602

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*106 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*113 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810175

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80602 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		90	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		102	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		90	40-140			
Surrogate: Decachlorobiphenyl	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		96	40-140	6	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		98	40-140	8	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		109	40-140	7	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		98	40-140	8	30	
Surrogate: Decachlorobiphenyl	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0259*		mg/kg wet	*0.02500*		*103*	*30-150*			
Batch CJ80913 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810175

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80913 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		102	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		103	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		92	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		103	40-140			
Surrogate: Decachlorobiphenyl	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		107	40-140	5	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		107	40-140	4	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		98	40-140	6	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		108	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0221*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0244*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0226*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810175

Notes and Definitions

U	Analyte included in the analysis, but not detected
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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810175

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1810175
Date Received: 10/4/2018
Project Due Date: 10/12/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	274509	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	274508	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	274507	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	274506	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	274505	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	274504	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	274503	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	274502	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	274501	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	274500	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	274499	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	274498	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	274497	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	274496	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	274495	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	274494	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	274493	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	274492	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
19	274491	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
20	274490	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? Yes / No

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 1810175

Date Received: 10/4/2018

Are all necessary stickers attached? (Yes) / No

Completed By: [signature]

Date & Time: 10/4/18 2139

Reviewed By: [signature]

Date & Time: 10/4/18 2218

Delivered By: [signature]

10/4/18 2218

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # K810175

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ○MA MCP ○RGP
Reporting Limits	PCBs <0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	MA	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082														
01	10/1/2018	10:40 a.m.	Grab	Solid	ICS-01-21	X														
02	10/1/2018	10:45 a.m.	Grab	Solid	ICS-01-22	X														
03	10/1/2018	10:50 a.m.	Grab	Solid	ICS-01-23	X														
04	10/1/2018	10:55 a.m.	Grab	Solid	ICS-01-24	X														
05	10/1/2018	11:00 a.m.	Grab	Solid	ICS-01-25	X														
06	10/1/2018	11:05 a.m.	Grab	Solid	ICS-01-26	X														
07	10/1/2018	11:10 a.m.	Grab	Solid	ICS-01-27	X														
08	10/1/2018	11:15 a.m.	Grab	Solid	ICS-01-28	X														
09	10/1/2018	11:20 a.m.	Grab	Solid	ICS-01-29	X														
10	10/1/2018	11:25 a.m.	Grab	Solid	ICS-01-30	X														
Container Type:	AC-Air Cassette	AG-Amber Glass	B-BOD Bottle	C-Cubitainer	G - Glass	O-Other	P-Poly	S-Sterile	V-Vial		AG									
Container Volume:	1-100 mL	2-2.5 gal	3-250 mL	4-300 mL	5-500 mL	6-1L	7-VOA	8-2 oz	9-4 oz	10-8 oz	11-Other*	9								
Preservation Code:	1-Non Preserved	2-HCl	3-H2SO4	4-HNO3	5-NaOH	6-Methanol	7-Na2S2O3	8-ZnAce, NaOH	9-NH4Cl	10-DI H2O	11-Other*	1								
										Number of Containers per Sample:		1								

Laboratory Use Only

Cooler Present: ✓
Seals Intact: ____
Cooler Temperature: 1.8+3.2 °C ICE RC

Sampled by : ACC/MJM/DCK

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:30	10/4/18 1330	10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
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CHAIN OF CUSTODY

ESS Lab # 181075

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ~~◉MA MCP~~ ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave,
Contact Person	**Address**	
Mark Zoller	4 First Street	
City	**State**	**Zip Code** / **PO #**
Bridgewater	MA	02324 / 5675.F
Telephone Number	**FAX Number**	**Email Address**
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082															
11	10/1/2018	11:30 a.m.	Grab	Solid	ICS-01-31	X															
12	10/1/2018	11:35 a.m.	Grab	Solid	ICS-01-32	X															
13	10/1/2018	11:40 a.m.	Grab	Solid	ICS-01-33	X															
14	10/1/2018	11:45 a.m.	Grab	Solid	ICS-01-34	X															
15	10/1/2018	11:50 a.m.	Grab	Solid	ICS-01-35	X															
16	10/1/2018	11:55 a.m.	Grab	Solid	ICS-01-36	X															
17	10/1/2018	12:00 p.m.	Grab	Solid	ICS-01-37	X															
18	10/1/2018	12:05 p.m.	Grab	Solid	ICS-01-38	X															
19	10/1/2018	12:10 p.m.	Grab	Solid	ICS-01-39	X															
20	10/1/2018	12:15 p.m.	Grab	Solid	ICS-01-40	X															
Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial						AG															
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*						9															
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*						1															
					Number of Containers per Sample:	1															

Laboratory Use Only
Cooler Present: ✓
Seals Intact: ____
Cooler Temperature: 1.8+3.2 °C ICE RC

Sampled by : NRH/DJD/MJM

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:30 p.m.	10/4/18 1330	10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1810188

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, Oct 12, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810188

SAMPLE RECEIPT

The following samples were received on October 04, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1810188-01	ICS-05-10	Soil	8082A
1810188-02	DUP-01	Soil	8082A
1810188-03	DUP-02	Soil	8082A
1810188-04	DUP-03	Soil	8082A
1810188-05	DUP-04	Soil	8082A
1810188-06	DUP-05	Soil	8082A
1810188-07	DUP-06	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810188

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810188

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-05-10
Date Sampled: 10/03/18 13:34
Percent Solids: 99
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810188
ESS Laboratory Sample ID: 1810188-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/9/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/10/18 13:36		CJ80912
Aroclor 1221	ND (0.1)		8082A		1	10/10/18 13:36		CJ80912
Aroclor 1232	ND (0.1)		8082A		1	10/10/18 13:36		CJ80912
Aroclor 1242	ND (0.1)		8082A		1	10/10/18 13:36		CJ80912
Aroclor 1248	ND (0.1)		8082A		1	10/10/18 13:36		CJ80912
Aroclor 1254	ND (0.1)		8082A		1	10/10/18 13:36		CJ80912
Aroclor 1260	**0.2** (0.1)		8082A		1	10/10/18 13:36		CJ80912
Aroclor 1262	ND (0.1)		8082A		1	10/10/18 13:36		CJ80912
Aroclor 1268	ND (0.1)		8082A		1	10/10/18 13:36		CJ80912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-01
Date Sampled: 10/01/18 10:15
Percent Solids: 98
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810188
ESS Laboratory Sample ID: 1810188-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/9/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/10/18 13:55		CJ80912
Aroclor 1221	ND (0.1)		8082A		1	10/10/18 13:55		CJ80912
Aroclor 1232	ND (0.1)		8082A		1	10/10/18 13:55		CJ80912
Aroclor 1242	ND (0.1)		8082A		1	10/10/18 13:55		CJ80912
Aroclor 1248	ND (0.1)		8082A		1	10/10/18 13:55		CJ80912
Aroclor 1254	ND (0.1)		8082A		1	10/10/18 13:55		CJ80912
Aroclor 1260	ND (0.1)		8082A		1	10/10/18 13:55		CJ80912
Aroclor 1262	ND (0.1)		8082A		1	10/10/18 13:55		CJ80912
Aroclor 1268	ND (0.1)		8082A		1	10/10/18 13:55		CJ80912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*54 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-02
Date Sampled: 10/01/18 11:55
Percent Solids: 98
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810188
ESS Laboratory Sample ID: 1810188-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/9/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/10/18 14:15		CJ80912
Aroclor 1221	ND (0.1)		8082A		1	10/10/18 14:15		CJ80912
Aroclor 1232	ND (0.1)		8082A		1	10/10/18 14:15		CJ80912
Aroclor 1242	ND (0.1)		8082A		1	10/10/18 14:15		CJ80912
Aroclor 1248	ND (0.1)		8082A		1	10/10/18 14:15		CJ80912
Aroclor 1254	ND (0.1)		8082A		1	10/10/18 14:15		CJ80912
Aroclor 1260	ND (0.1)		8082A		1	10/10/18 14:15		CJ80912
Aroclor 1262	ND (0.1)		8082A		1	10/10/18 14:15		CJ80912
Aroclor 1268	ND (0.1)		8082A		1	10/10/18 14:15		CJ80912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-03
Date Sampled: 10/03/18 10:50
Percent Solids: 99
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810188
ESS Laboratory Sample ID: 1810188-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/9/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/10/18 14:34		CJ80912
Aroclor 1221	ND (0.1)		8082A		1	10/10/18 14:34		CJ80912
Aroclor 1232	ND (0.1)		8082A		1	10/10/18 14:34		CJ80912
Aroclor 1242	ND (0.1)		8082A		1	10/10/18 14:34		CJ80912
Aroclor 1248	ND (0.1)		8082A		1	10/10/18 14:34		CJ80912
Aroclor 1254	ND (0.1)		8082A		1	10/10/18 14:34		CJ80912
Aroclor 1260	ND (0.1)		8082A		1	10/10/18 14:34		CJ80912
Aroclor 1262	ND (0.1)		8082A		1	10/10/18 14:34		CJ80912
Aroclor 1268	ND (0.1)		8082A		1	10/10/18 14:34		CJ80912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-04
Date Sampled: 10/01/18 11:15
Percent Solids: 97
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810188
ESS Laboratory Sample ID: 1810188-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/9/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/10/18 14:53		CJ80912
Aroclor 1221	ND (0.1)		8082A		1	10/10/18 14:53		CJ80912
Aroclor 1232	ND (0.1)		8082A		1	10/10/18 14:53		CJ80912
Aroclor 1242	ND (0.1)		8082A		1	10/10/18 14:53		CJ80912
Aroclor 1248	ND (0.1)		8082A		1	10/10/18 14:53		CJ80912
Aroclor 1254	ND (0.1)		8082A		1	10/10/18 14:53		CJ80912
Aroclor 1260	**0.3** (0.1)		8082A		1	10/10/18 14:53		CJ80912
Aroclor 1262	ND (0.1)		8082A		1	10/10/18 14:53		CJ80912
Aroclor 1268	ND (0.1)		8082A		1	10/10/18 14:53		CJ80912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*57 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-05
Date Sampled: 10/02/18 09:28
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810188
ESS Laboratory Sample ID: 1810188-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/9/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/10/18 15:12		CJ80912
Aroclor 1221	ND (0.1)		8082A		1	10/10/18 15:12		CJ80912
Aroclor 1232	ND (0.1)		8082A		1	10/10/18 15:12		CJ80912
Aroclor 1242	ND (0.1)		8082A		1	10/10/18 15:12		CJ80912
Aroclor 1248	ND (0.1)		8082A		1	10/10/18 15:12		CJ80912
Aroclor 1254 [2C]	**0.3** (0.1)		8082A		1	10/10/18 15:12		CJ80912
Aroclor 1260	**0.2** (0.1)		8082A		1	10/10/18 15:12		CJ80912
Aroclor 1262	ND (0.1)		8082A		1	10/10/18 15:12		CJ80912
Aroclor 1268	ND (0.1)		8082A		1	10/10/18 15:12		CJ80912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*41 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*40 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-06
Date Sampled: 10/02/18 11:53
Percent Solids: 98
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810188
ESS Laboratory Sample ID: 1810188-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/9/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/10/18 15:31		CJ80912
Aroclor 1221	ND (0.1)		8082A		1	10/10/18 15:31		CJ80912
Aroclor 1232	ND (0.1)		8082A		1	10/10/18 15:31		CJ80912
Aroclor 1242	ND (0.1)		8082A		1	10/10/18 15:31		CJ80912
Aroclor 1248	ND (0.1)		8082A		1	10/10/18 15:31		CJ80912
Aroclor 1254	ND (0.1)		8082A		1	10/10/18 15:31		CJ80912
Aroclor 1260	**0.3** (0.1)		8082A		1	10/10/18 15:31		CJ80912
Aroclor 1262	ND (0.1)		8082A		1	10/10/18 15:31		CJ80912
Aroclor 1268	ND (0.1)		8082A		1	10/10/18 15:31		CJ80912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810188

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80912 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0199*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0184*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0180*		mg/kg wet	*0.02500*		*72*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		99	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		102	40-140			
Aroclor 1260	0.6	0.02	mg/kg wet	0.5000		110	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0204*		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	0.5	0.02	mg/kg wet	0.5000		95	40-140	4	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		97	40-140	5	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		106	40-140	4	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		95	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0191*		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]	*0.0198*		mg/kg wet	*0.02500*		*79*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810188

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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810188

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1810188
Date Received: 10/4/2018
Project Due Date: 10/12/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	274622	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	274621	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	274620	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	274619	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	274618	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	274617	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	274616	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

Completed By: Date & Time: 10/4/18 2154
Reviewed By: Date & Time: 10/4/18 2210
Delivered By: 10/4/18 2210

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1810188

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ◉MA MCP ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI

Contact Person	Address		
Mark Zoller	4 First Street		
City	**State**	**Zip Code**	**PO #**
Bridgewater	MA	02324	5675.F
Telephone Number	**FAX Number**	**Email Address**	
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	10/3/2018	1:34 p.m.	Grab	Solid	ICS-05-10	X
2	10/1/18	10:15AM	↓	↓	Dup-01	X
3	10/1/18	11:55AM			Dup-02	X
4	10/3/18	10:50AM			Dup-03	X
5	10/1/18	11:15AM			Dup-04	X
6	10/2/18	9:28AM			Dup-05	X
7	10/2/18	10:53AM	↓	↓	Dup-06	X

Container Type:	AC-Air Cassette	AG-Amber Glass	B-BOD Bottle	C-Cubitainer	G - Glass	O-Other	P-Poly	S-Sterile	V-Vial	AG
Container Volume:	1-100 mL	2-2.5 gal	3-250 mL	4-300 mL	5-500 mL	6-1L	7-VOA	8-2 oz	9-4 oz	10-8 oz	11-Other*	9
Preservation Code:	1-Non Preserved	2-HCl	3-H2SO4	4-HNO3	5-NaOH	6-Methanol	7-Na2S2O3	8-ZnAce, NaOH	9-NH4Cl	10-DI H2O	11-Other*	1
										Number of Containers per Sample:		1

Laboratory Use Only
Cooler Present: ✓
Seals Intact: ____
Cooler Temperature: 1.8 + 3.2 °C ICE RC

Sampled by : NRH/DJD/MJM

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:30p.m.	10/4/18 1330	10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1810180

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 4:16 pm, Oct 12, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810180

SAMPLE RECEIPT

The following samples were received on October 04, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1810180-01	ICS-01-41	Soil	8082A
1810180-02	ICS-01-42	Soil	8082A
1810180-03	ICS-01-43	Soil	8082A
1810180-04	ICS-01-44	Soil	8082A
1810180-05	ICS-02-01	Soil	8082A
1810180-06	ICS-02-02	Soil	8082A
1810180-07	ICS-02-03	Soil	8082A
1810180-08	ICS-02-04	Soil	8082A
1810180-09	ICS-02-05	Soil	8082A
1810180-10	ICS-02-06	Soil	8082A
1810180-11	ICS-02-07	Soil	8082A
1810180-12	ICS-02-08	Soil	8082A
1810180-13	ICS-02-09	Soil	8082A
1810180-14	ICS-02-10	Soil	8082A
1810180-15	ICS-02-11	Soil	8082A
1810180-16	ICS-02-12	Soil	8082A
1810180-17	ICS-02-13	Soil	8082A
1810180-18	ICS-02-14	Soil	8082A
1810180-19	ICS-02-15	Soil	8082A
1810180-20	ICS-03-01	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810180

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810180

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-41
Date Sampled: 10/01/18 12:20
Percent Solids: 99
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 17:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 12:43		CJ81012
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 12:43		CJ81012
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 12:43		CJ81012
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 12:43		CJ81012
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 12:43		CJ81012
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 12:43		CJ81012
Aroclor 1260	ND (0.1)		8082A		1	10/12/18 12:43		CJ81012
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 12:43		CJ81012
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 12:43		CJ81012

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*37 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*36 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*35 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*40 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-42
Date Sampled: 10/01/18 12:25
Percent Solids: 99
Initial Volume: 5.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 12:18		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 12:18		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 12:18		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 12:18		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 12:18		CJ81011
Aroclor 1254 [2C]	**0.1** (0.1)		8082A		1	10/11/18 12:18		CJ81011
Aroclor 1260	ND (0.1)		8082A		1	10/11/18 12:18		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 12:18		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 12:18		CJ81011

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-43
Date Sampled: 10/01/18 12:30
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 12:37		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 12:37		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 12:37		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 12:37		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 12:37		CJ81011
Aroclor 1254 [2C]	ND (0.1)		8082A		1	10/11/18 12:37		CJ81011
Aroclor 1260	ND (0.1)		8082A		1	10/11/18 12:37		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 12:37		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 12:37		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-44
Date Sampled: 10/01/18 12:35
Percent Solids: 100
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 12:56		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 12:56		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 12:56		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 12:56		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 12:56		CJ81011
Aroclor 1254 [2C]	**0.3** (0.1)		8082A		1	10/11/18 12:56		CJ81011
Aroclor 1260	**0.3** (0.1)		8082A		1	10/11/18 12:56		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 12:56		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 12:56		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*39 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*38 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-01
Date Sampled: 10/02/18 09:18
Percent Solids: 100
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 13:15		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 13:15		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 13:15		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 13:15		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 13:15		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 13:15		CJ81011
Aroclor 1260	**0.2** (0.1)		8082A		1	10/11/18 13:15		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 13:15		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 13:15		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-02
Date Sampled: 10/02/18 09:28
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 13:35		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 13:35		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 13:35		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 13:35		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 13:35		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 13:35		CJ81011
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/11/18 13:35		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 13:35		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 13:35		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-03
Date Sampled: 10/02/18 09:40
Percent Solids: 100
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 13:54		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 13:54		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 13:54		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 13:54		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 13:54		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 13:54		CJ81011
Aroclor 1260	ND (0.1)		8082A		1	10/11/18 13:54		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 13:54		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 13:54		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-04
Date Sampled: 10/02/18 09:52
Percent Solids: 98
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 14:13		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 14:13		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 14:13		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 14:13		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 14:13		CJ81011
Aroclor 1254 [2C]	ND (0.1)		8082A		1	10/11/18 14:13		CJ81011
Aroclor 1260	ND (0.1)		8082A		1	10/11/18 14:13		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 14:13		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 14:13		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*57 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*58 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-05
Date Sampled: 10/02/18 10:02
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 14:32		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 14:32		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 14:32		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 14:32		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 14:32		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 14:32		CJ81011
Aroclor 1260	ND (0.1)		8082A		1	10/11/18 14:32		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 14:32		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 14:32		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-06
Date Sampled: 10/02/18 10:22
Percent Solids: 99
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 14:51		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 14:51		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 14:51		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 14:51		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 14:51		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 14:51		CJ81011
Aroclor 1260	**0.5** (0.1)		8082A		1	10/11/18 14:51		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 14:51		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 14:51		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-07
Date Sampled: 10/02/18 10:30
Percent Solids: 99
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 15:11		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 15:11		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 15:11		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 15:11		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 15:11		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 15:11		CJ81011
Aroclor 1260	**0.2** (0.1)		8082A		1	10/11/18 15:11		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 15:11		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 15:11		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-08
Date Sampled: 10/02/18 10:32
Percent Solids: 99
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 15:30		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 15:30		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 15:30		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 15:30		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 15:30		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 15:30		CJ81011
Aroclor 1260	ND (0.1)		8082A		1	10/11/18 15:30		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 15:30		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 15:30		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-09
Date Sampled: 10/02/18 10:28
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 15:49		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 15:49		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 15:49		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 15:49		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 15:49		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 15:49		CJ81011
Aroclor 1260	ND (0.1)		8082A		1	10/11/18 15:49		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 15:49		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 15:49		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-10
Date Sampled: 10/02/18 10:20
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 16:08		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 16:08		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 16:08		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 16:08		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 16:08		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 16:08		CJ81011
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/11/18 16:08		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 16:08		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 16:08		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*56 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-11
Date Sampled: 10/02/18 10:17
Percent Solids: 100
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 16:27		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 16:27		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 16:27		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 16:27		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 16:27		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 16:27		CJ81011
Aroclor 1260	ND (0.1)		8082A		1	10/11/18 16:27		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 16:27		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 16:27		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*60 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-12
Date Sampled: 10/02/18 10:18
Percent Solids: 100
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 16:46		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 16:46		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 16:46		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 16:46		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 16:46		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 16:46		CJ81011
Aroclor 1260	ND (0.1)		8082A		1	10/11/18 16:46		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 16:46		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 16:46		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-13
Date Sampled: 10/02/18 10:06
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 17:06		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 17:06		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 17:06		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 17:06		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 17:06		CJ81011
Aroclor 1254 [2C]	**0.1** (0.1)		8082A		1	10/11/18 17:06		CJ81011
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/11/18 17:06		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 17:06		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 17:06		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-14
Date Sampled: 10/02/18 10:02
Percent Solids: 100
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 19:39		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 19:39		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 19:39		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 19:39		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 19:39		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 19:39		CJ81011
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/11/18 19:39		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 19:39		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 19:39		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-15
Date Sampled: 10/02/18 09:59
Percent Solids: 99
Initial Volume: 5.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 19:58		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 19:58		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 19:58		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 19:58		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 19:58		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 19:58		CJ81011
Aroclor 1260	**0.1** (0.1)		8082A		1	10/11/18 19:58		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 19:58		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 19:58		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-01
Date Sampled: 10/02/18 11:36
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810180
ESS Laboratory Sample ID: 1810180-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/10/18 16:42

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 20:17		CJ81011
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 20:17		CJ81011
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 20:17		CJ81011
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 20:17		CJ81011
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 20:17		CJ81011
Aroclor 1254	ND (0.1)		8082A		1	10/11/18 20:17		CJ81011
Aroclor 1260	**1.5** (0.1)		8082A		1	10/11/18 20:17		CJ81011
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 20:17		CJ81011
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 20:17		CJ81011

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810180

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ81011 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0191*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		98	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		100	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		110	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		98	40-140			
Surrogate: Decachlorobiphenyl	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0190*		mg/kg wet	*0.02500*		*76*	*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*		*85*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		99	40-140	0.7	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		100	40-140	0.7	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		110	40-140	0.08	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		98	40-140	0.2	30	
Surrogate: Decachlorobiphenyl	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0190*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0209*		mg/kg wet	*0.02500*		*83*	*30-150*			
Batch CJ81012 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810180

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ81012 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0259*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0204*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0201*		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	0.5	0.05	mg/kg wet	0.5000		96	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		99	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		95	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		97	40-140			
Surrogate: Decachlorobiphenyl	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0201*		mg/kg wet	*0.02500*		*80*	*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*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		92	40-140	4	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		95	40-140	4	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		94	40-140	2	30	
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		95	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0201*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0214*		mg/kg wet	*0.02500*		*85*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810180

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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810180

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1810180
Date Received: 10/4/2018
Project Due Date: 10/12/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	274564	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	274563	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	274562	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	274561	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	274560	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	274559	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	274558	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	274557	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	274556	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	274555	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	274554	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	274553	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	274552	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	274551	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	274550	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	274549	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	274548	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	274547	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
19	274546	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
20	274545	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? (Yes) / No

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 1810180
Date Received: 10/4/2018

Are all necessary stickers attached? Yes / No

Completed By: _____ Date & Time: 10/4/18 2210

Reviewed By: _____ Date & Time: 10/4/18 2220

Delivered By: _____ 10/4/18 2220

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1810180

Turn Time	5-Day **Rush**
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ○MA MCP ○RGP
Reporting Limits	PCBs <0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name Coneco Engineers and Scientists	**Project #** 5675.F	**Project Name** Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI	
Contact Person Mark Zoller	**Address** 4 First Street		
City Bridgewater	**State** MA	**Zip Code** 02324	**PO #** 5675.F
Telephone Number 508-697-3191	**FAX Number**	**Email Address** jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	10/1/2018	12:20 p.m.	Grab	Solid	ICS-01-41	X
02	10/1/2018	12:25 p.m.	Grab	Solid	ICS-01-42	X
03	10/1/2018	12:30 p.m.	Grab	Solid	ICS-01-43	X
04	10/1/2018	12:35 p.m.	Grab	Solid	ICS-01-44	X
05	10/2/2018	9:18 a.m.	Grab	Solid	ICS-02-01	X
06	10/2/2019	9:28 a.m.	Grab	Solid	ICS-02-02	X
07	10/2/2020	9:40 a.m.	Grab	Solid	ICS-02-03	X
08	10/2/2021	9:52 a.m.	Grab	Solid	ICS-02-04	X
09	10/2/2022	10:02 a.m.	Grab	Solid	ICS-02-05	X
10	10/2/2023	10:22 a.m.	Grab	Solid	ICS-02-06	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓

Seals Intact: ____

Cooler Temperature: 1.8 +3.2 °C ICE RC

Sampled by : ACC/MJM/DCK

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:30 p.m.	10/4/18 1330	10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1810080

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ●~~MA MCP~~ (RC) ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Excel ☑Other (Please Specify →) PDF

Company Name Coneco Engineers and Scientists	**Project #** 5675.F	**Project Name** Pawtucket 1 Control House, 6 Thornton Ave,	
Contact Person Mark Zoller	**Address** 4 First Street		
City Bridgewater	**State** MA	**Zip Code** 02324	**PO #** 5675.F
Telephone Number 508-697-3191	**FAX Number**	**Email Address** jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
11	10/2/2018	10:30 a.m.	Grab	Solid	ICS-02-07	X
12	10/2/2018	10:32 a.m.	Grab	Solid	ICS-02-08	X
13	10/2/2018	10:28 a.m.	Grab	Solid	ICS-02-09	X
14	10/2/2018	10:20 a.m.	Grab	Solid	ICS-02-10	X
15	10/2/2018	10:17 a.m.	Grab	Solid	ICS-02-11	X
16	10/2/2018	10:18a.m.	Grab	Solid	ICS-02-12	X
17	10/2/2018	10:06 a.m.	Grab	Solid	ICS-02-13	X
18	10/2/2018	10:02 a.m.	Grab	Solid	ICS-02-14	X
19	10/2/2018	9:59 a.m.	Grab	Solid	ICS-02-15	X
20	10/2/2018	11:36 a.m.	Grab	Solid	ICS-03-01	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: ✓
Seals Intact:
Cooler Temperature: 1.8 +3.2 °C ICE RC

Sampled by : NRH/DJD/MJM

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:30p.m.	10/4/18 1330	10/4/18 1545	10/4/18 2017
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1810189

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 3:29 pm, Oct 15, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810189

SAMPLE RECEIPT

The following samples were received on October 04, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1810189-01	ICS-03-02	Solid	8082A
1810189-02	ICS-03-03	Solid	8082A
1810189-03	ICS-03-04	Solid	8082A
1810189-04	ICS-03-05	Solid	8082A
1810189-05	ICS-03-06	Solid	8082A
1810189-06	ICS-03-07	Solid	8082A
1810189-07	ICS-03-08	Solid	8082A
1810189-08	ICS-03-09	Solid	8082A
1810189-09	ICS-03-10	Solid	8082A
1810189-10	ICS-03-11	Solid	8082A
1810189-11	ICS-03-12	Solid	8082A
1810189-12	ICS-03-13	Solid	8082A
1810189-13	ICS-03-14	Solid	8082A
1810189-14	ICS-03-15	Solid	8082A
1810189-15	ICS-03-16	Solid	8082A
1810189-16	ICS-03-17	Solid	8082A
1810189-17	ICS-03-18	Solid	8082A
1810189-18	ICS-04-01	Solid	8082A
1810189-19	ICS-04-02	Solid	8082A
1810189-20	ICS-04-03	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810189

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810189

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-02
Date Sampled: 10/02/18 11:31
Percent Solids: 99
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 15:24		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 15:24		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 15:24		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 15:24		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 15:24		CJ81107
Aroclor 1254 [2C]	**1.4** (0.1)		8082A		1	10/12/18 15:24		CJ81107
Aroclor 1260	**1.2** (0.1)		8082A		1	10/12/18 15:24		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 15:24		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 15:24		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-03
Date Sampled: 10/02/18 11:29
Percent Solids: 100
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 15:43		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 15:43		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 15:43		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 15:43		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 15:43		CJ81107
Aroclor 1254 [2C]	**0.7** (0.1)		8082A		1	10/12/18 15:43		CJ81107
Aroclor 1260	**0.9** (0.1)		8082A		1	10/12/18 15:43		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 15:43		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 15:43		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-04
Date Sampled: 10/02/18 11:25
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 16:02		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 16:02		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 16:02		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 16:02		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 16:02		CJ81107
Aroclor 1254	**1.2** (0.1)		8082A		1	10/12/18 16:02		CJ81107
Aroclor 1260	**1.0** (0.1)		8082A		1	10/12/18 16:02		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 16:02		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 16:02		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*64 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-05
Date Sampled: 10/02/18 11:22
Percent Solids: 100
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 16:21		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 16:21		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 16:21		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 16:21		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 16:21		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 16:21		CJ81107
Aroclor 1260	**0.5** (0.1)		8082A		1	10/12/18 16:21		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 16:21		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 16:21		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-06
Date Sampled: 10/02/18 11:31
Percent Solids: 99
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 18:55		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 18:55		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 18:55		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 18:55		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 18:55		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 18:55		CJ81107
Aroclor 1260	**0.7** (0.1)		8082A		1	10/12/18 18:55		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 18:55		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 18:55		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-07
Date Sampled: 10/02/18 11:37
Percent Solids: 100
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 19:14		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 19:14		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 19:14		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 19:14		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 19:14		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 19:14		CJ81107
Aroclor 1260	**0.4** (0.1)		8082A		1	10/12/18 19:14		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 19:14		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 19:14		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-08
Date Sampled: 10/02/18 11:44
Percent Solids: 100
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 19:33		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 19:33		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 19:33		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 19:33		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 19:33		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 19:33		CJ81107
Aroclor 1260	**0.2** (0.1)		8082A		1	10/12/18 19:33		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 19:33		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 19:33		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-09
Date Sampled: 10/02/18 11:52
Percent Solids: 100
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 19:52		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 19:52		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 19:52		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 19:52		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 19:52		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 19:52		CJ81107
Aroclor 1260	**0.2** (0.1)		8082A		1	10/12/18 19:52		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 19:52		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 19:52		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-10
Date Sampled: 10/02/18 11:59
Percent Solids: 100
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 20:11		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 20:11		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 20:11		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 20:11		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 20:11		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 20:11		CJ81107
Aroclor 1260	**0.2** (0.1)		8082A		1	10/12/18 20:11		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 20:11		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 20:11		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-11
Date Sampled: 10/02/18 12:01
Percent Solids: 100
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 20:30		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 20:30		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 20:30		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 20:30		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 20:30		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 20:30		CJ81107
Aroclor 1260	**0.2** (0.1)		8082A		1	10/12/18 20:30		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 20:30		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 20:30		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-12
Date Sampled: 10/02/18 12:07
Percent Solids: 100
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 20:49		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 20:49		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 20:49		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 20:49		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 20:49		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 20:49		CJ81107
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/12/18 20:49		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 20:49		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 20:49		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-13
Date Sampled: 10/02/18 12:03
Percent Solids: 100
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 21:09		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 21:09		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 21:09		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 21:09		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 21:09		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 21:09		CJ81107
Aroclor 1260	**0.2** (0.1)		8082A		1	10/12/18 21:09		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 21:09		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 21:09		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-14
Date Sampled: 10/02/18 12:09
Percent Solids: 100
Initial Volume: 5.12
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 21:28		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 21:28		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 21:28		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 21:28		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 21:28		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 21:28		CJ81107
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/12/18 21:28		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 21:28		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 21:28		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-15
Date Sampled: 10/02/18 11:42
Percent Solids: 100
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-14
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 21:47		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 21:47		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 21:47		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 21:47		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 21:47		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 21:47		CJ81107
Aroclor 1260	**0.3** (0.1)		8082A		1	10/12/18 21:47		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 21:47		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 21:47		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-16
Date Sampled: 10/02/18 11:45
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-15
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 22:06		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 22:06		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 22:06		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 22:06		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 22:06		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 22:06		CJ81107
Aroclor 1260	**0.5** (0.1)		8082A		1	10/12/18 22:06		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 22:06		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 22:06		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*47 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-17
Date Sampled: 10/02/18 11:48
Percent Solids: 100
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-16
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 22:25		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 22:25		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 22:25		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 22:25		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 22:25		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 22:25		CJ81107
Aroclor 1260	**0.1** (0.1)		8082A		1	10/12/18 22:25		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 22:25		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 22:25		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-18
Date Sampled: 10/02/18 11:53
Percent Solids: 98
Initial Volume: 5.12
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-17
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 22:44		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 22:44		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 22:44		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 22:44		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 22:44		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 22:44		CJ81107
Aroclor 1260	**0.3** (0.1)		8082A		1	10/12/18 22:44		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 22:44		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 22:44		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-01
Date Sampled: 10/03/18 11:54
Percent Solids: 100
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-18
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 23:03		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 23:03		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 23:03		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 23:03		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 23:03		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 23:03		CJ81107
Aroclor 1260	**1.0** (0.1)		8082A		1	10/12/18 23:03		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 23:03		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 23:03		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-02
Date Sampled: 10/03/18 11:55
Percent Solids: 100
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-19
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 23:23		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 23:23		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 23:23		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 23:23		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 23:23		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 23:23		CJ81107
Aroclor 1260	**0.1** (0.1)		8082A		1	10/12/18 23:23		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 23:23		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 23:23		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-03
Date Sampled: 10/03/18 11:56
Percent Solids: 99
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810189
ESS Laboratory Sample ID: 1810189-20
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 23:42		CJ81107
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 23:42		CJ81107
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 23:42		CJ81107
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 23:42		CJ81107
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 23:42		CJ81107
Aroclor 1254	ND (0.1)		8082A		1	10/12/18 23:42		CJ81107
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/12/18 23:42		CJ81107
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 23:42		CJ81107
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 23:42		CJ81107

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810189

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ81107 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0194*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0194*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
LCS										
Aroclor 1016	0.6	0.02	mg/kg wet	0.5000		112	40-140			
Aroclor 1016 [2C]	0.6	0.02	mg/kg wet	0.5000		111	40-140			
Aroclor 1260	0.6	0.02	mg/kg wet	0.5000		121	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		108	40-140			
Surrogate: Decachlorobiphenyl	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0214*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0226*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		107	40-140	5	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		109	40-140	1	30	
Aroclor 1260	0.6	0.02	mg/kg wet	0.5000		119	40-140	2	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		106	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*89*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810189

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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810189

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1810189
Date Received: 10/4/2018
Project Due Date: 10/12/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	274642	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	274641	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	274640	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	274639	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	274638	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	274637	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	274636	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	274635	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	274634	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	274633	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	274632	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	274631	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	274630	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	274629	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	274628	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	274627	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	274626	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	274625	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
19	274624	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
20	274623	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? (Yes) / No

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 1810189
Date Received: 10/4/2018

Are all necessary stickers attached? Yes / No

Completed By: _____ Date & Time: 10/4/18 2154

Reviewed By: _____ Date & Time: 10/4/18 2215

Delivered By: _____ 10/4/18 2215

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1810189

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ◉MA MCP ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI
Contact Person	**Address**	
Mark Zoller	4 First Street	
City	**State**	**Zip Code** / **PO #**
Bridgewater	MA	02324 / 5675.F
Telephone Number	**FAX Number**	**Email Address**
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	10/2/2018	11:31 a.m.	Grab	Solid	ICS-03-02	X
02	10/2/2018	11:29 a.m.	Grab	Solid	ICS-03-03	X
03	10/2/2018	11:25 a.m.	Grab	Solid	ICS-03-04	X
04	10/2/2018	11:22 a.m.	Grab	Solid	ICS-03-05	X
05	10/2/2018	11:31 a.m.	Grab	Solid	ICS-03-06	X
06	10/2/2018	11:37 a.m.	Grab	Solid	ICS-03-07	X
07	10/2/2018	11:44 a.m.	Grab	Solid	ICS-03-08	X
08	10/2/2018	11:52 a.m.	Grab	Solid	ICS-03-09	X
09	10/2/2018	11:59 a.m.	Grab	Solid	ICS-03-10	X
10	10/2/2018	12:01 p.m.	Grab	Solid	ICS-03-11	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: ✓
Seals Intact: ____
Cooler Temperature: 1.8+3.2°C ICE RC

Sampled by : NRH/DJD/MJM

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:30 p.m.	10/4/18 1330	10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory

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185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 810189

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?	○CT RCP ◉MA MCP ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Excel ☑Other (Please Specify →)

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave,

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	MA	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
11	10/2/2018	12:07 p.m.	Grab	Solid	ICS-03-12	X
12	10/2/2018	12:03 p.m.	Grab	Solid	ICS-03-13	X
13	10/2/2018	12:09 p.m.	Grab	Solid	ICS-03-14	X
14	10/2/2018	11:42 a.m.	Grab	Solid	ICS-03-15	X
15	10/2/2018	11:45 a.m.	Grab	Solid	ICS-03-16	X
16	10/2/2018	11:48 a.m.	Grab	Solid	ICS-03-17	X
17	10/2/2018	11:53 a.m.	Grab	Solid	ICS-03-18	X
18	10/3/2018	11:54 a.m.	Grab	Solid	ICS-04-01	X
19	10/3/2018	11:55 a.m.	Grab	Solid	ICS-04-02	X
20	10/3/2018	11:56 a.m.	Grab	Solid	ICS-04-03	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: ✓
Seals Intact: ____
Cooler Temperature: 1.8+3.2 °C ICE RC

Sampled by : NRH/DJD/MJM

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:30 p.m.	10/4/18 1330	10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1810190

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 5:56 pm, Oct 16, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810190

SAMPLE RECEIPT

The following samples were received on October 04, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1810190-01	ICS-04-04	Solid	8082A
1810190-02	ICS-04-05	Solid	8082A
1810190-03	ICS-04-06	Solid	8082A
1810190-04	ICS-04-07	Solid	8082A
1810190-05	ICS-04-08	Solid	8082A
1810190-06	ICS-04-09	Solid	8082A
1810190-07	ICS-04-10	Solid	8082A
1810190-08	ICS-04-11	Solid	8082A
1810190-09	ICS-04-12	Solid	8082A
1810190-10	ICS-04-13	Solid	8082A
1810190-11	ICS-04-14	Solid	8082A
1810190-12	ICS-05-01	Solid	8082A
1810190-13	ICS-05-02	Solid	8082A
1810190-14	ICS-05-03	Solid	8082A
1810190-15	ICS-05-04	Solid	8082A
1810190-16	ICS-05-05	Solid	8082A
1810190-17	ICS-05-06	Solid	8082A
1810190-18	ICS-05-07	Solid	8082A
1810190-19	ICS-05-08	Solid	8082A
1810190-20	ICS-05-09	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810190

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810190

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-04
Date Sampled: 10/03/18 10:56
Percent Solids: 100
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/15/18 19:50		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/15/18 19:50		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/15/18 19:50		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/15/18 19:50		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/15/18 19:50		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/15/18 19:50		CJ81208
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/15/18 19:50		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/15/18 19:50		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/15/18 19:50		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*56 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-05
Date Sampled: 10/03/18 10:57
Percent Solids: 100
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/15/18 20:10		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/15/18 20:10		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/15/18 20:10		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/15/18 20:10		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/15/18 20:10		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/15/18 20:10		CJ81208
Aroclor 1260	ND (0.1)		8082A		1	10/15/18 20:10		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/15/18 20:10		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/15/18 20:10		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*62 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-06
Date Sampled: 10/03/18 10:58
Percent Solids: 99
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/15/18 20:29		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/15/18 20:29		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/15/18 20:29		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/15/18 20:29		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/15/18 20:29		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/15/18 20:29		CJ81208
Aroclor 1260	ND (0.1)		8082A		1	10/15/18 20:29		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/15/18 20:29		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/15/18 20:29		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-07
Date Sampled: 10/03/18 10:59
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/15/18 20:48		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/15/18 20:48		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/15/18 20:48		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/15/18 20:48		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/15/18 20:48		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/15/18 20:48		CJ81208
Aroclor 1260	ND (0.1)		8082A		1	10/15/18 20:48		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/15/18 20:48		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/15/18 20:48		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-08
Date Sampled: 10/03/18 11:01
Percent Solids: 100
Initial Volume: 5.12
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/15/18 21:07		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/15/18 21:07		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/15/18 21:07		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/15/18 21:07		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/15/18 21:07		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/15/18 21:07		CJ81208
Aroclor 1260	ND (0.1)		8082A		1	10/15/18 21:07		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/15/18 21:07		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/15/18 21:07		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-09
Date Sampled: 10/03/18 11:02
Percent Solids: 100
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/15/18 21:26		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/15/18 21:26		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/15/18 21:26		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/15/18 21:26		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/15/18 21:26		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/15/18 21:26		CJ81208
Aroclor 1260	ND (0.1)		8082A		1	10/15/18 21:26		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/15/18 21:26		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/15/18 21:26		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-10
Date Sampled: 10/03/18 11:21
Percent Solids: 99
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/15/18 21:45		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/15/18 21:45		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/15/18 21:45		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/15/18 21:45		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/15/18 21:45		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/15/18 21:45		CJ81208
Aroclor 1260	ND (0.1)		8082A		1	10/15/18 21:45		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/15/18 21:45		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/15/18 21:45		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*91 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-11
Date Sampled: 10/03/18 11:22
Percent Solids: 100
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/15/18 22:05		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/15/18 22:05		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/15/18 22:05		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/15/18 22:05		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/15/18 22:05		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/15/18 22:05		CJ81208
Aroclor 1260	ND (0.1)		8082A		1	10/15/18 22:05		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/15/18 22:05		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/15/18 22:05		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-12
Date Sampled: 10/03/18 11:10
Percent Solids: 100
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/15/18 22:24		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/15/18 22:24		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/15/18 22:24		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/15/18 22:24		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/15/18 22:24		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/15/18 22:24		CJ81208
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/15/18 22:24		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/15/18 22:24		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/15/18 22:24		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-13
Date Sampled: 10/03/18 10:55
Percent Solids: 100
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/15/18 22:43		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/15/18 22:43		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/15/18 22:43		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/15/18 22:43		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/15/18 22:43		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/15/18 22:43		CJ81208
Aroclor 1260	ND (0.1)		8082A		1	10/15/18 22:43		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/15/18 22:43		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/15/18 22:43		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-14
Date Sampled: 10/03/18 10:50
Percent Solids: 100
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/15/18 23:02		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/15/18 23:02		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/15/18 23:02		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/15/18 23:02		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/15/18 23:02		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/15/18 23:02		CJ81208
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/15/18 23:02		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/15/18 23:02		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/15/18 23:02		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-05-01
Date Sampled: 10/03/18 13:09
Percent Solids: 100
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/15/18 23:21		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/15/18 23:21		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/15/18 23:21		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/15/18 23:21		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/15/18 23:21		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/15/18 23:21		CJ81208
Aroclor 1260 [2C]	**0.1** (0.1)		8082A		1	10/15/18 23:21		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/15/18 23:21		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/15/18 23:21		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-05-02
Date Sampled: 10/03/18 13:15
Percent Solids: 100
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/15/18 23:40		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/15/18 23:40		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/15/18 23:40		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/15/18 23:40		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/15/18 23:40		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/15/18 23:40		CJ81208
Aroclor 1260	**0.4** (0.1)		8082A		1	10/15/18 23:40		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/15/18 23:40		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/15/18 23:40		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-05-03
Date Sampled: 10/03/18 13:16
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-14
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/16/18 0:00		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/16/18 0:00		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/16/18 0:00		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/16/18 0:00		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/16/18 0:00		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/16/18 0:00		CJ81208
Aroclor 1260	**0.5** (0.1)		8082A		1	10/16/18 0:00		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/16/18 0:00		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/16/18 0:00		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-05-04
Date Sampled: 10/03/18 13:17
Percent Solids: 100
Initial Volume: 5.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-15
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/16/18 0:19		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/16/18 0:19		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/16/18 0:19		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/16/18 0:19		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/16/18 0:19		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/16/18 0:19		CJ81208
Aroclor 1260	ND (0.1)		8082A		1	10/16/18 0:19		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/16/18 0:19		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/16/18 0:19		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-05-05
Date Sampled: 10/03/18 13:18
Percent Solids: 100
Initial Volume: 5.12
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-16
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/16/18 0:38		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/16/18 0:38		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/16/18 0:38		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/16/18 0:38		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/16/18 0:38		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/16/18 0:38		CJ81208
Aroclor 1260	**0.2** (0.1)		8082A		1	10/16/18 0:38		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/16/18 0:38		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/16/18 0:38		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-05-06
Date Sampled: 10/03/18 13:29
Percent Solids: 100
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-17
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/16/18 0:57		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/16/18 0:57		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/16/18 0:57		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/16/18 0:57		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/16/18 0:57		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/16/18 0:57		CJ81208
Aroclor 1260 [2C]	ND (0.1)		8082A		1	10/16/18 0:57		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/16/18 0:57		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/16/18 0:57		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-05-07
Date Sampled: 10/03/18 13:32
Percent Solids: 100
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-18
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/16/18 1:16		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/16/18 1:16		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/16/18 1:16		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/16/18 1:16		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/16/18 1:16		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/16/18 1:16		CJ81208
Aroclor 1260 [2C]	**0.3** (0.1)		8082A		1	10/16/18 1:16		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/16/18 1:16		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/16/18 1:16		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-05-08
Date Sampled: 10/03/18 13:44
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-19
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/16/18 3:49		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/16/18 3:49		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/16/18 3:49		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/16/18 3:49		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/16/18 3:49		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/16/18 3:49		CJ81208
Aroclor 1260	**0.3** (0.1)		8082A		1	10/16/18 3:49		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/16/18 3:49		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/16/18 3:49		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-05-09
Date Sampled: 10/03/18 13:31
Percent Solids: 100
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810190
ESS Laboratory Sample ID: 1810190-20
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 10/12/18 18:37

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/16/18 4:08		CJ81208
Aroclor 1221	ND (0.1)		8082A		1	10/16/18 4:08		CJ81208
Aroclor 1232	ND (0.1)		8082A		1	10/16/18 4:08		CJ81208
Aroclor 1242	ND (0.1)		8082A		1	10/16/18 4:08		CJ81208
Aroclor 1248	ND (0.1)		8082A		1	10/16/18 4:08		CJ81208
Aroclor 1254	ND (0.1)		8082A		1	10/16/18 4:08		CJ81208
Aroclor 1260	**0.3** (0.1)		8082A		1	10/16/18 4:08		CJ81208
Aroclor 1262	ND (0.1)		8082A		1	10/16/18 4:08		CJ81208
Aroclor 1268	ND (0.1)		8082A		1	10/16/18 4:08		CJ81208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810190

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ81208 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0201*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0169*		mg/kg wet	*0.02500*		*68*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0185*		mg/kg wet	*0.02500*		*74*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		88	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		84	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		98	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Surrogate: Decachlorobiphenyl	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0175*		mg/kg wet	*0.02500*		*70*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0180*		mg/kg wet	*0.02500*		*72*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		83	40-140	6	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		80	40-140	5	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		92	40-140	6	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0204*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0164*		mg/kg wet	*0.02500*		*66*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0170*		mg/kg wet	*0.02500*		*68*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810190

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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810190

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1810190
Date Received: 10/4/2018
Project Due Date: 10/12/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No (NA)
10. Were any analyses received outside of hold time? Yes (No)

11. Any Subcontracting needed? Yes (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	274662	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	274661	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	274660	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	274659	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	274658	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	274657	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	274656	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	274655	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	274654	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	274653	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	274652	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	274651	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	274650	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	274649	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	274648	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	274647	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	274646	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	274645	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
19	274644	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
20	274643	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? (Yes) No

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 1810190

Date Received: 10/4/2018

Are all necessary stickers attached? Yes / No

Completed By: _____ Date & Time: 10/4/18 2209

Reviewed By: _____ Date & Time: 10/4/18 2213

Delivered By: _____ 10/4/18 2213

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1810190

Turn Time 5-Day **Rush**

Regulatory State Rhode Island

Is this project for any of the following?: ○CT RCP ◉MA MCP ○RGP

Reporting Limits PCBs < 0.5 mg/kg

Electonic Deliverables ☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	MA	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	10/3/2018	10:56 a.m.	Grab	Solid	ICS-04-04	X
02	10/3/2018	10:57 a.m.	Grab	Solid	ICS-04-05	X
03	10/3/2018	10:58 a.m.	Grab	Solid	ICS-04-06	X
04	10/3/2018	10:59 a.m.	Grab	Solid	ICS-04-07	X
05	10/3/2018	11:01 a.m.	Grab	Solid	ICS-04-08	X
06	10/3/2018	11:02 a.m.	Grab	Solid	ICS-04-09	X
07	10/3/2018	11:21 a.m.	Grab	Solid	ICS-04-10	X
08	10/3/2018	~~11:21 a.m.~~ 11:22 a.m. DJD	Grab	Solid	ICS-04-11	X
09	10/3/2018	11:10 a.m.	Grab	Solid	ICS-04-12	X
10	10/3/2018	10:55 a.m.	Grab	Solid	ICS-04-13	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓

Seals Intact: ____

Cooler Temperature: 1.8+3.2°C ICE RC

Sampled by : NRH/DJD/MJM

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:30pm	10/4/18 1330	10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab #	1810190
Turn Time	5-Day **Rush**
Regulatory State	Rhode Island
Reporting Limits	PCBs < 0.5 mg/kg
Is this project for any of the following?:	○CT RCP ◉MA-MCP ○RGP
Electonic Deliverables	☐Limit Checker ☐Excel ☑Other (Please Specify →) PDF

Company Name	**Project #**	**Project Name**	
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave,	
Contact Person	**Address**		
Mark Zoller	4 First Street		
City	**State**	**Zip Code**	**PO #**
Bridgewater	MA	02324	5675.F
Telephone Number	**FAX Number**	**Email Address**	
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
11	10/3/2018	10:50 a.m.	Grab	Solid	ICS-04-14	X
12	10/3/2018	1:09 pm.	Grab	Solid	ICS-05-01	X
13	10/3/2018	1:15 p.m.	Grab	Solid	ICS-05-02	X
14	10/3/2018	1:16 p.m.	Grab	Solid	ICS-05-03	X
15	10/3/2018	1:17 a.m.	Grab	Solid	ICS-05-04	X
16	10/3/2018	1:18 p.m.	Grab	Solid	ICS-05-05	X
17	10/3/2018	1:29 p.m.	Grab	Solid	ICS-05-06	X
18	10/3/2018	1:32 p.m.	Grab	Solid	ICS-05-07	X
19	10/3/2018	1:44 p.m.	Grab	Solid	ICS-05-08	X
20	10/3/2018	1:31 p.m.	Grab	Solid	ICS-05-09	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: ✓
Seals Intact: ____
Cooler Temperature: 1.8+3.2 °C ICE RC

Sampled by : NRH/DJD/MJM

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:30 p.m.	10/4/18 1330	10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1811012

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 12:39 pm, Nov 08, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811012

SAMPLE RECEIPT

The following samples were received on November 01, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1811012-01	ICS-01-52	Solid	8082A
1811012-02	DUP-07	Solid	8082A
1811012-03	ICS-01-53	Solid	8082A
1811012-04	ICS-01-54	Solid	8082A
1811012-05	ICS-01-55	Solid	8082A
1811012-06	ICS-01-56	Solid	8082A
1811012-07	ICS-01-57	Solid	8082A
1811012-08	ICS-01-58	Solid	8082A
1811012-09	ICS-01-59	Solid	8082A
1811012-10	ICS-03-19	Solid	8082A
1811012-11	ICS-03-20	Solid	8082A
1811012-12	ICS-03-21	Solid	8082A
1811012-13	ICS-04-15	Solid	8082A
1811012-14	ICS-04-16	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811012

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1811012-01	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1260
1811012-01	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1260
1811012-08	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1260
1811012-08	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1260

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811012

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-52
Date Sampled: 10/31/18 11:00
Percent Solids: 100
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 1:19		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 1:19		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 1:19		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 1:19		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 1:19		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 1:19		CK80208
Aroclor 1260	**LC, P 0.1** (0.1)		8082A		1	11/06/18 1:19		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 1:19		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 1:19		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*106 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-07
Date Sampled: 10/31/18 11:00
Percent Solids: 100
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 1:39		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 1:39		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 1:39		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 1:39		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 1:39		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 1:39		CK80208
Aroclor 1260 [2C]	**0.1** (0.1)		8082A		1	11/06/18 1:39		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 1:39		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 1:39		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*112 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-53
Date Sampled: 10/31/18 10:23
Percent Solids: 99
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 1:58		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 1:58		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 1:58		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 1:58		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 1:58		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 1:58		CK80208
Aroclor 1260	**0.2** (0.1)		8082A		1	11/06/18 1:58		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 1:58		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 1:58		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*63 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-54
Date Sampled: 10/31/18 10:40
Percent Solids: 99
Initial Volume: 5.15
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 2:17		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 2:17		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 2:17		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 2:17		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 2:17		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 2:17		CK80208
Aroclor 1260 [2C]	**0.2** (0.1)		8082A		1	11/06/18 2:17		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 2:17		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 2:17		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*56 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-55
Date Sampled: 10/31/18 11:32
Percent Solids: 100
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 2:36		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 2:36		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 2:36		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 2:36		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 2:36		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 2:36		CK80208
Aroclor 1260	**0.2** (0.1)		8082A		1	11/06/18 2:36		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 2:36		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 2:36		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-56
Date Sampled: 10/31/18 11:30
Percent Solids: 100
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 2:56		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 2:56		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 2:56		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 2:56		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 2:56		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 2:56		CK80208
Aroclor 1260 [2C]	**0.2** (0.1)		8082A		1	11/06/18 2:56		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 2:56		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 2:56		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-57
Date Sampled: 10/31/18 13:26
Percent Solids: 99
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 3:15		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 3:15		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 3:15		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 3:15		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 3:15		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 3:15		CK80208
Aroclor 1260 [2C]	**0.5** (0.1)		8082A		1	11/06/18 3:15		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 3:15		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 3:15		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-58
Date Sampled: 10/31/18 13:15
Percent Solids: 98
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 3:34		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 3:34		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 3:34		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 3:34		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 3:34		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 3:34		CK80208
Aroclor 1260	**LC, P 0.2** (0.1)		8082A		1	11/06/18 3:34		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 3:34		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 3:34		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*100 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-59
Date Sampled: 10/31/18 13:03
Percent Solids: 98
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 3:54		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 3:54		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 3:54		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 3:54		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 3:54		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 3:54		CK80208
Aroclor 1260 [2C]	**0.2** (0.1)		8082A		1	11/06/18 3:54		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 3:54		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 3:54		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*36 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*33 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-19
Date Sampled: 10/30/18 10:35
Percent Solids: 100
Initial Volume: 5.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 6:08		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 6:08		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 6:08		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 6:08		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 6:08		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 6:08		CK80208
Aroclor 1260 [2C]	**15.7** (1.0)		8082A		10	11/06/18 10:31		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 6:08		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 6:08		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*102 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-20
Date Sampled: 10/30/18 10:55
Percent Solids: 100
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 6:28		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 6:28		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 6:28		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 6:28		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 6:28		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 6:28		CK80208
Aroclor 1260 [2C]	**6.4** (0.5)		8082A		5	11/06/18 10:50		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 6:28		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 6:28		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-21
Date Sampled: 10/30/18 11:20
Percent Solids: 100
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 6:47		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 6:47		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 6:47		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 6:47		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 6:47		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 6:47		CK80208
Aroclor 1260 [2C]	**7.5** (0.5)		8082A		5	11/06/18 11:09		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 6:47		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 6:47		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-15
Date Sampled: 10/30/18 11:45
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 7:06		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 7:06		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 7:06		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 7:06		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 7:06		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 7:06		CK80208
Aroclor 1260 [2C]	**0.8** (0.1)		8082A		1	11/06/18 7:06		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 7:06		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 7:06		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-16
Date Sampled: 10/30/18 12:15
Percent Solids: 99
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811012
ESS Laboratory Sample ID: 1811012-14
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 16:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 7:26		CK80208
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 7:26		CK80208
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 7:26		CK80208
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 7:26		CK80208
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 7:26		CK80208
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 7:26		CK80208
Aroclor 1260 [2C]	**1.5** (0.1)		8082A		1	11/06/18 7:26		CK80208
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 7:26		CK80208
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 7:26		CK80208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*100 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811012

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CK80208 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0180*		mg/kg wet	*0.02500*		*72*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		102	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		99	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		99	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		96	40-140			
Surrogate: Decachlorobiphenyl	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0191*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		108	40-140	5	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		105	40-140	6	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		105	40-140	5	30	
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		101	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0266*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811012

Notes and Definitions

U	Analyte included in the analysis, but not detected
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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811012

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1811012
Date Received: 11/1/2018
Project Due Date: 11/8/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 2.6 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	285274	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	285273	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	285272	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	285271	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	285270	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	285269	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	285268	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	285267	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	285266	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	285265	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	285264	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	285263	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	285262	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	285261	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

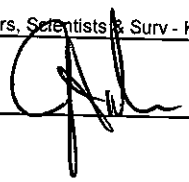
Completed By: Date & Time: 11/1/18 1818
Reviewed By: Date & Time: 11/1/18 1830

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 1811012

Date Received: 11/1/2018

Delivered By:  11/1/18 1830

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 181012

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ◉MA MCP ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name: Coneco Engineers and Scientists	Project #: 5675.F	Project Name: Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI	
Contact Person: Mark Zoller		Address: 4 First Street	
City: Bridgewater	State: MA	Zip Code: 02324	PO #: 5675.F
Telephone Number: 508-697-3191	FAX Number	Email Address: jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
1	10/31/18	11:00 AM	Grab	Concrete	ICS-01-52	X
2	10/31/18	11:00 AM	Grab	Concrete	Dup-07	X
3	10/31/18	10:23 AM	Grab	Concrete	ICS-01-53	X
4	10/31/18	10:40 AM	Grab	Concrete	ICS-01-54	X
5	10/31/18	11:32 AM	Grab	Concrete	ICS-01-55	X
6	10/31/18	11:50 AM	Grab	Concrete	ICS-01-56	X
7	10/31/18	1:26 PM	Grab	Concrete	ICS-01-57	X
8	10/31/18	1:15 PM	Grab	Concrete	ICS-01-58	X
9	10/31/18	1:05 PM	Grab	Concrete	ICS-01-59	X

Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*	1
	Number of Containers per Sample:	1

Laboratory Use Only

Cooler Present: ✓

Seals Intact:

Cooler Temperature: 2.6 °C ICE RC

Sampled by : MJM/WRA

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
	R. Carlson 11/1/18 1255	R. Carlson 11/1/18 1555	11/1/18 1757
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 181012

Turn Time: 5-Day Rush

Regulatory State: Rhode Island

Reporting Limits: PCBs < 0.5 mg/kg

Is this project for any of the following?: ○CT RCP ◉MA MCP ○RGP

Electonic Deliverables: ☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	MA	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		jaevazalis, mzoller, kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
10	10/30/18	10:35AM	Grab	Concrete	ICS-03-19	X
11	10/30/18	10:55AM	Grab	Concrete	ICS-03-20	X
12	10/30/18	11:20AM	Grab	Concrete	ICS-03-21	X
13	10/30/18	11:45AM	Grab	Concrete	ICS-04-15	X
14	10/30/18	12:15PM	Grab	Concrete	ICS-04-16	X
	〃		Grab	Concrete	Dup-07	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓

Seals Intact: ____

Cooler Temperature: 2.6 °C ICE RC

Sampled by : MJM/WRA

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
[signature]	[signature] 11/1/18 1255	[signature] 11/1/18 1555	[signature] 11/1/18 1757
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1811013

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, Nov 08, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811013

SAMPLE RECEIPT

The following samples were received on November 01, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1811013-01	ICS-01	Solid	8082A
1811013-02	ICS-02	Solid	8082A
1811013-03	ICS-03	Solid	8082A
1811013-04	ICS-01-45	Solid	8082A
1811013-05	ICS-01-46	Solid	8082A
1811013-06	ICS-01-47	Solid	8082A
1811013-07	ICS-01-48	Solid	8082A
1811013-08	ICS-01-49	Solid	8082A
1811013-09	ICS-01-50	Solid	8082A
1811013-10	ICS-01-51	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811013

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811013

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01
Date Sampled: 10/30/18 09:40
Percent Solids: 98
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811013
ESS Laboratory Sample ID: 1811013-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 17:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/05/18 15:19		CK80210
Aroclor 1221	ND (0.2)		8082A		1	11/05/18 15:19		CK80210
Aroclor 1232	ND (0.2)		8082A		1	11/05/18 15:19		CK80210
Aroclor 1242	ND (0.2)		8082A		1	11/05/18 15:19		CK80210
Aroclor 1248	ND (0.2)		8082A		1	11/05/18 15:19		CK80210
Aroclor 1254	ND (0.2)		8082A		1	11/05/18 15:19		CK80210
Aroclor 1260	ND (0.2)		8082A		1	11/05/18 15:19		CK80210
Aroclor 1262	ND (0.2)		8082A		1	11/05/18 15:19		CK80210
Aroclor 1268	ND (0.2)		8082A		1	11/05/18 15:19		CK80210

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*61 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*48 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02
Date Sampled: 10/30/18 10:00
Percent Solids: 98
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811013
ESS Laboratory Sample ID: 1811013-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 17:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/05/18 17:17		CK80210
Aroclor 1221	ND (0.2)		8082A		1	11/05/18 17:17		CK80210
Aroclor 1232	ND (0.2)		8082A		1	11/05/18 17:17		CK80210
Aroclor 1242	ND (0.2)		8082A		1	11/05/18 17:17		CK80210
Aroclor 1248	ND (0.2)		8082A		1	11/05/18 17:17		CK80210
Aroclor 1254	ND (0.2)		8082A		1	11/05/18 17:17		CK80210
Aroclor 1260	ND (0.2)		8082A		1	11/05/18 17:17		CK80210
Aroclor 1262	ND (0.2)		8082A		1	11/05/18 17:17		CK80210
Aroclor 1268	ND (0.2)		8082A		1	11/05/18 17:17		CK80210

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*73 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03
Date Sampled: 10/31/18 14:30
Percent Solids: 94
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811013
ESS Laboratory Sample ID: 1811013-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 17:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/05/18 17:36		CK80210
Aroclor 1221	ND (0.2)		8082A		1	11/05/18 17:36		CK80210
Aroclor 1232	ND (0.2)		8082A		1	11/05/18 17:36		CK80210
Aroclor 1242	ND (0.2)		8082A		1	11/05/18 17:36		CK80210
Aroclor 1248	ND (0.2)		8082A		1	11/05/18 17:36		CK80210
Aroclor 1254	ND (0.2)		8082A		1	11/05/18 17:36		CK80210
Aroclor 1260 [2C]	**0.8** (0.2)		8082A		1	11/05/18 17:36		CK80210
Aroclor 1262	ND (0.2)		8082A		1	11/05/18 17:36		CK80210
Aroclor 1268	ND (0.2)		8082A		1	11/05/18 17:36		CK80210

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-45
Date Sampled: 10/30/18 13:57
Percent Solids: 99
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811013
ESS Laboratory Sample ID: 1811013-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 17:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/05/18 17:56		CK80210
Aroclor 1221	ND (0.2)		8082A		1	11/05/18 17:56		CK80210
Aroclor 1232	ND (0.2)		8082A		1	11/05/18 17:56		CK80210
Aroclor 1242	ND (0.2)		8082A		1	11/05/18 17:56		CK80210
Aroclor 1248	ND (0.2)		8082A		1	11/05/18 17:56		CK80210
Aroclor 1254	ND (0.2)		8082A		1	11/05/18 17:56		CK80210
Aroclor 1260	ND (0.2)		8082A		1	11/05/18 17:56		CK80210
Aroclor 1262	ND (0.2)		8082A		1	11/05/18 17:56		CK80210
Aroclor 1268	ND (0.2)		8082A		1	11/05/18 17:56		CK80210

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-46
Date Sampled: 10/31/18 08:40
Percent Solids: 99
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811013
ESS Laboratory Sample ID: 1811013-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 17:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/05/18 18:15		CK80210
Aroclor 1221	ND (0.2)		8082A		1	11/05/18 18:15		CK80210
Aroclor 1232	ND (0.2)		8082A		1	11/05/18 18:15		CK80210
Aroclor 1242	ND (0.2)		8082A		1	11/05/18 18:15		CK80210
Aroclor 1248	ND (0.2)		8082A		1	11/05/18 18:15		CK80210
Aroclor 1254 [2C]	**0.3** (0.2)		8082A		1	11/05/18 18:15		CK80210
Aroclor 1260 [2C]	**0.3** (0.2)		8082A		1	11/05/18 18:15		CK80210
Aroclor 1262	ND (0.2)		8082A		1	11/05/18 18:15		CK80210
Aroclor 1268	ND (0.2)		8082A		1	11/05/18 18:15		CK80210

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-47
Date Sampled: 10/31/18 08:45
Percent Solids: 99
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811013
ESS Laboratory Sample ID: 1811013-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 17:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/05/18 18:34		CK80210
Aroclor 1221	ND (0.2)		8082A		1	11/05/18 18:34		CK80210
Aroclor 1232	ND (0.2)		8082A		1	11/05/18 18:34		CK80210
Aroclor 1242	ND (0.2)		8082A		1	11/05/18 18:34		CK80210
Aroclor 1248	ND (0.2)		8082A		1	11/05/18 18:34		CK80210
Aroclor 1254 [2C]	**0.4** (0.2)		8082A		1	11/05/18 18:34		CK80210
Aroclor 1260 [2C]	**0.4** (0.2)		8082A		1	11/05/18 18:34		CK80210
Aroclor 1262	ND (0.2)		8082A		1	11/05/18 18:34		CK80210
Aroclor 1268	ND (0.2)		8082A		1	11/05/18 18:34		CK80210

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-48
Date Sampled: 10/31/18 09:00
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811013
ESS Laboratory Sample ID: 1811013-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 17:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/05/18 18:54		CK80210
Aroclor 1221	ND (0.2)		8082A		1	11/05/18 18:54		CK80210
Aroclor 1232	ND (0.2)		8082A		1	11/05/18 18:54		CK80210
Aroclor 1242	ND (0.2)		8082A		1	11/05/18 18:54		CK80210
Aroclor 1248	ND (0.2)		8082A		1	11/05/18 18:54		CK80210
Aroclor 1254 [2C]	**0.4** (0.2)		8082A		1	11/05/18 18:54		CK80210
Aroclor 1260 [2C]	**0.4** (0.2)		8082A		1	11/05/18 18:54		CK80210
Aroclor 1262	ND (0.2)		8082A		1	11/05/18 18:54		CK80210
Aroclor 1268	ND (0.2)		8082A		1	11/05/18 18:54		CK80210

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-49
Date Sampled: 10/31/18 09:50
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811013
ESS Laboratory Sample ID: 1811013-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 17:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/05/18 19:13		CK80210
Aroclor 1221	ND (0.2)		8082A		1	11/05/18 19:13		CK80210
Aroclor 1232	ND (0.2)		8082A		1	11/05/18 19:13		CK80210
Aroclor 1242	ND (0.2)		8082A		1	11/05/18 19:13		CK80210
Aroclor 1248	ND (0.2)		8082A		1	11/05/18 19:13		CK80210
Aroclor 1254 [2C]	**0.6** (0.2)		8082A		1	11/05/18 19:13		CK80210
Aroclor 1260	ND (0.2)		8082A		1	11/05/18 19:13		CK80210
Aroclor 1262	ND (0.2)		8082A		1	11/05/18 19:13		CK80210
Aroclor 1268	ND (0.2)		8082A		1	11/05/18 19:13		CK80210

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-50
Date Sampled: 10/31/18 09:30
Percent Solids: 98
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811013
ESS Laboratory Sample ID: 1811013-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 17:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/05/18 19:32		CK80210
Aroclor 1221	ND (0.2)		8082A		1	11/05/18 19:32		CK80210
Aroclor 1232	ND (0.2)		8082A		1	11/05/18 19:32		CK80210
Aroclor 1242	ND (0.2)		8082A		1	11/05/18 19:32		CK80210
Aroclor 1248	ND (0.2)		8082A		1	11/05/18 19:32		CK80210
Aroclor 1254	ND (0.2)		8082A		1	11/05/18 19:32		CK80210
Aroclor 1260	ND (0.2)		8082A		1	11/05/18 19:32		CK80210
Aroclor 1262	ND (0.2)		8082A		1	11/05/18 19:32		CK80210
Aroclor 1268	ND (0.2)		8082A		1	11/05/18 19:32		CK80210

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-51
Date Sampled: 10/31/18 09:15
Percent Solids: 99
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811013
ESS Laboratory Sample ID: 1811013-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/2/18 17:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/05/18 21:47		CK80210
Aroclor 1221	ND (0.2)		8082A		1	11/05/18 21:47		CK80210
Aroclor 1232	ND (0.2)		8082A		1	11/05/18 21:47		CK80210
Aroclor 1242	ND (0.2)		8082A		1	11/05/18 21:47		CK80210
Aroclor 1248	ND (0.2)		8082A		1	11/05/18 21:47		CK80210
Aroclor 1254	ND (0.2)		8082A		1	11/05/18 21:47		CK80210
Aroclor 1260	ND (0.2)		8082A		1	11/05/18 21:47		CK80210
Aroclor 1262	ND (0.2)		8082A		1	11/05/18 21:47		CK80210
Aroclor 1268	ND (0.2)		8082A		1	11/05/18 21:47		CK80210

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*64 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811013

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CK80210 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0161*		mg/kg wet	*0.02500*		*64*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0197*		mg/kg wet	*0.02500*		*79*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		99	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		93	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		97	40-140			
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		88	40-140			
Surrogate: Decachlorobiphenyl	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0182*		mg/kg wet	*0.02500*		*73*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		104	40-140	5	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		99	40-140	6	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		102	40-140	5	30	
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		95	40-140	7	30	
Surrogate: Decachlorobiphenyl	*0.0261*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0191*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811013

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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811013

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1811013
Date Received: 11/1/2018
Project Due Date: 11/8/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 2.6 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	285288	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	285287	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	285286	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	285285	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	285284	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	285283	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	285282	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	285281	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	285280	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	285279	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? (Yes) / No
Are all necessary stickers attached? (Yes) / No

Completed By: Date & Time: 11/1/18 1819
Reviewed By: Date & Time: 11/1/18 1840
Delivered By: 11/4/18 1840

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1811013

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ◉MA MCP ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name: Coneco Engineers and Scientists	Project #: 5675.F	Project Name: Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI	
Contact Person: Mark Zoller		Address: 4 First Street	
City: Bridgewater	State: MA	Zip Code: 02324	PO #: 5675.F
Telephone Number: 508-697-3191	FAX Number:	Email Address: jaevazalis, mzoller.kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
~~1~~ WRA	10/30/18	9:40AM	Grab	Concrete	ICS-01	X
2	10/30/18	10:00AM	Grab	Concrete	ICS-02	X
3	10/30/18	2:30PM	Grab	Concrete	ICS-03	X
4	10/30/18	1:57PM	Grab	Concrete	ICS-01-45	X
5	10/31/18	8:40AM	Grab	Concrete	ICS-01-46	X
6	10/31/18	8:45AM	Grab	Concrete	ICS-01-47	X
7	10/31/18	9:00AM	Grab	Concrete	ICS-01-48	X
8	10/31/18	9:50AM	Grab	Concrete	ICS-01-49	X
9	10/31/18	9:30AM	Grab	Concrete	ICS-01-50	X
10	10/31/18	9:15AM	Grab	Concrete	ICS-01-51	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓

Seals Intact: —

Cooler Temperature: 2.6 °C ICE RC

Sampled by : MJM/WRA

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
[signature]	[signature] 11/1/18 1255	[signature] 11/1/18 1555	[signature] 11/1/18 1757
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1903020

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 3:32 pm, Mar 08, 2019

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903020

SAMPLE RECEIPT

The following samples were received on March 01, 2019 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1903020-01	ICS-03-22	Solid	8082A
1903020-02	ICS-03-23	Solid	8082A
1903020-03	ICS-03-24	Solid	8082A
1903020-04	ICS-03-25	Solid	8082A
1903020-05	ICS-03-26	Solid	8082A
1903020-06	ICS-03-27	Solid	8082A
1903020-07	ICS-03-28	Solid	8082A
1903020-08	ICS-03-29	Solid	8082A
1903020-09	ICS-03-30	Solid	8082A
1903020-10	ICS-03-31	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903020

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903020

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
MADEP 04-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-22
Date Sampled: 02/28/19 09:30
Percent Solids: 99
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903020
ESS Laboratory Sample ID: 1903020-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/06/19 19:04	C9C0096	CC90407
Aroclor 1221	ND (0.1)		8082A		1	03/06/19 19:04	C9C0096	CC90407
Aroclor 1232	ND (0.1)		8082A		1	03/06/19 19:04	C9C0096	CC90407
Aroclor 1242	ND (0.1)		8082A		1	03/06/19 19:04	C9C0096	CC90407
Aroclor 1248	ND (0.1)		8082A		1	03/06/19 19:04	C9C0096	CC90407
Aroclor 1254	ND (0.1)		8082A		1	03/06/19 19:04	C9C0096	CC90407
Aroclor 1260	**0.8** (0.1)		8082A		1	03/06/19 19:04	C9C0096	CC90407
Aroclor 1262	ND (0.1)		8082A		1	03/06/19 19:04	C9C0096	CC90407
Aroclor 1268	ND (0.1)		8082A		1	03/06/19 19:04	C9C0096	CC90407

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*102 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-23
Date Sampled: 02/28/19 09:35
Percent Solids: 99
Initial Volume: 5.61
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903020
ESS Laboratory Sample ID: 1903020-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	03/06/19 19:23	C9C0096	CC90407
Aroclor 1221	ND (0.09)		8082A		1	03/06/19 19:23	C9C0096	CC90407
Aroclor 1232	ND (0.09)		8082A		1	03/06/19 19:23	C9C0096	CC90407
Aroclor 1242	ND (0.09)		8082A		1	03/06/19 19:23	C9C0096	CC90407
Aroclor 1248	ND (0.09)		8082A		1	03/06/19 19:23	C9C0096	CC90407
Aroclor 1254	ND (0.09)		8082A		1	03/06/19 19:23	C9C0096	CC90407
Aroclor 1260	**1.3** (0.09)		8082A		1	03/06/19 19:23	C9C0096	CC90407
Aroclor 1262	ND (0.09)		8082A		1	03/06/19 19:23	C9C0096	CC90407
Aroclor 1268	ND (0.09)		8082A		1	03/06/19 19:23	C9C0096	CC90407

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-24
Date Sampled: 02/28/19 09:40
Percent Solids: 100
Initial Volume: 5.23
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903020
ESS Laboratory Sample ID: 1903020-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/06/19 19:42	C9C0096	CC90407
Aroclor 1221	ND (0.1)		8082A		1	03/06/19 19:42	C9C0096	CC90407
Aroclor 1232	ND (0.1)		8082A		1	03/06/19 19:42	C9C0096	CC90407
Aroclor 1242	ND (0.1)		8082A		1	03/06/19 19:42	C9C0096	CC90407
Aroclor 1248	ND (0.1)		8082A		1	03/06/19 19:42	C9C0096	CC90407
Aroclor 1254	ND (0.1)		8082A		1	03/06/19 19:42	C9C0096	CC90407
Aroclor 1260	**0.9** (0.1)		8082A		1	03/06/19 19:42	C9C0096	CC90407
Aroclor 1262	ND (0.1)		8082A		1	03/06/19 19:42	C9C0096	CC90407
Aroclor 1268	ND (0.1)		8082A		1	03/06/19 19:42	C9C0096	CC90407

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-25
Date Sampled: 02/28/19 09:45
Percent Solids: 99
Initial Volume: 5.52
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903020
ESS Laboratory Sample ID: 1903020-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	03/06/19 20:01	C9C0096	CC90407
Aroclor 1221	ND (0.09)		8082A		1	03/06/19 20:01	C9C0096	CC90407
Aroclor 1232	ND (0.09)		8082A		1	03/06/19 20:01	C9C0096	CC90407
Aroclor 1242	ND (0.09)		8082A		1	03/06/19 20:01	C9C0096	CC90407
Aroclor 1248	ND (0.09)		8082A		1	03/06/19 20:01	C9C0096	CC90407
Aroclor 1254	ND (0.09)		8082A		1	03/06/19 20:01	C9C0096	CC90407
Aroclor 1260	**1.4** (0.09)		8082A		1	03/06/19 20:01	C9C0096	CC90407
Aroclor 1262	ND (0.09)		8082A		1	03/06/19 20:01	C9C0096	CC90407
Aroclor 1268	ND (0.09)		8082A		1	03/06/19 20:01	C9C0096	CC90407

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*100 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-26
Date Sampled: 02/28/19 09:50
Percent Solids: 99
Initial Volume: 5.31
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903020
ESS Laboratory Sample ID: 1903020-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	03/06/19 20:21	C9C0096	CC90407
Aroclor 1221	ND (0.09)		8082A		1	03/06/19 20:21	C9C0096	CC90407
Aroclor 1232	ND (0.09)		8082A		1	03/06/19 20:21	C9C0096	CC90407
Aroclor 1242	ND (0.09)		8082A		1	03/06/19 20:21	C9C0096	CC90407
Aroclor 1248	ND (0.09)		8082A		1	03/06/19 20:21	C9C0096	CC90407
Aroclor 1254	ND (0.09)		8082A		1	03/06/19 20:21	C9C0096	CC90407
Aroclor 1260	**1.5** (0.09)		8082A		1	03/06/19 20:21	C9C0096	CC90407
Aroclor 1262	ND (0.09)		8082A		1	03/06/19 20:21	C9C0096	CC90407
Aroclor 1268	ND (0.09)		8082A		1	03/06/19 20:21	C9C0096	CC90407

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*52 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*57 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-27
Date Sampled: 02/28/19 09:55
Percent Solids: 99
Initial Volume: 5.27
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903020
ESS Laboratory Sample ID: 1903020-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/06/19 20:40	C9C0096	CC90407
Aroclor 1221	ND (0.1)		8082A		1	03/06/19 20:40	C9C0096	CC90407
Aroclor 1232	ND (0.1)		8082A		1	03/06/19 20:40	C9C0096	CC90407
Aroclor 1242	ND (0.1)		8082A		1	03/06/19 20:40	C9C0096	CC90407
Aroclor 1248	ND (0.1)		8082A		1	03/06/19 20:40	C9C0096	CC90407
Aroclor 1254	ND (0.1)		8082A		1	03/06/19 20:40	C9C0096	CC90407
Aroclor 1260	**2.1** (0.1)		8082A		1	03/06/19 20:40	C9C0096	CC90407
Aroclor 1262	ND (0.1)		8082A		1	03/06/19 20:40	C9C0096	CC90407
Aroclor 1268	ND (0.1)		8082A		1	03/06/19 20:40	C9C0096	CC90407

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-28
Date Sampled: 02/28/19 10:00
Percent Solids: 99
Initial Volume: 5.68
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903020
ESS Laboratory Sample ID: 1903020-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	03/06/19 20:59	C9C0096	CC90407
Aroclor 1221	ND (0.09)		8082A		1	03/06/19 20:59	C9C0096	CC90407
Aroclor 1232	ND (0.09)		8082A		1	03/06/19 20:59	C9C0096	CC90407
Aroclor 1242	ND (0.09)		8082A		1	03/06/19 20:59	C9C0096	CC90407
Aroclor 1248	ND (0.09)		8082A		1	03/06/19 20:59	C9C0096	CC90407
Aroclor 1254	ND (0.09)		8082A		1	03/06/19 20:59	C9C0096	CC90407
Aroclor 1260	**1.9** (0.09)		8082A		1	03/06/19 20:59	C9C0096	CC90407
Aroclor 1262	ND (0.09)		8082A		1	03/06/19 20:59	C9C0096	CC90407
Aroclor 1268	ND (0.09)		8082A		1	03/06/19 20:59	C9C0096	CC90407

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-29
Date Sampled: 02/28/19 10:05
Percent Solids: 98
Initial Volume: 5.45
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903020
ESS Laboratory Sample ID: 1903020-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	03/06/19 23:14	C9C0096	CC90407
Aroclor 1221	ND (0.09)		8082A		1	03/06/19 23:14	C9C0096	CC90407
Aroclor 1232	ND (0.09)		8082A		1	03/06/19 23:14	C9C0096	CC90407
Aroclor 1242	ND (0.09)		8082A		1	03/06/19 23:14	C9C0096	CC90407
Aroclor 1248	ND (0.09)		8082A		1	03/06/19 23:14	C9C0096	CC90407
Aroclor 1254	ND (0.09)		8082A		1	03/06/19 23:14	C9C0096	CC90407
Aroclor 1260	**2.5** (0.09)		8082A		1	03/06/19 23:14	C9C0096	CC90407
Aroclor 1262	ND (0.09)		8082A		1	03/06/19 23:14	C9C0096	CC90407
Aroclor 1268	ND (0.09)		8082A		1	03/06/19 23:14	C9C0096	CC90407

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-30
Date Sampled: 02/28/19 10:10
Percent Solids: 99
Initial Volume: 5.32
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903020
ESS Laboratory Sample ID: 1903020-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	03/06/19 23:33	C9C0096	CC90407
Aroclor 1221	ND (0.09)		8082A		1	03/06/19 23:33	C9C0096	CC90407
Aroclor 1232	ND (0.09)		8082A		1	03/06/19 23:33	C9C0096	CC90407
Aroclor 1242	ND (0.09)		8082A		1	03/06/19 23:33	C9C0096	CC90407
Aroclor 1248	ND (0.09)		8082A		1	03/06/19 23:33	C9C0096	CC90407
Aroclor 1254	ND (0.09)		8082A		1	03/06/19 23:33	C9C0096	CC90407
Aroclor 1260	**1.0** (0.09)		8082A		1	03/06/19 23:33	C9C0096	CC90407
Aroclor 1262	ND (0.09)		8082A		1	03/06/19 23:33	C9C0096	CC90407
Aroclor 1268	ND (0.09)		8082A		1	03/06/19 23:33	C9C0096	CC90407

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*101 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-31
Date Sampled: 02/28/19 10:15
Percent Solids: 99
Initial Volume: 5.55
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903020
ESS Laboratory Sample ID: 1903020-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	03/06/19 23:52	C9C0096	CC90407
Aroclor 1221	ND (0.09)		8082A		1	03/06/19 23:52	C9C0096	CC90407
Aroclor 1232	ND (0.09)		8082A		1	03/06/19 23:52	C9C0096	CC90407
Aroclor 1242	ND (0.09)		8082A		1	03/06/19 23:52	C9C0096	CC90407
Aroclor 1248	ND (0.09)		8082A		1	03/06/19 23:52	C9C0096	CC90407
Aroclor 1254	ND (0.09)		8082A		1	03/06/19 23:52	C9C0096	CC90407
Aroclor 1260	**1.5** (0.09)		8082A		1	03/06/19 23:52	C9C0096	CC90407
Aroclor 1262	ND (0.09)		8082A		1	03/06/19 23:52	C9C0096	CC90407
Aroclor 1268	ND (0.09)		8082A		1	03/06/19 23:52	C9C0096	CC90407

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903020

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC90407 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0259*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		97	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		92	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		102	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140			
Surrogate: Decachlorobiphenyl	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		98	40-140	2	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		97	40-140	5	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		105	40-140	3	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		93	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0259*		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	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903020

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903020

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1903020
Date Received: 3/1/2019
Project Due Date: 3/8/2019
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608.3 Pesticides)
01	320486	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	320485	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	320484	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	320483	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	320482	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	320481	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	320480	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	320479	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	320478	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	320477	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
All containers scanned into storage/lab
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No
Initials:

Completed By: Date & Time: 3/1/19 1739
Reviewed By: Date & Time: 3/1/19 1843
Delivered By: 3/1/19 1843

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # ~~1902C~~ 1903020

Turn Time: 5-Day Rush:

Regulatory State: Rhode Island

Is this project for any of the following?: ☐ MA-MCP ☐ CT-RCP ☐ RGP ☐ Remediation

Reporting Limits: PCBs <0.5 ppm

Electonic Deliverables: ☐ Limit Checker ☐ Excel ☑ Other (Please Specifiy) → PDF

Company Name: Coneco Engineers and Scientists

Project #: 5675.F

Project Name: Pawtucket 1 Control House, 6 Thorton Ave, Pawtucket, RI

Contact Person: Mark Zoller

Address: 4 First Street

City: Bridgewater

State: Massachusetts

Zip Code: 02324

PO #: 5675.F

Telephone Number: 508-245-3967

FAX Number:

Email Address: jaevazelis,mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by Method 8082
1	2/28/19	9:30 a.m.	Grab	Concrete	ICS-03-22	X
2	2/28/19	9:35 a.m.	Grab	Concrete	ICS-03-23	X
3	2/28/19	9:40 a.m	Grab	Concrete	ICS-03-24	X
4	2/28/19	9:45 a.m	Grab	Concrete	ICS-03-25	X
5	2/28/19	9:50 am.	Grab	Concrete	ICS-03-26	X
6	2/28/19	9:55 a.m	Grab	Concrete	ICS-03-27	X
7	2/28/19	10:00 a.m	Grab	Concrete	ICS-03-28	X
8	2/28/19	10:05 a.m.	Grab	Concrete	ICS-03-29	X
9	2/28/19	10:10 a.m.	Grab	Concrete	ICS-03-30	X
10	2/28/19	10:15 a.m.	Grab	Concrete	ICS-03-31	X

Container Type: AG-Amber Glass B-BOD Bottle G-Glass P-Poly S-Sterile V-Vial O-Other → ag

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* → 1

Number of Containers: 10

Laboratory Use Only

Cooler Present: _____

Seals Intact: _____

Cooler Temperature: 1.4 °C ICE RC

Sampled by : DJD/CKL

Please specify "Other" preservative and containers types in this space

Comments: National Grid Project, use manual Soxhlet Extraction per EPA Method 3540, Report dry weight, homogenize sample, ISCA requirements, Provide full data package.

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
		Fridge 3/1/19 1300	R Carlson 3/1/19 1300
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
R Carlson 3/1/19 1550	3/1/19 1625		

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1903021

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 3:34 pm, Mar 08, 2019

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903021

SAMPLE RECEIPT

The following samples were received on March 01, 2019 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1903021-01	DUP-08	Solid	8082A
1903021-02	ICS-03-32	Solid	8082A
1903021-03	ICS-03-33	Solid	8082A
1903021-04	ICS-03-34	Solid	8082A
1903021-05	ICS-03-35	Solid	8082A
1903021-06	ICS-03-36	Solid	8082A
1903021-07	ICS-03-37	Solid	8082A
1903021-08	ICS-03-38	Solid	8082A
1903021-09	ICS-03-39	Solid	8082A
1903021-10	ICS-03-40	Solid	8082A
1903021-11	ICS-03-41	Solid	8082A
1903021-12	ICS-03-42	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903021

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1903021-08 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Tetrachloro-m-xylene [2C] (197% @ 30-150%)

1903021-10 **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%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903021

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
MADEP 04-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-08
Date Sampled: 02/28/19 10:20
Percent Solids: 99
Initial Volume: 5.34
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903021
ESS Laboratory Sample ID: 1903021-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	03/05/19 20:34	C9C0059	CC90408
Aroclor 1221	ND (0.09)		8082A		1	03/05/19 20:34	C9C0059	CC90408
Aroclor 1232	ND (0.09)		8082A		1	03/05/19 20:34	C9C0059	CC90408
Aroclor 1242	ND (0.09)		8082A		1	03/05/19 20:34	C9C0059	CC90408
Aroclor 1248	ND (0.09)		8082A		1	03/05/19 20:34	C9C0059	CC90408
Aroclor 1254	ND (0.09)		8082A		1	03/05/19 20:34	C9C0059	CC90408
Aroclor 1260	**0.7** (0.09)		8082A		1	03/05/19 20:34	C9C0059	CC90408
Aroclor 1262	ND (0.09)		8082A		1	03/05/19 20:34	C9C0059	CC90408
Aroclor 1268	ND (0.09)		8082A		1	03/05/19 20:34	C9C0059	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-32
Date Sampled: 02/28/19 10:25
Percent Solids: 99
Initial Volume: 5.31
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903021
ESS Laboratory Sample ID: 1903021-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/05/19 20:53	C9C0059	CC90408
Aroclor 1221	ND (0.1)		8082A		1	03/05/19 20:53	C9C0059	CC90408
Aroclor 1232	ND (0.1)		8082A		1	03/05/19 20:53	C9C0059	CC90408
Aroclor 1242	ND (0.1)		8082A		1	03/05/19 20:53	C9C0059	CC90408
Aroclor 1248	ND (0.1)		8082A		1	03/05/19 20:53	C9C0059	CC90408
Aroclor 1254	ND (0.1)		8082A		1	03/05/19 20:53	C9C0059	CC90408
Aroclor 1260	**1.1** (0.1)		8082A		1	03/05/19 20:53	C9C0059	CC90408
Aroclor 1262	ND (0.1)		8082A		1	03/05/19 20:53	C9C0059	CC90408
Aroclor 1268	ND (0.1)		8082A		1	03/05/19 20:53	C9C0059	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*59 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-33
Date Sampled: 02/28/19 10:30
Percent Solids: 99
Initial Volume: 5.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903021
ESS Laboratory Sample ID: 1903021-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/05/19 21:12	C9C0059	CC90408
Aroclor 1221	ND (0.1)		8082A		1	03/05/19 21:12	C9C0059	CC90408
Aroclor 1232	ND (0.1)		8082A		1	03/05/19 21:12	C9C0059	CC90408
Aroclor 1242	ND (0.1)		8082A		1	03/05/19 21:12	C9C0059	CC90408
Aroclor 1248	ND (0.1)		8082A		1	03/05/19 21:12	C9C0059	CC90408
Aroclor 1254	ND (0.1)		8082A		1	03/05/19 21:12	C9C0059	CC90408
Aroclor 1260	**6.0** (1.0)		8082A		10	03/06/19 18:55	C9C0059	CC90408
Aroclor 1262	ND (0.1)		8082A		1	03/05/19 21:12	C9C0059	CC90408
Aroclor 1268	ND (0.1)		8082A		1	03/05/19 21:12	C9C0059	CC90408

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*100 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-34
Date Sampled: 02/28/19 10:35
Percent Solids: 99
Initial Volume: 5.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903021
ESS Laboratory Sample ID: 1903021-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/05/19 21:32	C9C0059	CC90408
Aroclor 1221	ND (0.1)		8082A		1	03/05/19 21:32	C9C0059	CC90408
Aroclor 1232	ND (0.1)		8082A		1	03/05/19 21:32	C9C0059	CC90408
Aroclor 1242	ND (0.1)		8082A		1	03/05/19 21:32	C9C0059	CC90408
Aroclor 1248	ND (0.1)		8082A		1	03/05/19 21:32	C9C0059	CC90408
Aroclor 1254	ND (0.1)		8082A		1	03/05/19 21:32	C9C0059	CC90408
Aroclor 1260	**1.9** (0.1)		8082A		1	03/05/19 21:32	C9C0059	CC90408
Aroclor 1262	ND (0.1)		8082A		1	03/05/19 21:32	C9C0059	CC90408
Aroclor 1268	ND (0.1)		8082A		1	03/05/19 21:32	C9C0059	CC90408

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-35
Date Sampled: 02/28/19 10:40
Percent Solids: 98
Initial Volume: 5.22
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903021
ESS Laboratory Sample ID: 1903021-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/05/19 23:26	C9C0059	CC90408
Aroclor 1221	ND (0.1)		8082A		1	03/05/19 23:26	C9C0059	CC90408
Aroclor 1232	ND (0.1)		8082A		1	03/05/19 23:26	C9C0059	CC90408
Aroclor 1242	ND (0.1)		8082A		1	03/05/19 23:26	C9C0059	CC90408
Aroclor 1248	ND (0.1)		8082A		1	03/05/19 23:26	C9C0059	CC90408
Aroclor 1254	ND (0.1)		8082A		1	03/05/19 23:26	C9C0059	CC90408
Aroclor 1260 [2C]	**1.7** (0.1)		8082A		1	03/05/19 23:26	C9C0059	CC90408
Aroclor 1262	ND (0.1)		8082A		1	03/05/19 23:26	C9C0059	CC90408
Aroclor 1268	ND (0.1)		8082A		1	03/05/19 23:26	C9C0059	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*59 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-36
Date Sampled: 02/28/19 10:45
Percent Solids: 99
Initial Volume: 5.88
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903021
ESS Laboratory Sample ID: 1903021-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	03/05/19 23:45	C9C0059	CC90408
Aroclor 1221	ND (0.09)		8082A		1	03/05/19 23:45	C9C0059	CC90408
Aroclor 1232	ND (0.09)		8082A		1	03/05/19 23:45	C9C0059	CC90408
Aroclor 1242	ND (0.09)		8082A		1	03/05/19 23:45	C9C0059	CC90408
Aroclor 1248	ND (0.09)		8082A		1	03/05/19 23:45	C9C0059	CC90408
Aroclor 1254	ND (0.09)		8082A		1	03/05/19 23:45	C9C0059	CC90408
Aroclor 1260	**1.9** (0.09)		8082A		1	03/05/19 23:45	C9C0059	CC90408
Aroclor 1262	ND (0.09)		8082A		1	03/05/19 23:45	C9C0059	CC90408
Aroclor 1268	ND (0.09)		8082A		1	03/05/19 23:45	C9C0059	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-37
Date Sampled: 02/28/19 10:50
Percent Solids: 98
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903021
ESS Laboratory Sample ID: 1903021-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/06/19 0:04	C9C0059	CC90408
Aroclor 1221	ND (0.1)		8082A		1	03/06/19 0:04	C9C0059	CC90408
Aroclor 1232	ND (0.1)		8082A		1	03/06/19 0:04	C9C0059	CC90408
Aroclor 1242	ND (0.1)		8082A		1	03/06/19 0:04	C9C0059	CC90408
Aroclor 1248	ND (0.1)		8082A		1	03/06/19 0:04	C9C0059	CC90408
Aroclor 1254	ND (0.1)		8082A		1	03/06/19 0:04	C9C0059	CC90408
Aroclor 1260	**8.2** (1.0)		8082A		10	03/06/19 19:14	C9C0059	CC90408
Aroclor 1262	ND (0.1)		8082A		1	03/06/19 0:04	C9C0059	CC90408
Aroclor 1268	ND (0.1)		8082A		1	03/06/19 0:04	C9C0059	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-38
Date Sampled: 02/28/19 10:55
Percent Solids: 99
Initial Volume: 5.21
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903021
ESS Laboratory Sample ID: 1903021-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/06/19 20:30	C9C0095	CC90409
Aroclor 1221	ND (0.1)		8082A		1	03/06/19 20:30	C9C0095	CC90409
Aroclor 1232	ND (0.1)		8082A		1	03/06/19 20:30	C9C0095	CC90409
Aroclor 1242	ND (0.1)		8082A		1	03/06/19 20:30	C9C0095	CC90409
Aroclor 1248	ND (0.1)		8082A		1	03/06/19 20:30	C9C0095	CC90409
Aroclor 1254	ND (0.1)		8082A		1	03/06/19 20:30	C9C0095	CC90409
Aroclor 1260	**15.5** (1.0)		8082A		10	03/07/19 17:30	C9C0095	CC90409
Aroclor 1262	ND (0.1)		8082A		1	03/06/19 20:30	C9C0095	CC90409
Aroclor 1268	ND (0.1)		8082A		1	03/06/19 20:30	C9C0095	CC90409

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*57 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*197 %*	*SM*	*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-39
Date Sampled: 02/28/19 11:00
Percent Solids: 99
Initial Volume: 5.52
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903021
ESS Laboratory Sample ID: 1903021-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	03/06/19 20:49	C9C0095	CC90409
Aroclor 1221	ND (0.09)		8082A		1	03/06/19 20:49	C9C0095	CC90409
Aroclor 1232	ND (0.09)		8082A		1	03/06/19 20:49	C9C0095	CC90409
Aroclor 1242	ND (0.09)		8082A		1	03/06/19 20:49	C9C0095	CC90409
Aroclor 1248	ND (0.09)		8082A		1	03/06/19 20:49	C9C0095	CC90409
Aroclor 1254	ND (0.09)		8082A		1	03/06/19 20:49	C9C0095	CC90409
Aroclor 1260	**2.1** (0.09)		8082A		1	03/06/19 20:49	C9C0095	CC90409
Aroclor 1262	ND (0.09)		8082A		1	03/06/19 20:49	C9C0095	CC90409
Aroclor 1268	ND (0.09)		8082A		1	03/06/19 20:49	C9C0095	CC90409

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-40
Date Sampled: 02/28/19 11:05
Percent Solids: 99
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903021
ESS Laboratory Sample ID: 1903021-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.0)		8082A		50	03/07/19 17:49	C9C0102	CC90409
Aroclor 1221	ND (5.0)		8082A		50	03/07/19 17:49	C9C0102	CC90409
Aroclor 1232	ND (5.0)		8082A		50	03/07/19 17:49	C9C0102	CC90409
Aroclor 1242	ND (5.0)		8082A		50	03/07/19 17:49	C9C0102	CC90409
Aroclor 1248	ND (5.0)		8082A		50	03/07/19 17:49	C9C0102	CC90409
Aroclor 1254	ND (5.0)		8082A		50	03/07/19 17:49	C9C0102	CC90409
Aroclor 1260	**172** (5.0)		8082A		50	03/07/19 17:49	C9C0102	CC90409
Aroclor 1262	ND (5.0)		8082A		50	03/07/19 17:49	C9C0102	CC90409
Aroclor 1268	ND (5.0)		8082A		50	03/07/19 17:49	C9C0102	CC90409

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-41
Date Sampled: 02/28/19 11:10
Percent Solids: 99
Initial Volume: 5.32
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903021
ESS Laboratory Sample ID: 1903021-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/06/19 23:22	C9C0095	CC90409
Aroclor 1221	ND (0.1)		8082A		1	03/06/19 23:22	C9C0095	CC90409
Aroclor 1232	ND (0.1)		8082A		1	03/06/19 23:22	C9C0095	CC90409
Aroclor 1242	ND (0.1)		8082A		1	03/06/19 23:22	C9C0095	CC90409
Aroclor 1248	ND (0.1)		8082A		1	03/06/19 23:22	C9C0095	CC90409
Aroclor 1254	ND (0.1)		8082A		1	03/06/19 23:22	C9C0095	CC90409
Aroclor 1260	**3.7** (0.1)		8082A		1	03/06/19 23:22	C9C0095	CC90409
Aroclor 1262	ND (0.1)		8082A		1	03/06/19 23:22	C9C0095	CC90409
Aroclor 1268	ND (0.1)		8082A		1	03/06/19 23:22	C9C0095	CC90409

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-42
Date Sampled: 02/28/19 11:15
Percent Solids: 99
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903021
ESS Laboratory Sample ID: 1903021-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/06/19 23:41	C9C0095	CC90409
Aroclor 1221	ND (0.1)		8082A		1	03/06/19 23:41	C9C0095	CC90409
Aroclor 1232	ND (0.1)		8082A		1	03/06/19 23:41	C9C0095	CC90409
Aroclor 1242	ND (0.1)		8082A		1	03/06/19 23:41	C9C0095	CC90409
Aroclor 1248	ND (0.1)		8082A		1	03/06/19 23:41	C9C0095	CC90409
Aroclor 1254	ND (0.1)		8082A		1	03/06/19 23:41	C9C0095	CC90409
Aroclor 1260	**11.0** (1.0)		8082A		10	03/07/19 18:08	C9C0095	CC90409
Aroclor 1262	ND (0.1)		8082A		1	03/06/19 23:41	C9C0095	CC90409
Aroclor 1268	ND (0.1)		8082A		1	03/06/19 23:41	C9C0095	CC90409

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903021

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC90408 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0242*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0246*		mg/kg wet	*0.02500*		*98*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		96	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		87	40-140			
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		84	40-140			
Surrogate: Decachlorobiphenyl	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0221*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0216*		mg/kg wet	*0.02500*		*87*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		99	40-140	3	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140	2	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		88	40-140	3	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		87	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Batch CC90409 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903021

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC90409 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0244*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0251*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		103	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		90	40-140			
Surrogate: Decachlorobiphenyl	*0.0248*		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	*0.0246*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		97	40-140	6	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140	6	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		85	40-140	6	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		84	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903021

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903021

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1903021
Date Received: 3/1/2019
Project Due Date: 3/8/2019
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608.3 Pesticides)
01	320498	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	320497	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	320496	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	320495	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	320494	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	320493	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	320492	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	320491	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	320490	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	320489	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	320488	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	320487	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
All containers scanned into storage/lab
Are barcode labels on correct containers? Initials:
Are all necessary stickers attached? Yes / No
Yes / No

Completed By: Date & Time: 1741 3/1/19
Reviewed By: Date & Time: 3/1/19 1842
Delivered

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 1903021

Date Received: 3/1/2019

By: 3/1/19 1842

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1903021

Turn Time: 5-Day Rush:

Regulatory State: Rhode Island

Is this project for any of the following?: ☐ MA-MCP ☐ CT-RCP ☐ RGP ☐ Remediation

Reporting Limits: PCBs <0.5 ppm

Electonic Deliverables: ☐ Limit Checker ☐ Excel ☑ Other (Please Specifiy) → PDF

Company Name: Coneco Engineers and Scientists

Project #: 5675.F

Project Name: Pawtucket 1 Control House, 6 Thorton Ave Pawtucket, RI

Contact Person: Mark Zoller

Address: 4 First Street

City: Bridgewater

State: Massachusetts

Zip Code: 02324

PO #: 5675.F

Telephone Number: 508-245-3967

FAX Number:

Email Address: jaevazelis,mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by Method 8082
1	2/28/19	10:20 a.m.	Grab	Concrete	~~ICS-03~~ (ND) Dup 08	X
2	2/28/19	10:25 a.m.	Grab	Concrete	ICS-03-32	X
3	2/28/19	10:30 a.m.	Grab	Concrete	ICS-03-33	X
4	2/28/19	10:35 a.m.	Grab	Concrete	ICS-03-34	X
5	2/28/19	10:40 a.m.	Grab	Concrete	ICS-03-35	X
6	2/28/19	10:45 a.m.	Grab	Concrete	ICS-03-36	X
7	2/28/19	10:50 a.m.	Grab	Concrete	ICS-03-37	X
8	2/28/19	10:55 am	Grab	Concrete	ICS-03-38	X
9	2/28/19	11:00 am	Grab	Concrete	ICS-03-39	X
10	2/28/19	11:05	Grab	Concrete	ICS-03-40	X

Container Type: AG-Amber Glass B-BOD Bottle G-Glass P-Poly S-Sterile V-Vial O-Other — ag

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Number of Containers: 10

Laboratory Use Only

Cooler Present: _____

Seals Intact: _____

Cooler Temperature: 1.4 °C ICE RC

Sampled by : DJD/CKL

Comments: Please specify "Other" preservative and containers types in this space
National Grid Project, use manual soxhlet extraction per EPA Method 3540, Report dry weight, homogenize sample, TSCA requirements, Provide full data package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Daniel D'Amma		Fridge 3/1/19 1300	RCarlson 3/1/19 1300
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
RCarlson 3/1/19 1550	3/1/19 1685		

ESS Laboratory
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www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1903021

Turn Time: 5-Day Rush:

Regulatory State: Rhode Island

Is this project for any of the following?: ☐ MA-MCP ☐ CT-RCP ☐ RGP ☐ Remediation

Reporting Limits: PCBs <0.5 ppm

Electonic Deliverables: ☐ Limit Checker ☐ Excel ☑ Other (Please Specifiy) → PDF

Company Name: Coneco Engineers and Scientists	Project #: 5675.F	Project Name: Pawtucket 1 Control House, 6 Thorton Ave Pawtucket, RI	
Contact Person: Mark Zoller	Address: 4 First Street		
City: Bridgewater	State: Massachusetts	Zip Code: 02324	PO #: 5675.F
Telephone Number: 508-245-3967	FAX Number:	Email Address: jaevazelis,mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by Method 8082
11	2/28/19	11:10 a.m	Grab	Concrete	ICS-03-41	X
12	2/28/19	11:15 a.m	Grab	Concrete	ICS-03-42	X
~~2/28/19~~	~~2/28/19~~	~~10:20am~~	~~Grab~~	~~Concrete~~	~~Dup-03~~	X
	~~2/28/19~~		~~Grab~~			X
	~~2/28/19~~		~~Grab~~			X
	~~2/28/19~~		~~Grab~~			X
	~~2/28/19~~		~~Grab~~			X
	~~2/28/19~~		~~Grab~~			X
	~~2/28/19~~		~~Grab~~			X
	~~2/28/19~~		~~Grab~~			X
	2/28/19		Grab			X

Container Type: AG-Amber Glass B-BOD Bottle G-Glass P-Poly S-Sterile V-Vial O-Other — ag

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Number of Containers: 2

Laboratory Use Only

Cooler Present: _____

Seals Intact: _____

Cooler Temperature: 1.4 °C ICE RC

Sampled by : DJD/CKL

Comments: Please specify "Other" preservative and containers types in this space
National Grid Project, use Manual Soxhlet Extraction per EPA Method 3540, Report dry weight. homogenize Sample, TSCA requirements, Provide full data package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Dan D Thomann		Fridge 3/1/19 1300	R Carlson 3/1/19 1300
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
R Carlson 3/1/19 1550	3/1/19 1605		

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 19J0020

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 3:35 pm, Oct 09, 2019

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0020

SAMPLE RECEIPT

The following samples were received on October 01, 2019 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
19J0020-01	ICS-03-19 0.5-1	Solid	8082A
19J0020-02	ICS-03-19 1-2	Solid	8082A
19J0020-03	ICS-03-19 2-3	Solid	8082A
19J0020-04	ICS-03-21 0.5-1	Solid	8082A
19J0020-05	ICS-03-21 1-2	Solid	8082A
19J0020-06	ICS-03-21 2-3	Solid	8082A
19J0020-07	ICS-03-38 0.5-1	Solid	8082A
19J0020-08	ICS-03-38 1-2	Solid	8082A
19J0020-09	ICS-03-38 2-3	Solid	8082A
19J0020-10	ICS-03-43 0-0.5	Solid	8082A
19J0020-11	ICS-03-43 0.5-1	Solid	8082A
19J0020-12	ICS-03-43 1-2	Solid	8082A
19J0020-13	ICS-03-43 2-3	Solid	8082A
19J0020-14	ICS-03-40 0.5-1	Solid	8082A
19J0020-15	ICS-03-40 1-2	Solid	8082A
19J0020-16	ICS-03-40 2-3	Solid	8082A
19J0020-17	ICS-03-40 3-4	Solid	8082A
19J0020-18	ICS-03-44	Solid	8082A
19J0020-19	ICS-03-45	Solid	8082A
19J0020-20	ICS-03-46	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0020

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

19J0020-03 **Surrogate recovery(ies) below lower control limit (S-).**
Tetrachloro-m-xylene (29% @ 30-150%)

19J0020-10 **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%)

19J0020-18 **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%)

19J0020-19 **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%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0020

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-19 0.5-1
Date Sampled: 09/26/19 08:00
Percent Solids: 99
Initial Volume: 5.35
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 16:26	C9J0139	CJ90207
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 16:26	C9J0139	CJ90207
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 16:26	C9J0139	CJ90207
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 16:26	C9J0139	CJ90207
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 16:26	C9J0139	CJ90207
Aroclor 1254	ND (0.09)		8082A		1	10/03/19 16:26	C9J0139	CJ90207
Aroclor 1260	**0.3** (0.09)		8082A		1	10/03/19 16:26	C9J0139	CJ90207
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 16:26	C9J0139	CJ90207
Aroclor 1268	ND (0.09)		8082A		1	10/03/19 16:26	C9J0139	CJ90207

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-19 1-2
Date Sampled: 09/26/19 08:05
Percent Solids: 99
Initial Volume: 5.57
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 16:46	C9J0139	CJ90207
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 16:46	C9J0139	CJ90207
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 16:46	C9J0139	CJ90207
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 16:46	C9J0139	CJ90207
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 16:46	C9J0139	CJ90207
Aroclor 1254	ND (0.09)		8082A		1	10/03/19 16:46	C9J0139	CJ90207
Aroclor 1260 [2C]	ND (0.09)		8082A		1	10/03/19 16:46	C9J0139	CJ90207
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 16:46	C9J0139	CJ90207
Aroclor 1268	ND (0.09)		8082A		1	10/03/19 16:46	C9J0139	CJ90207

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-19 2-3
Date Sampled: 09/26/19 08:10
Percent Solids: 99
Initial Volume: 5.47
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 17:05	C9J0139	CJ90207
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 17:05	C9J0139	CJ90207
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 17:05	C9J0139	CJ90207
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 17:05	C9J0139	CJ90207
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 17:05	C9J0139	CJ90207
Aroclor 1254	ND (0.09)		8082A		1	10/03/19 17:05	C9J0139	CJ90207
Aroclor 1260	ND (0.09)		8082A		1	10/03/19 17:05	C9J0139	CJ90207
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 17:05	C9J0139	CJ90207
Aroclor 1268	ND (0.09)		8082A		1	10/03/19 17:05	C9J0139	CJ90207

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*48 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*51 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*29 %*	*S-*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*36 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-21 0.5-1
Date Sampled: 09/26/19 08:15
Percent Solids: 99
Initial Volume: 5.28
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 17:24	C9J0139	CJ90207
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 17:24	C9J0139	CJ90207
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 17:24	C9J0139	CJ90207
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 17:24	C9J0139	CJ90207
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 17:24	C9J0139	CJ90207
Aroclor 1254	ND (0.1)		8082A		1	10/03/19 17:24	C9J0139	CJ90207
Aroclor 1260	**0.3** (0.1)		8082A		1	10/03/19 17:24	C9J0139	CJ90207
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 17:24	C9J0139	CJ90207
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 17:24	C9J0139	CJ90207

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-21 1-2
Date Sampled: 09/26/19 08:20
Percent Solids: 100
Initial Volume: 5.34
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 17:43	C9J0139	CJ90207
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 17:43	C9J0139	CJ90207
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 17:43	C9J0139	CJ90207
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 17:43	C9J0139	CJ90207
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 17:43	C9J0139	CJ90207
Aroclor 1254	ND (0.09)		8082A		1	10/03/19 17:43	C9J0139	CJ90207
Aroclor 1260	ND (0.09)		8082A		1	10/03/19 17:43	C9J0139	CJ90207
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 17:43	C9J0139	CJ90207
Aroclor 1268	ND (0.09)		8082A		1	10/03/19 17:43	C9J0139	CJ90207

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-21 2-3
Date Sampled: 09/26/19 08:25
Percent Solids: 100
Initial Volume: 5.58
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 18:02	C9J0139	CJ90207
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 18:02	C9J0139	CJ90207
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 18:02	C9J0139	CJ90207
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 18:02	C9J0139	CJ90207
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 18:02	C9J0139	CJ90207
Aroclor 1254	ND (0.09)		8082A		1	10/03/19 18:02	C9J0139	CJ90207
Aroclor 1260	ND (0.09)		8082A		1	10/03/19 18:02	C9J0139	CJ90207
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 18:02	C9J0139	CJ90207
Aroclor 1268	ND (0.09)		8082A		1	10/03/19 18:02	C9J0139	CJ90207

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-38 0.5-1
Date Sampled: 09/26/19 08:30
Percent Solids: 99
Initial Volume: 5.17
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 18:21	C9J0139	CJ90207
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 18:21	C9J0139	CJ90207
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 18:21	C9J0139	CJ90207
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 18:21	C9J0139	CJ90207
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 18:21	C9J0139	CJ90207
Aroclor 1254	ND (0.1)		8082A		1	10/03/19 18:21	C9J0139	CJ90207
Aroclor 1260 [2C]	**1.3** (0.1)		8082A		1	10/03/19 18:21	C9J0139	CJ90207
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 18:21	C9J0139	CJ90207
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 18:21	C9J0139	CJ90207

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-38 1-2
Date Sampled: 09/26/19 08:35
Percent Solids: 99
Initial Volume: 5.57
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 18:40	C9J0139	CJ90207
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 18:40	C9J0139	CJ90207
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 18:40	C9J0139	CJ90207
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 18:40	C9J0139	CJ90207
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 18:40	C9J0139	CJ90207
Aroclor 1254	ND (0.09)		8082A		1	10/03/19 18:40	C9J0139	CJ90207
Aroclor 1260 [2C]	**0.5** (0.09)		8082A		1	10/03/19 18:40	C9J0139	CJ90207
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 18:40	C9J0139	CJ90207
Aroclor 1268	ND (0.09)		8082A		1	10/03/19 18:40	C9J0139	CJ90207

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-38 2-3
Date Sampled: 09/26/19 08:40
Percent Solids: 99
Initial Volume: 5.12
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 18:59	C9J0139	CJ90207
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 18:59	C9J0139	CJ90207
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 18:59	C9J0139	CJ90207
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 18:59	C9J0139	CJ90207
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 18:59	C9J0139	CJ90207
Aroclor 1254	ND (0.1)		8082A		1	10/03/19 18:59	C9J0139	CJ90207
Aroclor 1260	ND (0.1)		8082A		1	10/03/19 18:59	C9J0139	CJ90207
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 18:59	C9J0139	CJ90207
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 18:59	C9J0139	CJ90207

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-43 0-0.5
Date Sampled: 09/26/19 08:45
Percent Solids: 99
Initial Volume: 5.15
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.0)		8082A		20	10/07/19 23:53	C9J0157	CJ90207
Aroclor 1221	ND (2.0)		8082A		20	10/07/19 23:53	C9J0157	CJ90207
Aroclor 1232	ND (2.0)		8082A		20	10/07/19 23:53	C9J0157	CJ90207
Aroclor 1242	ND (2.0)		8082A		20	10/07/19 23:53	C9J0157	CJ90207
Aroclor 1248	ND (2.0)		8082A		20	10/07/19 23:53	C9J0157	CJ90207
Aroclor 1254	ND (2.0)		8082A		20	10/07/19 23:53	C9J0157	CJ90207
Aroclor 1260	**47.6** (2.0)		8082A		20	10/07/19 23:53	C9J0157	CJ90207
Aroclor 1262	ND (2.0)		8082A		20	10/07/19 23:53	C9J0157	CJ90207
Aroclor 1268	ND (2.0)		8082A		20	10/07/19 23:53	C9J0157	CJ90207

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-43 0.5-1
Date Sampled: 09/26/19 08:50
Percent Solids: 99
Initial Volume: 5.52
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 19:38	C9J0139	CJ90207
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 19:38	C9J0139	CJ90207
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 19:38	C9J0139	CJ90207
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 19:38	C9J0139	CJ90207
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 19:38	C9J0139	CJ90207
Aroclor 1254	ND (0.09)		8082A		1	10/03/19 19:38	C9J0139	CJ90207
Aroclor 1260	**2.1** (0.09)		8082A		1	10/03/19 19:38	C9J0139	CJ90207
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 19:38	C9J0139	CJ90207
Aroclor 1268	ND (0.09)		8082A		1	10/03/19 19:38	C9J0139	CJ90207

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-43 1-2
Date Sampled: 09/26/19 08:55
Percent Solids: 100
Initial Volume: 5.25
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 19:57	C9J0139	CJ90207
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 19:57	C9J0139	CJ90207
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 19:57	C9J0139	CJ90207
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 19:57	C9J0139	CJ90207
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 19:57	C9J0139	CJ90207
Aroclor 1254	ND (0.1)		8082A		1	10/03/19 19:57	C9J0139	CJ90207
Aroclor 1260	**1.4** (0.1)		8082A		1	10/03/19 19:57	C9J0139	CJ90207
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 19:57	C9J0139	CJ90207
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 19:57	C9J0139	CJ90207

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-43 2-3
Date Sampled: 09/26/19 09:00
Percent Solids: 100
Initial Volume: 5.19
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 22:11	C9J0139	CJ90207
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 22:11	C9J0139	CJ90207
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 22:11	C9J0139	CJ90207
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 22:11	C9J0139	CJ90207
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 22:11	C9J0139	CJ90207
Aroclor 1254	ND (0.1)		8082A		1	10/03/19 22:11	C9J0139	CJ90207
Aroclor 1260 [2C]	**0.2** (0.1)		8082A		1	10/03/19 22:11	C9J0139	CJ90207
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 22:11	C9J0139	CJ90207
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 22:11	C9J0139	CJ90207

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*91 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-40 0.5-1
Date Sampled: 09/26/19 09:05
Percent Solids: 99
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-14
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 22:30	C9J0139	CJ90207
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 22:30	C9J0139	CJ90207
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 22:30	C9J0139	CJ90207
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 22:30	C9J0139	CJ90207
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 22:30	C9J0139	CJ90207
Aroclor 1254	ND (0.1)		8082A		1	10/03/19 22:30	C9J0139	CJ90207
Aroclor 1260	**7.1** (0.5)		8082A		5	10/08/19 0:12	C9J0139	CJ90207
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 22:30	C9J0139	CJ90207
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 22:30	C9J0139	CJ90207

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*91 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-40 1-2
Date Sampled: 09/26/19 09:10
Percent Solids: 100
Initial Volume: 5.32
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-15
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 22:49	C9J0139	CJ90207
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 22:49	C9J0139	CJ90207
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 22:49	C9J0139	CJ90207
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 22:49	C9J0139	CJ90207
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 22:49	C9J0139	CJ90207
Aroclor 1254	ND (0.09)		8082A		1	10/03/19 22:49	C9J0139	CJ90207
Aroclor 1260	**1.0** (0.09)		8082A		1	10/03/19 22:49	C9J0139	CJ90207
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 22:49	C9J0139	CJ90207
Aroclor 1268	ND (0.09)		8082A		1	10/03/19 22:49	C9J0139	CJ90207

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-40 2-3
Date Sampled: 09/26/19 09:15
Percent Solids: 100
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-16
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/07/19 14:57	C9J0157	CJ90208
Aroclor 1221	ND (0.1)		8082A		1	10/07/19 14:57	C9J0157	CJ90208
Aroclor 1232	ND (0.1)		8082A		1	10/07/19 14:57	C9J0157	CJ90208
Aroclor 1242	ND (0.1)		8082A		1	10/07/19 14:57	C9J0157	CJ90208
Aroclor 1248	ND (0.1)		8082A		1	10/07/19 14:57	C9J0157	CJ90208
Aroclor 1254	ND (0.1)		8082A		1	10/07/19 14:57	C9J0157	CJ90208
Aroclor 1260	**0.5** (0.1)		8082A		1	10/07/19 14:57	C9J0157	CJ90208
Aroclor 1262	ND (0.1)		8082A		1	10/07/19 14:57	C9J0157	CJ90208
Aroclor 1268	ND (0.1)		8082A		1	10/07/19 14:57	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-40 3-4
Date Sampled: 09/26/19 09:20
Percent Solids: 100
Initial Volume: 5.23
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-17
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/07/19 15:16	C9J0157	CJ90208
Aroclor 1221	ND (0.1)		8082A		1	10/07/19 15:16	C9J0157	CJ90208
Aroclor 1232	ND (0.1)		8082A		1	10/07/19 15:16	C9J0157	CJ90208
Aroclor 1242	ND (0.1)		8082A		1	10/07/19 15:16	C9J0157	CJ90208
Aroclor 1248	ND (0.1)		8082A		1	10/07/19 15:16	C9J0157	CJ90208
Aroclor 1254	ND (0.1)		8082A		1	10/07/19 15:16	C9J0157	CJ90208
Aroclor 1260 [2C]	**0.2** (0.1)		8082A		1	10/07/19 15:16	C9J0157	CJ90208
Aroclor 1262	ND (0.1)		8082A		1	10/07/19 15:16	C9J0157	CJ90208
Aroclor 1268	ND (0.1)		8082A		1	10/07/19 15:16	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*106 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*115 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*108 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-44
Date Sampled: 09/26/19 09:25
Percent Solids: 99
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-18
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (500)		8082A		5000	10/08/19 11:58	C9J0164	CJ90208
Aroclor 1221	ND (500)		8082A		5000	10/08/19 11:58	C9J0164	CJ90208
Aroclor 1232	ND (500)		8082A		5000	10/08/19 11:58	C9J0164	CJ90208
Aroclor 1242	ND (500)		8082A		5000	10/08/19 11:58	C9J0164	CJ90208
Aroclor 1248	ND (500)		8082A		5000	10/08/19 11:58	C9J0164	CJ90208
Aroclor 1254	ND (500)		8082A		5000	10/08/19 11:58	C9J0164	CJ90208
Aroclor 1260	**9080** (500)		8082A		5000	10/08/19 11:58	C9J0164	CJ90208
Aroclor 1262	ND (500)		8082A		5000	10/08/19 11:58	C9J0164	CJ90208
Aroclor 1268	ND (500)		8082A		5000	10/08/19 11:58	C9J0164	CJ90208

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-45
Date Sampled: 09/29/19 09:30
Percent Solids: 99
Initial Volume: 5.44
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-19
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (930)		8082A		10000	10/08/19 12:17	C9J0164	CJ90208
Aroclor 1221	ND (930)		8082A		10000	10/08/19 12:17	C9J0164	CJ90208
Aroclor 1232	ND (930)		8082A		10000	10/08/19 12:17	C9J0164	CJ90208
Aroclor 1242	ND (930)		8082A		10000	10/08/19 12:17	C9J0164	CJ90208
Aroclor 1248	ND (930)		8082A		10000	10/08/19 12:17	C9J0164	CJ90208
Aroclor 1254	ND (930)		8082A		10000	10/08/19 12:17	C9J0164	CJ90208
Aroclor 1260	**27700** (930)		8082A		10000	10/08/19 12:17	C9J0164	CJ90208
Aroclor 1262	ND (930)		8082A		10000	10/08/19 12:17	C9J0164	CJ90208
Aroclor 1268	ND (930)		8082A		10000	10/08/19 12:17	C9J0164	CJ90208

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-46
Date Sampled: 09/29/19 09:35
Percent Solids: 99
Initial Volume: 5.14
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0020
ESS Laboratory Sample ID: 19J0020-20
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/07/19 15:35	C9J0157	CJ90208
Aroclor 1221	ND (0.1)		8082A		1	10/07/19 15:35	C9J0157	CJ90208
Aroclor 1232	ND (0.1)		8082A		1	10/07/19 15:35	C9J0157	CJ90208
Aroclor 1242	ND (0.1)		8082A		1	10/07/19 15:35	C9J0157	CJ90208
Aroclor 1248	ND (0.1)		8082A		1	10/07/19 15:35	C9J0157	CJ90208
Aroclor 1254	ND (0.1)		8082A		1	10/07/19 15:35	C9J0157	CJ90208
Aroclor 1260 [2C]	**2.8** (0.1)		8082A		1	10/07/19 15:35	C9J0157	CJ90208
Aroclor 1262	ND (0.1)		8082A		1	10/07/19 15:35	C9J0157	CJ90208
Aroclor 1268	ND (0.1)		8082A		1	10/07/19 15:35	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*114 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*114 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0020

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ90207 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0234*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0157*		mg/kg wet	*0.02500*		*63*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		81	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		95	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		93	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		97	40-140			
Surrogate: Decachlorobiphenyl	*0.0206*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0177*		mg/kg wet	*0.02500*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		84	40-140	4	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		98	40-140	3	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		99	40-140	6	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		102	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0179*		mg/kg wet	*0.02500*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Batch CJ90208 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0020

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ90208 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0226*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		105	40-140			
Aroclor 1016 [2C]	0.6	0.02	mg/kg wet	0.5000		125	40-140			
Aroclor 1260	0.6	0.02	mg/kg wet	0.5000		119	40-140			
Aroclor 1260 [2C]	0.6	0.02	mg/kg wet	0.5000		122	40-140			
Surrogate: Decachlorobiphenyl	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0275*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0261*		mg/kg wet	*0.02500*		*105*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		101	40-140	4	30	
Aroclor 1016 [2C]	0.6	0.02	mg/kg wet	0.5000		121	40-140	3	30	
Aroclor 1260	0.6	0.02	mg/kg wet	0.5000		116	40-140	3	30	
Aroclor 1260 [2C]	0.6	0.02	mg/kg wet	0.5000		119	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0261*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0274*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0020

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0020

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 19J0020
Date Received: 10/1/2019
Project Due Date: 10/8/2019
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 0.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No (NA)
10. Were any analyses received outside of hold time? Yes (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

8oz jars rec'd with holes drilled into caps. Inside barriers intact.

14. Was there a need to contact Project Manager? (Yes) / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	393711	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
02	393710	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
03	393709	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
04	393708	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
05	393707	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
06	393706	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
07	393705	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
08	393704	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
09	393703	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
10	393702	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
11	393701	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
12	393700	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
13	393699	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
14	393698	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
15	393697	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
16	393696	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
17	393695	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
18	393694	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
19	393693	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
20	393692	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 19J0020
Date Received: 10/1/2019

Were all containers scanned into storage/lab?	Initials	WO
Are barcode labels on correct containers?		(Yes) / No
Are all Flashpoint stickers attached/container ID # circled?		Yes / No / NA
Are all Hex Chrome stickers attached?		Yes / No / NA
Are all QC stickers attached?		Yes / No / NA
Are VOA stickers attached if bubbles noted?		Yes / No / NA

Completed By:	[signature]	Date & Time:	10/1/19 1950
Reviewed By:	[signature]	Date & Time:	10/1/19 2100
Delivered By:	[signature]		10/1/19 2100

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 150020

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	MA	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID (DeFrancesco)	Analysis: PCBs 8082
01	9/26/19	8:00 a.m.	Grab	Solid	ICS-03-19 (0.5-1)	X
02	9/26/19	8:05 a.m.	Grab	Solid	ICS-03-19 (1-2)	X
03	9/26/19	8:10 a.m.	Grab	Solid	ICS-03-19 (2-3)	X
04	9/26/19	8:15 a.m.	Grab	Solid	ICS-03-21 (0.5-1)	X
05	9/26/19	8:20 a.m.	Grab	Solid	ICS-03-21 (1-2)	X
06	9/26/19	8:25 a.m.	Grab	Solid	ICS-03-21 (2-3)	X
07	9/26/19	8:30 a.m.	Grab	Solid	ICS-03-38 (0.5-1)	X
08	9/26/19	8:35 a.m.	Grab	Solid	ICS-03-38 (1-2)	X
09	9/26/19	8:40 a.m.	Grab	Solid	ICS-03-38 (2-3)	X
10	9/26/19	8:45 a.m.	Grab	Solid	ICS-03-43 (0-0.5)	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 10

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓
Seals Intact: NA
Cooler Temperature: °C ice temp 0.4

Sampled by : DJD/MJM

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice

Homogenize Sample TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
9/30/19 1:17 p.m	10/1/19 12:36	10/1/19 16:37	10/1/19 1637
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 19500020

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Excel ☑ Other (Please Specify →)

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave,
Contact Person	**Address**	
Mark Zoller	4 First Street	
City	**State**	**Zip Code** / **PO #**
Bridgewater	MA	02324 / 5675.F
Telephone Number	**FAX Number**	**Email Address**
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	DD: Frank CSC> Sample ID	Analysis: PCBs 8082	PCBs 8082
11	9/26/19	8:50 a.m.	Grab	Solid	ICS-03-43 (0.5-1)	X	
12	9/26/19	8:55 a.m.	Grab	Solid	ICS-03-43 (1-2)	X	
13	9/26/19	9:00 a.m.	Grab	Solid	ICS-03-43 (2-3)	X	
14	9/26/19	9:05 a.m.	Grab	Solid	ICS-03-40 (0.5-1)	X	
15	9/26/19	9:10 a.m.	Grab	Solid	ICS-03-40 (1-2)	X	
16	9/26/19	9:15 a.m.	Grab	Solid	ICS-03-40 (2-3)	X	
17	9/26/19	9:20 a.m.	Grab	Solid	ICS-03-40 (3-4)	X	
18	9/26/19	9:25 a.m.	Grab	Solid	ICS-03-44		X
19	9/29/19	9:30 a.m.	Grab	Solid	ICS-03-45		X
20	9/29/19	9:35 a.m.	Grab	Solid	ICS-03-46		X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG | AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 10 | 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11 | 11
Number of Containers per Sample: 1 | 1

Laboratory Use Only
Cooler Present: ✓
Seals Intact: NA
Cooler Temperature: °C ICR temp. 0.4

Sampled by : ~~KML~~ DS DJD/MJM

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice
Homogenize Sample TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
9/30/19 1:18 p.m.	10/1/19 12:36	10/1/19 16:37	10/1/19 1637
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 19J0021

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 3:36 pm, Oct 09, 2019

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0021

SAMPLE RECEIPT

The following samples were received on October 01, 2019 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
19J0021-01	ICS-03-47	Solid	8082A
19J0021-02	ICS-03-48	Solid	8082A
19J0021-03	ICS-01-60	Solid	8082A
19J0021-04	ICS-01-61	Solid	8082A
19J0021-05	ICS-01-62	Solid	8082A
19J0021-06	ICS-01-63	Solid	8082A
19J0021-07	ICS-01-64	Solid	8082A
19J0021-08	ICS-04-17	Solid	8082A
19J0021-09	ICS-04-18	Solid	8082A
19J0021-10	ICS-04-19	Solid	8082A
19J0021-11	ICS-04-20	Solid	8082A
19J0021-12	DUP-09	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0021

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0021

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-47
Date Sampled: 09/26/19 09:40
Percent Solids: 99
Initial Volume: 5.21
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0021
ESS Laboratory Sample ID: 19J0021-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/07/19 15:54	C9J0157	CJ90208
Aroclor 1221	ND (0.1)		8082A		1	10/07/19 15:54	C9J0157	CJ90208
Aroclor 1232	ND (0.1)		8082A		1	10/07/19 15:54	C9J0157	CJ90208
Aroclor 1242	ND (0.1)		8082A		1	10/07/19 15:54	C9J0157	CJ90208
Aroclor 1248	ND (0.1)		8082A		1	10/07/19 15:54	C9J0157	CJ90208
Aroclor 1254	ND (0.1)		8082A		1	10/07/19 15:54	C9J0157	CJ90208
Aroclor 1260 [2C]	**2.6** (0.1)		8082A		1	10/07/19 15:54	C9J0157	CJ90208
Aroclor 1262	ND (0.1)		8082A		1	10/07/19 15:54	C9J0157	CJ90208
Aroclor 1268	ND (0.1)		8082A		1	10/07/19 15:54	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*108 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-48
Date Sampled: 09/26/19 09:45
Percent Solids: 99
Initial Volume: 5.56
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0021
ESS Laboratory Sample ID: 19J0021-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/07/19 16:13	C9J0157	CJ90208
Aroclor 1221	ND (0.09)		8082A		1	10/07/19 16:13	C9J0157	CJ90208
Aroclor 1232	ND (0.09)		8082A		1	10/07/19 16:13	C9J0157	CJ90208
Aroclor 1242	ND (0.09)		8082A		1	10/07/19 16:13	C9J0157	CJ90208
Aroclor 1248	ND (0.09)		8082A		1	10/07/19 16:13	C9J0157	CJ90208
Aroclor 1254	ND (0.09)		8082A		1	10/07/19 16:13	C9J0157	CJ90208
Aroclor 1260	**0.9** (0.09)		8082A		1	10/07/19 16:13	C9J0157	CJ90208
Aroclor 1262	ND (0.09)		8082A		1	10/07/19 16:13	C9J0157	CJ90208
Aroclor 1268	ND (0.09)		8082A		1	10/07/19 16:13	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*105 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*102 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-60
Date Sampled: 09/27/19 08:00
Percent Solids: 100
Initial Volume: 5.46
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0021
ESS Laboratory Sample ID: 19J0021-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/07/19 16:32	C9J0157	CJ90208
Aroclor 1221	ND (0.09)		8082A		1	10/07/19 16:32	C9J0157	CJ90208
Aroclor 1232	ND (0.09)		8082A		1	10/07/19 16:32	C9J0157	CJ90208
Aroclor 1242	ND (0.09)		8082A		1	10/07/19 16:32	C9J0157	CJ90208
Aroclor 1248	ND (0.09)		8082A		1	10/07/19 16:32	C9J0157	CJ90208
Aroclor 1254	ND (0.09)		8082A		1	10/07/19 16:32	C9J0157	CJ90208
Aroclor 1260 [2C]	**0.3** (0.09)		8082A		1	10/07/19 16:32	C9J0157	CJ90208
Aroclor 1262	ND (0.09)		8082A		1	10/07/19 16:32	C9J0157	CJ90208
Aroclor 1268	ND (0.09)		8082A		1	10/07/19 16:32	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*111 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*104 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-61
Date Sampled: 09/27/19 08:05
Percent Solids: 100
Initial Volume: 5.35
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0021
ESS Laboratory Sample ID: 19J0021-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/07/19 16:52	C9J0157	CJ90208
Aroclor 1221	ND (0.09)		8082A		1	10/07/19 16:52	C9J0157	CJ90208
Aroclor 1232	ND (0.09)		8082A		1	10/07/19 16:52	C9J0157	CJ90208
Aroclor 1242	ND (0.09)		8082A		1	10/07/19 16:52	C9J0157	CJ90208
Aroclor 1248	ND (0.09)		8082A		1	10/07/19 16:52	C9J0157	CJ90208
Aroclor 1254	ND (0.09)		8082A		1	10/07/19 16:52	C9J0157	CJ90208
Aroclor 1260 [2C]	**0.3** (0.09)		8082A		1	10/07/19 16:52	C9J0157	CJ90208
Aroclor 1262	ND (0.09)		8082A		1	10/07/19 16:52	C9J0157	CJ90208
Aroclor 1268	ND (0.09)		8082A		1	10/07/19 16:52	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*91 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*110 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-62
Date Sampled: 09/27/19 08:10
Percent Solids: 100
Initial Volume: 5.28
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0021
ESS Laboratory Sample ID: 19J0021-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/07/19 17:11	C9J0157	CJ90208
Aroclor 1221	ND (0.09)		8082A		1	10/07/19 17:11	C9J0157	CJ90208
Aroclor 1232	ND (0.09)		8082A		1	10/07/19 17:11	C9J0157	CJ90208
Aroclor 1242	ND (0.09)		8082A		1	10/07/19 17:11	C9J0157	CJ90208
Aroclor 1248	ND (0.09)		8082A		1	10/07/19 17:11	C9J0157	CJ90208
Aroclor 1254	ND (0.09)		8082A		1	10/07/19 17:11	C9J0157	CJ90208
Aroclor 1260 [2C]	**0.3** (0.09)		8082A		1	10/07/19 17:11	C9J0157	CJ90208
Aroclor 1262	ND (0.09)		8082A		1	10/07/19 17:11	C9J0157	CJ90208
Aroclor 1268	ND (0.09)		8082A		1	10/07/19 17:11	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-63
Date Sampled: 09/27/19 08:15
Percent Solids: 99
Initial Volume: 5.17
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0021
ESS Laboratory Sample ID: 19J0021-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/07/19 18:08	C9J0157	CJ90208
Aroclor 1221	ND (0.1)		8082A		1	10/07/19 18:08	C9J0157	CJ90208
Aroclor 1232	ND (0.1)		8082A		1	10/07/19 18:08	C9J0157	CJ90208
Aroclor 1242	ND (0.1)		8082A		1	10/07/19 18:08	C9J0157	CJ90208
Aroclor 1248	ND (0.1)		8082A		1	10/07/19 18:08	C9J0157	CJ90208
Aroclor 1254	ND (0.1)		8082A		1	10/07/19 18:08	C9J0157	CJ90208
Aroclor 1260 [2C]	**0.3** (0.1)		8082A		1	10/07/19 18:08	C9J0157	CJ90208
Aroclor 1262	ND (0.1)		8082A		1	10/07/19 18:08	C9J0157	CJ90208
Aroclor 1268	ND (0.1)		8082A		1	10/07/19 18:08	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-64
Date Sampled: 09/27/19 08:20
Percent Solids: 99
Initial Volume: 5.47
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0021
ESS Laboratory Sample ID: 19J0021-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/07/19 18:28	C9J0157	CJ90208
Aroclor 1221	ND (0.09)		8082A		1	10/07/19 18:28	C9J0157	CJ90208
Aroclor 1232	ND (0.09)		8082A		1	10/07/19 18:28	C9J0157	CJ90208
Aroclor 1242	ND (0.09)		8082A		1	10/07/19 18:28	C9J0157	CJ90208
Aroclor 1248	ND (0.09)		8082A		1	10/07/19 18:28	C9J0157	CJ90208
Aroclor 1254	ND (0.09)		8082A		1	10/07/19 18:28	C9J0157	CJ90208
Aroclor 1260	**0.1** (0.09)		8082A		1	10/07/19 18:28	C9J0157	CJ90208
Aroclor 1262	ND (0.09)		8082A		1	10/07/19 18:28	C9J0157	CJ90208
Aroclor 1268	ND (0.09)		8082A		1	10/07/19 18:28	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-17
Date Sampled: 09/27/19 08:25
Percent Solids: 99
Initial Volume: 5.42
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0021
ESS Laboratory Sample ID: 19J0021-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/07/19 18:47	C9J0157	CJ90208
Aroclor 1221	ND (0.09)		8082A		1	10/07/19 18:47	C9J0157	CJ90208
Aroclor 1232	ND (0.09)		8082A		1	10/07/19 18:47	C9J0157	CJ90208
Aroclor 1242	ND (0.09)		8082A		1	10/07/19 18:47	C9J0157	CJ90208
Aroclor 1248	ND (0.09)		8082A		1	10/07/19 18:47	C9J0157	CJ90208
Aroclor 1254	ND (0.09)		8082A		1	10/07/19 18:47	C9J0157	CJ90208
Aroclor 1260	**0.6** (0.09)		8082A		1	10/07/19 18:47	C9J0157	CJ90208
Aroclor 1262	ND (0.09)		8082A		1	10/07/19 18:47	C9J0157	CJ90208
Aroclor 1268	ND (0.09)		8082A		1	10/07/19 18:47	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-18
Date Sampled: 09/27/19 08:30
Percent Solids: 99
Initial Volume: 5.12
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0021
ESS Laboratory Sample ID: 19J0021-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/07/19 21:01	C9J0157	CJ90208
Aroclor 1221	ND (0.1)		8082A		1	10/07/19 21:01	C9J0157	CJ90208
Aroclor 1232	ND (0.1)		8082A		1	10/07/19 21:01	C9J0157	CJ90208
Aroclor 1242	ND (0.1)		8082A		1	10/07/19 21:01	C9J0157	CJ90208
Aroclor 1248	ND (0.1)		8082A		1	10/07/19 21:01	C9J0157	CJ90208
Aroclor 1254	ND (0.1)		8082A		1	10/07/19 21:01	C9J0157	CJ90208
Aroclor 1260 [2C]	**0.5** (0.1)		8082A		1	10/07/19 21:01	C9J0157	CJ90208
Aroclor 1262	ND (0.1)		8082A		1	10/07/19 21:01	C9J0157	CJ90208
Aroclor 1268	ND (0.1)		8082A		1	10/07/19 21:01	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-19
Date Sampled: 09/27/19 08:35
Percent Solids: 99
Initial Volume: 5.17
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0021
ESS Laboratory Sample ID: 19J0021-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/07/19 21:20	C9J0157	CJ90208
Aroclor 1221	ND (0.1)		8082A		1	10/07/19 21:20	C9J0157	CJ90208
Aroclor 1232	ND (0.1)		8082A		1	10/07/19 21:20	C9J0157	CJ90208
Aroclor 1242	ND (0.1)		8082A		1	10/07/19 21:20	C9J0157	CJ90208
Aroclor 1248	ND (0.1)		8082A		1	10/07/19 21:20	C9J0157	CJ90208
Aroclor 1254	ND (0.1)		8082A		1	10/07/19 21:20	C9J0157	CJ90208
Aroclor 1260 [2C]	**0.6** (0.1)		8082A		1	10/07/19 21:20	C9J0157	CJ90208
Aroclor 1262	ND (0.1)		8082A		1	10/07/19 21:20	C9J0157	CJ90208
Aroclor 1268	ND (0.1)		8082A		1	10/07/19 21:20	C9J0157	CJ90208

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*73 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-20
Date Sampled: 09/27/19 08:40
Percent Solids: 99
Initial Volume: 5.24
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0021
ESS Laboratory Sample ID: 19J0021-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/07/19 21:39	C9J0157	CJ90208
Aroclor 1221	ND (0.1)		8082A		1	10/07/19 21:39	C9J0157	CJ90208
Aroclor 1232	ND (0.1)		8082A		1	10/07/19 21:39	C9J0157	CJ90208
Aroclor 1242	ND (0.1)		8082A		1	10/07/19 21:39	C9J0157	CJ90208
Aroclor 1248	ND (0.1)		8082A		1	10/07/19 21:39	C9J0157	CJ90208
Aroclor 1254	ND (0.1)		8082A		1	10/07/19 21:39	C9J0157	CJ90208
Aroclor 1260 [2C]	**0.9** (0.1)		8082A		1	10/07/19 21:39	C9J0157	CJ90208
Aroclor 1262	ND (0.1)		8082A		1	10/07/19 21:39	C9J0157	CJ90208
Aroclor 1268	ND (0.1)		8082A		1	10/07/19 21:39	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-09
Date Sampled: 09/27/19 08:45
Percent Solids: 99
Initial Volume: 5.32
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0021
ESS Laboratory Sample ID: 19J0021-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/07/19 21:58	C9J0157	CJ90208
Aroclor 1221	ND (0.1)		8082A		1	10/07/19 21:58	C9J0157	CJ90208
Aroclor 1232	ND (0.1)		8082A		1	10/07/19 21:58	C9J0157	CJ90208
Aroclor 1242	ND (0.1)		8082A		1	10/07/19 21:58	C9J0157	CJ90208
Aroclor 1248	ND (0.1)		8082A		1	10/07/19 21:58	C9J0157	CJ90208
Aroclor 1254	ND (0.1)		8082A		1	10/07/19 21:58	C9J0157	CJ90208
Aroclor 1260	**0.2** (0.1)		8082A		1	10/07/19 21:58	C9J0157	CJ90208
Aroclor 1262	ND (0.1)		8082A		1	10/07/19 21:58	C9J0157	CJ90208
Aroclor 1268	ND (0.1)		8082A		1	10/07/19 21:58	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0021

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ90208 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0226*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		105	40-140			
Aroclor 1016 [2C]	0.6	0.02	mg/kg wet	0.5000		125	40-140			
Aroclor 1260	0.6	0.02	mg/kg wet	0.5000		119	40-140			
Aroclor 1260 [2C]	0.6	0.02	mg/kg wet	0.5000		122	40-140			
Surrogate: Decachlorobiphenyl	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0275*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0261*		mg/kg wet	*0.02500*		*105*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		101	40-140	4	30	
Aroclor 1016 [2C]	0.6	0.02	mg/kg wet	0.5000		121	40-140	3	30	
Aroclor 1260	0.6	0.02	mg/kg wet	0.5000		116	40-140	3	30	
Aroclor 1260 [2C]	0.6	0.02	mg/kg wet	0.5000		119	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0261*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0274*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
Matrix Spike **Source: 19J0021-05**										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0021

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ90208 - 3540C										
Aroclor 1016	1.7	0.1	mg/kg dry	1.933	ND	88	40-140			
Aroclor 1016 [2C]	2.0	0.1	mg/kg dry	1.933	ND	104	40-140			
Aroclor 1260	2.1	0.1	mg/kg dry	1.933	0.3	89	40-140			
Aroclor 1260 [2C]	2.1	0.1	mg/kg dry	1.933	0.3	92	40-140			
Surrogate: Decachlorobiphenyl	*0.0821*		mg/kg dry	*0.09664*		*85*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0939*		mg/kg dry	*0.09664*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0755*		mg/kg dry	*0.09664*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0896*		mg/kg dry	*0.09664*		*93*	*30-150*			
Matrix Spike Source: 19J0021-12										
Aroclor 1016	1.4	0.09	mg/kg dry	1.896	ND	76	40-140			
Aroclor 1016 [2C]	1.7	0.09	mg/kg dry	1.896	ND	91	40-140			
Aroclor 1260	1.6	0.09	mg/kg dry	1.896	0.2	75	40-140			
Aroclor 1260 [2C]	1.7	0.09	mg/kg dry	1.896	0.1	84	40-140			
Surrogate: Decachlorobiphenyl	*0.0722*		mg/kg dry	*0.09479*		*76*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0829*		mg/kg dry	*0.09479*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0658*		mg/kg dry	*0.09479*		*69*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0764*		mg/kg dry	*0.09479*		*81*	*30-150*			
Matrix Spike Dup Source: 19J0021-05										
Aroclor 1016	1.5	0.09	mg/kg dry	1.821	ND	83	40-140	12	30	
Aroclor 1016 [2C]	1.8	0.09	mg/kg dry	1.821	ND	100	40-140	10	30	
Aroclor 1260	1.8	0.09	mg/kg dry	1.821	0.3	82	40-140	12	30	
Aroclor 1260 [2C]	1.9	0.09	mg/kg dry	1.821	0.3	86	40-140	11	30	
Surrogate: Decachlorobiphenyl	*0.0748*		mg/kg dry	*0.09103*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0831*		mg/kg dry	*0.09103*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0693*		mg/kg dry	*0.09103*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0805*		mg/kg dry	*0.09103*		*88*	*30-150*			
Matrix Spike Dup Source: 19J0021-12										
Aroclor 1016	1.6	0.1	mg/kg dry	1.993	ND	80	40-140	10	30	
Aroclor 1016 [2C]	1.9	0.1	mg/kg dry	1.993	ND	93	40-140	8	30	
Aroclor 1260	1.7	0.1	mg/kg dry	1.993	0.2	77	40-140	6	30	
Aroclor 1260 [2C]	1.8	0.1	mg/kg dry	1.993	0.1	84	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0781*		mg/kg dry	*0.09963*		*78*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0879*		mg/kg dry	*0.09963*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0726*		mg/kg dry	*0.09963*		*73*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0822*		mg/kg dry	*0.09963*		*83*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0021

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0021

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 19J0021
Date Received: 10/1/2019
Project Due Date: 10/8/2019
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 0.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes (No)
    a. Was there a need to contact the client? Yes (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	393723	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	393722	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	393721	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	393720	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	393719	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	393718	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	393717	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	393716	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	393715	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	393714	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	393713	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	393712	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review

Were all containers scanned into storage/lab? Initials

Are barcode labels on correct containers? Yes / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 19J0021

Date Received: 10/1/2019

Completed By: _____ Date & Time: 10/1/19 1935

Reviewed By: _____ Date & Time: 10/1/19 2053

Delivered By: _____ 10/1/19 2053

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 190021

Turn Time	5-Day **Rush**
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	**Project #**	**Project Name**
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI
Contact Person	**Address**	
Mark Zoller	4 First Street	
City	**State**	**Zip Code** / **PO #**
Bridgewater	MA	02324 / 5675.F
Telephone Number	**FAX Number**	**Email Address**
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

DiFrancesco

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082	MS/MSD
01	9/26/19	9:40 a.m.	Grab	Solid	ICS-03-47	X	
02	9/26/19	9:45 a.m.	Grab	Solid	ICS-03-48	X	
03	9/27/19	8:00 a.m.	Grab	Solid	ICS-01-60	X	
04	9/27/19	8:05 a.m.	Grab	Solid	ICS-01-61	X	
05	9/27/19	8:10 a.m.	Grab	Solid	ICS-01-62	X	X
06	9/27/19	8:15 a.m.	Grab	Solid	ICS-01-63	X	
07	9/27/19	8:20 a.m.	Grab	Solid	ICS-01-64	X	
08	9/27/19	8:25 a.m.	Grab	Solid	ICS-04-17	X	
09	9/27/19	8:30 a.m.	Grab	Solid	ICS-04-18	X	
10	9/27/19	8:35 a.m.	Grab	Solid	ICS-04-19	X	

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓
Seals Intact: NA
Cooler Temperature: °C Ice then 0.4

Sampled by : DJD/MJM

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice
Homogenize Sample TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
9/30/19 12:18 p.m.	10/1/19 12:36	10/1/19 16:37	10/1/19 1637
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory

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CHAIN OF CUSTODY

ESS Lab # 1930021

Turn Time	5-Day **Rush**
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Excel ☑ Other (Please Specify →)

Company Name	**Project #**	**Project Name**
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket, RI
Contact Person	**Address**	
Mark Zoller	4 First Street	
City	**State**	**Zip Code** / **PO #**
Bridgewater	MA	02324 / 5675.F
Telephone Number	**FAX Number**	**Email Address**
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

Analysis

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID (DDiFrancesco)	PCBs 8082	MS/MSD
11	9/27/19	8:40 a.m.	Grab	Solid	ICS-04-20	X	
12	9/27/19	8:45 a.m.	Grab	Solid	DUP-09	X	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: (12) — 1

Laboratory Use Only
Cooler Present: ✓
Seals Intact: NA
Cooler Temperature: °C (cooler temp. 0.4)

Sampled by : ~~MMR~~ DJD/MJM

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice

Homogenize Sample TSCA Requirements, Provide Full Data P

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
9/30/19 1:19 pm	10/1/19 13:30	10/1/19 16:37	10/1/19 1648
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 20A0099

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 12:29 pm, Jan 15, 2020

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0099

SAMPLE RECEIPT

The following samples were received on January 07, 2020 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
20A0099-01	ICS-03-52	Solid	8082A
20A0099-02	ICS-03-53	Solid	8082A
20A0099-03	ICS-03-54	Solid	8082A
20A0099-04	ICS-03-55	Solid	8082A
20A0099-05	ICS-03-56	Solid	8082A
20A0099-06	ICS-04-21	Solid	8082A
20A0099-07	ICS-04-22	Solid	8082A
20A0099-08	ICS-04-23	Solid	8082A
20A0099-09	ICS-04-24	Solid	8082A
20A0099-10	ICS-01-65	Solid	8082A
20A0099-11	ICS-01-66	Solid	8082A
20A0099-12	ICS-01-67	Solid	8082A
20A0099-13	ICS-01-68	Solid	8082A
20A0099-14	ICS-01-69	Solid	8082A
20A0099-15	ICS-01-70	Solid	8082A
20A0099-16	ICS-01-71	Solid	8082A
20A0099-17	ICS-01-72	Solid	8082A
20A0099-18	ICS-01-73	Solid	8082A
20A0099-19	DUP-10	Solid	8082A
20A0099-20	DUP-11	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0099

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0099

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-52
Date Sampled: 01/03/20 13:15
Percent Solids: 99
Initial Volume: 5.23
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 16:16	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 16:16	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 16:16	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 16:16	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 16:16	C0A0149	CA00824
Aroclor 1254	ND (0.1)		8082A		1	01/10/20 16:16	C0A0149	CA00824
Aroclor 1260 [2C]	**0.3** (0.1)		8082A		1	01/10/20 16:16	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 16:16	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 16:16	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-53
Date Sampled: 01/03/20 13:20
Percent Solids: 99
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 16:36	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 16:36	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 16:36	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 16:36	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 16:36	C0A0149	CA00824
Aroclor 1254	ND (0.1)		8082A		1	01/10/20 16:36	C0A0149	CA00824
Aroclor 1260	**0.6** (0.1)		8082A		1	01/10/20 16:36	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 16:36	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 16:36	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-54
Date Sampled: 01/03/20 13:25
Percent Solids: 99
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 16:55	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 16:55	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 16:55	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 16:55	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 16:55	C0A0149	CA00824
Aroclor 1254	ND (0.1)		8082A		1	01/10/20 16:55	C0A0149	CA00824
Aroclor 1260	**0.6** (0.1)		8082A		1	01/10/20 16:55	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 16:55	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 16:55	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-55
Date Sampled: 01/03/20 13:30
Percent Solids: 99
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 17:14	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 17:14	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 17:14	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 17:14	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 17:14	C0A0149	CA00824
Aroclor 1254	ND (0.1)		8082A		1	01/10/20 17:14	C0A0149	CA00824
Aroclor 1260	**0.9** (0.1)		8082A		1	01/10/20 17:14	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 17:14	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 17:14	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-56
Date Sampled: 01/03/20 13:35
Percent Solids: 99
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 17:34	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 17:34	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 17:34	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 17:34	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 17:34	C0A0149	CA00824
Aroclor 1254	ND (0.1)		8082A		1	01/10/20 17:34	C0A0149	CA00824
Aroclor 1260	**0.3** (0.1)		8082A		1	01/10/20 17:34	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 17:34	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 17:34	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-21
Date Sampled: 01/03/20 13:40
Percent Solids: 99
Initial Volume: 5.15
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 17:53	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 17:53	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 17:53	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 17:53	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 17:53	C0A0149	CA00824
Aroclor 1254 [2C]	**0.3** (0.1)		8082A		1	01/10/20 17:53	C0A0149	CA00824
Aroclor 1260 [2C]	**0.5** (0.1)		8082A		1	01/10/20 17:53	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 17:53	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 17:53	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-22
Date Sampled: 01/03/20 13:45
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 18:13	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 18:13	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 18:13	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 18:13	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 18:13	C0A0149	CA00824
Aroclor 1254 [2C]	**0.4** (0.1)		8082A		1	01/10/20 18:13	C0A0149	CA00824
Aroclor 1260 [2C]	**0.4** (0.1)		8082A		1	01/10/20 18:13	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 18:13	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 18:13	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-23
Date Sampled: 01/03/20 13:50
Percent Solids: 99
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 18:32	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 18:32	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 18:32	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 18:32	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 18:32	C0A0149	CA00824
Aroclor 1254 [2C]	**0.2** (0.1)		8082A		1	01/10/20 18:32	C0A0149	CA00824
Aroclor 1260 [2C]	**0.3** (0.1)		8082A		1	01/10/20 18:32	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 18:32	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 18:32	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-24
Date Sampled: 01/03/20 13:55
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 18:51	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 18:51	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 18:51	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 18:51	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 18:51	C0A0149	CA00824
Aroclor 1254	ND (0.1)		8082A		1	01/10/20 18:51	C0A0149	CA00824
Aroclor 1260	**0.3** (0.1)		8082A		1	01/10/20 18:51	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 18:51	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 18:51	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-65
Date Sampled: 01/03/20 14:00
Percent Solids: 98
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 19:10	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 19:10	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 19:10	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 19:10	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 19:10	C0A0149	CA00824
Aroclor 1254	ND (0.1)		8082A		1	01/10/20 19:10	C0A0149	CA00824
Aroclor 1260 [2C]	**0.1** (0.1)		8082A		1	01/10/20 19:10	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 19:10	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 19:10	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-66
Date Sampled: 01/03/20 14:05
Percent Solids: 99
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 19:30	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 19:30	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 19:30	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 19:30	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 19:30	C0A0149	CA00824
Aroclor 1254	ND (0.1)		8082A		1	01/10/20 19:30	C0A0149	CA00824
Aroclor 1260	**0.3** (0.1)		8082A		1	01/10/20 19:30	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 19:30	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 19:30	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*103 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*106 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-67
Date Sampled: 01/03/20 14:10
Percent Solids: 92
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 19:49	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 19:49	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 19:49	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 19:49	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 19:49	C0A0149	CA00824
Aroclor 1254	ND (0.1)		8082A		1	01/10/20 19:49	C0A0149	CA00824
Aroclor 1260 [2C]	**1.4** (0.1)		8082A		1	01/10/20 19:49	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 19:49	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 19:49	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-68
Date Sampled: 01/03/20 14:15
Percent Solids: 95
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 20:08	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 20:08	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 20:08	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 20:08	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 20:08	C0A0149	CA00824
Aroclor 1254	ND (0.1)		8082A		1	01/10/20 20:08	C0A0149	CA00824
Aroclor 1260	ND (0.1)		8082A		1	01/10/20 20:08	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 20:08	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 20:08	C0A0149	CA00824

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*59 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-69
Date Sampled: 01/03/20 14:20
Percent Solids: 98
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-14
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 23:00	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 23:00	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 23:00	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 23:00	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 23:00	C0A0149	CA00824
Aroclor 1254 [2C]	**0.4** (0.1)		8082A		1	01/10/20 23:00	C0A0149	CA00824
Aroclor 1260 [2C]	**0.6** (0.1)		8082A		1	01/10/20 23:00	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 23:00	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 23:00	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-70
Date Sampled: 01/03/20 14:25
Percent Solids: 98
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-15
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 23:19	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 23:19	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 23:19	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 23:19	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 23:19	C0A0149	CA00824
Aroclor 1254 [2C]	**0.7** (0.1)		8082A		1	01/10/20 23:19	C0A0149	CA00824
Aroclor 1260 [2C]	**1.0** (0.1)		8082A		1	01/10/20 23:19	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 23:19	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 23:19	C0A0149	CA00824

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-71
Date Sampled: 01/03/20 14:30
Percent Solids: 97
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-16
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 23:38	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 23:38	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 23:38	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 23:38	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 23:38	C0A0149	CA00824
Aroclor 1254 [2C]	**0.5** (0.1)		8082A		1	01/10/20 23:38	C0A0149	CA00824
Aroclor 1260 [2C]	**0.7** (0.1)		8082A		1	01/10/20 23:38	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/10/20 23:38	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 23:38	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-72
Date Sampled: 01/03/20 14:35
Percent Solids: 98
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-17
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/10/20 23:57	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/10/20 23:57	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/10/20 23:57	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/10/20 23:57	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/10/20 23:57	C0A0149	CA00824
Aroclor 1254 [2C]	**0.2** (0.1)		8082A		1	01/10/20 23:57	C0A0149	CA00824
Aroclor 1260	ND (0.1)		8082A		1	01/10/20 23:57	C0A0149	CA00824
Aroclor 1262	**0.3** (0.1)		8082A		1	01/10/20 23:57	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/10/20 23:57	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*103 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-73
Date Sampled: 01/03/20 14:40
Percent Solids: 95
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-18
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/13/20 15:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/14/20 10:32	C0A0196	CA01342
Aroclor 1221	ND (0.1)		8082A		1	01/14/20 10:32	C0A0196	CA01342
Aroclor 1232	ND (0.1)		8082A		1	01/14/20 10:32	C0A0196	CA01342
Aroclor 1242	ND (0.1)		8082A		1	01/14/20 10:32	C0A0196	CA01342
Aroclor 1248	ND (0.1)		8082A		1	01/14/20 10:32	C0A0196	CA01342
Aroclor 1254 [2C]	**0.2** (0.1)		8082A		1	01/14/20 10:32	C0A0196	CA01342
Aroclor 1260 [2C]	**0.1** (0.1)		8082A		1	01/14/20 10:32	C0A0196	CA01342
Aroclor 1262	ND (0.1)		8082A		1	01/14/20 10:32	C0A0196	CA01342
Aroclor 1268	ND (0.1)		8082A		1	01/14/20 10:32	C0A0196	CA01342

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*51 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-10
Date Sampled: 01/03/20 14:45
Percent Solids: 98
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-19
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/11/20 0:36	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/11/20 0:36	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/11/20 0:36	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/11/20 0:36	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/11/20 0:36	C0A0149	CA00824
Aroclor 1254	ND (0.1)		8082A		1	01/11/20 0:36	C0A0149	CA00824
Aroclor 1260	ND (0.1)		8082A		1	01/11/20 0:36	C0A0149	CA00824
Aroclor 1262	ND (0.1)		8082A		1	01/11/20 0:36	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/11/20 0:36	C0A0149	CA00824

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-11
Date Sampled: 01/03/20 14:50
Percent Solids: 99
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0099
ESS Laboratory Sample ID: 20A0099-20
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/11/20 0:55	C0A0149	CA00824
Aroclor 1221	ND (0.1)		8082A		1	01/11/20 0:55	C0A0149	CA00824
Aroclor 1232	ND (0.1)		8082A		1	01/11/20 0:55	C0A0149	CA00824
Aroclor 1242	ND (0.1)		8082A		1	01/11/20 0:55	C0A0149	CA00824
Aroclor 1248	ND (0.1)		8082A		1	01/11/20 0:55	C0A0149	CA00824
Aroclor 1254 [2C]	**0.3** (0.1)		8082A		1	01/11/20 0:55	C0A0149	CA00824
Aroclor 1260	ND (0.1)		8082A		1	01/11/20 0:55	C0A0149	CA00824
Aroclor 1262	**0.4** (0.1)		8082A		1	01/11/20 0:55	C0A0149	CA00824
Aroclor 1268	ND (0.1)		8082A		1	01/11/20 0:55	C0A0149	CA00824

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0099

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CA00824 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0188*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0192*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0191*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		88	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140			
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		74	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		74	40-140			
Surrogate: Decachlorobiphenyl	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		91	40-140	3	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140	5	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		80	40-140	8	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		80	40-140	8	30	
Surrogate: Decachlorobiphenyl	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0259*		mg/kg wet	*0.02500*		*103*	*30-150*			
Batch CA01342 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0099

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CA01342 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0264*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0282*		mg/kg wet	*0.02500*		*113*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		96	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		94	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		93	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		98	40-140			
Surrogate: Decachlorobiphenyl	*0.0273*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0291*		mg/kg wet	*0.02500*		*117*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0236*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		92	40-140	4	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140	4	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		90	40-140	3	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		95	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0275*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0099

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0099

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 20A0099
Date Received: 1/7/2020
Project Due Date: 1/13/2020
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.5 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	776	Yes	N/A	Yes	4 oz. Jar	NP	
2	777	Yes	N/A	Yes	4 oz. Jar	NP	
3	778	Yes	N/A	Yes	4 oz. Jar	NP	
4	779	Yes	N/A	Yes	4 oz. Jar	NP	
5	780	Yes	N/A	Yes	4 oz. Jar	NP	
6	781	Yes	N/A	Yes	4 oz. Jar	NP	
7	782	Yes	N/A	Yes	4 oz. Jar	NP	
8	783	Yes	N/A	Yes	4 oz. Jar	NP	
9	784	Yes	N/A	Yes	4 oz. Jar	NP	
10	785	Yes	N/A	Yes	4 oz. Jar	NP	
11	786	Yes	N/A	Yes	4 oz. Jar	NP	
12	787	Yes	N/A	Yes	4 oz. Jar	NP	
13	788	Yes	N/A	Yes	4 oz. Jar	NP	
14	789	Yes	N/A	Yes	4 oz. Jar	NP	
15	790	Yes	N/A	Yes	4 oz. Jar	NP	
16	791	Yes	N/A	Yes	4 oz. Jar	NP	
17	792	Yes	N/A	Yes	4 oz. Jar	NP	

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 20A0099
Date Received: 1/7/2020

18	793	Yes	N/A	Yes	4 oz. Jar	NP
19	794	Yes	N/A	Yes	8 oz jar	NP
20	795	Yes	N/A	Yes	4 oz. Jar	NP

2nd Review

Initials

Were all containers scanned into storage/lab? Yes / No
Are barcode labels on correct containers? Yes / No / NA
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: _____ Date & Time: 1/7/20 2029

Reviewed By: _____ Date & Time: 1/7/20 2034

Delivered By: _____ 1/7/20 2034

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20A0099

Turn Time	5-Day **Rush**
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	<0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name Coneco Engineers & Scientists	**Project #** 5675.F	**Project Name** Pawtucket Control House, 6 Thorton Ave, Pawtucket, RI	
Contact Person Mark Zoller	**Address** 4 First Street		
City Bridgewater	**State** Massachusetts	**Zip Code** 02324	**PO #** 5675.F
Telephone Number (508) 697-3191	**FAX Number**	**Email Address** Jaevaelis, Mzoller, Kloftus, Ddifrancesco@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by 8082
01	1/3/2020	1:15 p.m.	Grab	Solid	ICS-03-52	X
02	1/3/2020	1:20 p.m.	Grab	Solid	ICS-03-53	X
03	1/3/2020	1:25 p.m.	Grab	Solid	ICS-03-54	X
04	1/3/2020	1:30 p.m.	Grab	Solid	ICS-03-55	X
05	1/3/2020	1:35 p.m.	Grab	Solid	ICS-03-56	X
06	1/3/2020	1:40 p.m.	Grab	Solid	ICS-04-21	X
07	1/3/2020	1:45 p.m.	Grab	Solid	ICS-04-22	X
08	1/3/2020	1:50 p.m.	Grab	Solid	ICS-04-23	X
09	1/3/2020	1:55 p.m.	Grab	Solid	ICS-04-24	X
10	1/3/2020	2:00 p.m.	Grab	Solid	ICS-01-65	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓
Seals Intact: ✓
Cooler Temperature: 3.5 °C

Sampled by : DJD/CKL

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice

Homogenize Sample TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Donald D Thomson 1/6/2020	1/2 11:20	1/2 15:09	1/7/20 1509
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20A099

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	<0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Excel ☑ Other (Please Specify →)

Company Name Coneco Engineers & Scientists	**Project #** 5675.F	**Project Name** Pawtucket Control House, 6 Thorton Ave,	
Contact Person Mark Zoller		**Address** 4 First Street	
City Bridgewater	**State** Massachusetts	**Zip Code** 02324	**PO #** 5675.F
Telephone Number (508) 697-3191	**FAX Number**	**Email Address** Jaevaelis, Mzoller, Kloftus,	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by 8082
11	1/3/2020	2:05 p.m.	Grab	Solid	ICS-01-66	X
12	1/3/2020	2:10 p.m.	Grab	Solid	ICS-01-67	X
13	1/3/2020	2:15 p.m.	Grab	Solid	ICS-01-68	X
14	1/3/2020	2:20 p.m.	Grab	Solid	ICS-01-69	X
15	1/3/2020	2:25 p.m.	Grab	Solid	ICS-01-70	X
16	1/3/2020	2:30 p.m.	Grab	Solid	ICS-01-71	X
17	1/3/2020	2:35 p.m.	Grab	Solid	ICS-01-72	X
18	1/3/2020	2:40 p.m.	Grab	Solid	ICS-01-73	X
19	1/3/2020	2:45 p.m.	Grab	Solid	DUP-10	X
20	1/3/2020	2:50 p.m.	Grab	Solid	DUP-11	X

Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*	11
	Number of Containers per Sample:	1

Laboratory Use Only

Cooler Present: Y
Seals Intact: Y
Cooler Temperature: 3.5 °C

Sampled by : DJD/CKL

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice

Homogenize Sample TSCA Requirements, Provide Full Data F

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Donald D Summerson 1/6/2020	1/7 11:20	1/7 13:09	1/7/20 1509
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 20A0100

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 12:32 pm, Jan 15, 2020

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0100

SAMPLE RECEIPT

The following samples were received on January 07, 2020 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
20A0100-01	ICS-03-44 0.5-1	Solid	8082A
20A0100-02	ICS-03-44 1-2	Solid	8082A
20A0100-03	ICS-03-44 2-3	Solid	8082A
20A0100-04	ICS-03-44 3-4	Solid	8082A
20A0100-05	ICS-03-45 0.5-1	Solid	8082A
20A0100-06	ICS-03-45 1-2	Solid	8082A
20A0100-07	ICS-03-45 2-3	Solid	8082A
20A0100-08	ICS-03-45 3-4	Solid	8082A
20A0100-09	ICS-03-23 0.5-1	Solid	8082A
20A0100-10	ICS-03-23 1-2	Solid	8082A
20A0100-11	ICS-03-23 2-3	Solid	8082A
20A0100-12	ICS-03-27 0.5-1	Solid	8082A
20A0100-13	ICS-03-27 1-2	Solid	8082A
20A0100-14	ICS-03-27 2-3	Solid	8082A
20A0100-15	ICS-03-33 0.5-1	Solid	8082A
20A0100-16	ICS-03-33 1-2	Solid	8082A
20A0100-17	ICS-03-33 2-3	Solid	8082A
20A0100-18	ICS-03-49	Solid	8082A
20A0100-19	ICS-03-50	Solid	8082A
20A0100-20	ICS-03-51	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0100

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

20A0100-01 **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%)

20A0100-02 **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%)

20A0100-03 **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%)

20A0100-04 **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%)

20A0100-05 **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%)

20A0100-06 **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%)

20A0100-07 **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%)

20A0100-08 **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%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0100

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-44 0.5-1
Date Sampled: 01/03/20 08:30
Percent Solids: 99
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1010)		8082A		10000	01/13/20 20:06	C0A0195	CA00825
Aroclor 1221	ND (1010)		8082A		10000	01/13/20 20:06	C0A0195	CA00825
Aroclor 1232	ND (1010)		8082A		10000	01/13/20 20:06	C0A0195	CA00825
Aroclor 1242	ND (1010)		8082A		10000	01/13/20 20:06	C0A0195	CA00825
Aroclor 1248	ND (1010)		8082A		10000	01/13/20 20:06	C0A0195	CA00825
Aroclor 1254	ND (1010)		8082A		10000	01/13/20 20:06	C0A0195	CA00825
Aroclor 1260 [2C]	**3300** (1010)		8082A		10000	01/13/20 20:06	C0A0195	CA00825
Aroclor 1262	ND (1010)		8082A		10000	01/13/20 20:06	C0A0195	CA00825
Aroclor 1268	ND (1010)		8082A		10000	01/13/20 20:06	C0A0195	CA00825

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-44 1-2
Date Sampled: 01/03/20 08:45
Percent Solids: 99
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (99.3)		8082A		1000	01/13/20 20:26	C0A0195	CA00825
Aroclor 1221	ND (99.3)		8082A		1000	01/13/20 20:26	C0A0195	CA00825
Aroclor 1232	ND (99.3)		8082A		1000	01/13/20 20:26	C0A0195	CA00825
Aroclor 1242	ND (99.3)		8082A		1000	01/13/20 20:26	C0A0195	CA00825
Aroclor 1248	ND (99.3)		8082A		1000	01/13/20 20:26	C0A0195	CA00825
Aroclor 1254	ND (99.3)		8082A		1000	01/13/20 20:26	C0A0195	CA00825
Aroclor 1260 [2C]	**1100** (99.3)		8082A		1000	01/13/20 20:26	C0A0195	CA00825
Aroclor 1262	ND (99.3)		8082A		1000	01/13/20 20:26	C0A0195	CA00825
Aroclor 1268	ND (99.3)		8082A		1000	01/13/20 20:26	C0A0195	CA00825

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-44 2-3
Date Sampled: 01/03/20 09:00
Percent Solids: 99
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.0)		8082A		20	01/13/20 20:45	C0A0195	CA00825
Aroclor 1221	ND (2.0)		8082A		20	01/13/20 20:45	C0A0195	CA00825
Aroclor 1232	ND (2.0)		8082A		20	01/13/20 20:45	C0A0195	CA00825
Aroclor 1242	ND (2.0)		8082A		20	01/13/20 20:45	C0A0195	CA00825
Aroclor 1248	ND (2.0)		8082A		20	01/13/20 20:45	C0A0195	CA00825
Aroclor 1254	ND (2.0)		8082A		20	01/13/20 20:45	C0A0195	CA00825
Aroclor 1260 [2C]	**69.6** (2.0)		8082A		20	01/13/20 20:45	C0A0195	CA00825
Aroclor 1262	ND (2.0)		8082A		20	01/13/20 20:45	C0A0195	CA00825
Aroclor 1268	ND (2.0)		8082A		20	01/13/20 20:45	C0A0195	CA00825

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-44 3-4
Date Sampled: 01/03/20 09:15
Percent Solids: 99
Initial Volume: 5.14
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (24.5)		8082A		250	01/14/20 10:51	C0A0196	CA00825
Aroclor 1221	ND (24.5)		8082A		250	01/14/20 10:51	C0A0196	CA00825
Aroclor 1232	ND (24.5)		8082A		250	01/14/20 10:51	C0A0196	CA00825
Aroclor 1242	ND (24.5)		8082A		250	01/14/20 10:51	C0A0196	CA00825
Aroclor 1248	ND (24.5)		8082A		250	01/14/20 10:51	C0A0196	CA00825
Aroclor 1254	ND (24.5)		8082A		250	01/14/20 10:51	C0A0196	CA00825
Aroclor 1260 [2C]	**180** (24.5)		8082A		250	01/14/20 10:51	C0A0196	CA00825
Aroclor 1262	ND (24.5)		8082A		250	01/14/20 10:51	C0A0196	CA00825
Aroclor 1268	ND (24.5)		8082A		250	01/14/20 10:51	C0A0196	CA00825

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-45 0.5-1
Date Sampled: 01/03/20 09:45
Percent Solids: 98
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1020)		8082A		10000	01/13/20 21:24	C0A0195	CA00825
Aroclor 1221	ND (1020)		8082A		10000	01/13/20 21:24	C0A0195	CA00825
Aroclor 1232	ND (1020)		8082A		10000	01/13/20 21:24	C0A0195	CA00825
Aroclor 1242	ND (1020)		8082A		10000	01/13/20 21:24	C0A0195	CA00825
Aroclor 1248	ND (1020)		8082A		10000	01/13/20 21:24	C0A0195	CA00825
Aroclor 1254	ND (1020)		8082A		10000	01/13/20 21:24	C0A0195	CA00825
Aroclor 1260 [2C]	**20900** (1020)		8082A		10000	01/13/20 21:24	C0A0195	CA00825
Aroclor 1262	ND (1020)		8082A		10000	01/13/20 21:24	C0A0195	CA00825
Aroclor 1268	ND (1020)		8082A		10000	01/13/20 21:24	C0A0195	CA00825

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-45 1-2
Date Sampled: 01/03/20 10:00
Percent Solids: 98
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1000)		8082A		10000	01/13/20 21:43	C0A0195	CA00825
Aroclor 1221	ND (1000)		8082A		10000	01/13/20 21:43	C0A0195	CA00825
Aroclor 1232	ND (1000)		8082A		10000	01/13/20 21:43	C0A0195	CA00825
Aroclor 1242	ND (1000)		8082A		10000	01/13/20 21:43	C0A0195	CA00825
Aroclor 1248	ND (1000)		8082A		10000	01/13/20 21:43	C0A0195	CA00825
Aroclor 1254	ND (1000)		8082A		10000	01/13/20 21:43	C0A0195	CA00825
Aroclor 1260 [2C]	**13400** (1000)		8082A		10000	01/13/20 21:43	C0A0195	CA00825
Aroclor 1262	ND (1000)		8082A		10000	01/13/20 21:43	C0A0195	CA00825
Aroclor 1268	ND (1000)		8082A		10000	01/13/20 21:43	C0A0195	CA00825

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-45 2-3
Date Sampled: 01/03/20 10:15
Percent Solids: 99
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1000)		8082A		10000	01/13/20 22:02	C0A0195	CA00825
Aroclor 1221	ND (1000)		8082A		10000	01/13/20 22:02	C0A0195	CA00825
Aroclor 1232	ND (1000)		8082A		10000	01/13/20 22:02	C0A0195	CA00825
Aroclor 1242	ND (1000)		8082A		10000	01/13/20 22:02	C0A0195	CA00825
Aroclor 1248	ND (1000)		8082A		10000	01/13/20 22:02	C0A0195	CA00825
Aroclor 1254	ND (1000)		8082A		10000	01/13/20 22:02	C0A0195	CA00825
Aroclor 1260 [2C]	**8970** (1000)		8082A		10000	01/13/20 22:02	C0A0195	CA00825
Aroclor 1262	ND (1000)		8082A		10000	01/13/20 22:02	C0A0195	CA00825
Aroclor 1268	ND (1000)		8082A		10000	01/13/20 22:02	C0A0195	CA00825

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-45 3-4
Date Sampled: 01/03/20 10:30
Percent Solids: 99
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (993)		8082A		10000	01/13/20 22:22	C0A0195	CA00825
Aroclor 1221	ND (993)		8082A		10000	01/13/20 22:22	C0A0195	CA00825
Aroclor 1232	ND (993)		8082A		10000	01/13/20 22:22	C0A0195	CA00825
Aroclor 1242	ND (993)		8082A		10000	01/13/20 22:22	C0A0195	CA00825
Aroclor 1248	ND (993)		8082A		10000	01/13/20 22:22	C0A0195	CA00825
Aroclor 1254	ND (993)		8082A		10000	01/13/20 22:22	C0A0195	CA00825
Aroclor 1260 [2C]	**12000** (993)		8082A		10000	01/13/20 22:22	C0A0195	CA00825
Aroclor 1262	ND (993)		8082A		10000	01/13/20 22:22	C0A0195	CA00825
Aroclor 1268	ND (993)		8082A		10000	01/13/20 22:22	C0A0195	CA00825

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-23 0.5-1
Date Sampled: 01/03/20 10:45
Percent Solids: 99
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 19:47	C0A0195	CA00825
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 19:47	C0A0195	CA00825
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 19:47	C0A0195	CA00825
Aroclor 1242	ND (0.1)		8082A		1	01/13/20 19:47	C0A0195	CA00825
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 19:47	C0A0195	CA00825
Aroclor 1254	ND (0.1)		8082A		1	01/13/20 19:47	C0A0195	CA00825
Aroclor 1260 [2C]	**0.2** (0.1)		8082A		1	01/13/20 19:47	C0A0195	CA00825
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 19:47	C0A0195	CA00825
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 19:47	C0A0195	CA00825

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-23 1-2
Date Sampled: 01/03/20 11:00
Percent Solids: 98
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 13:40	C0A0195	CA00825
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 13:40	C0A0195	CA00825
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 13:40	C0A0195	CA00825
Aroclor 1242	ND (0.1)		8082A		1	01/13/20 13:40	C0A0195	CA00825
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 13:40	C0A0195	CA00825
Aroclor 1254	ND (0.1)		8082A		1	01/13/20 13:40	C0A0195	CA00825
Aroclor 1260 [2C]	**0.3** (0.1)		8082A		1	01/13/20 13:40	C0A0195	CA00825
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 13:40	C0A0195	CA00825
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 13:40	C0A0195	CA00825

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-23 2-3
Date Sampled: 01/03/20 11:15
Percent Solids: 98
Initial Volume: 5.21
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 14:00	C0A0195	CA00825
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 14:00	C0A0195	CA00825
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 14:00	C0A0195	CA00825
Aroclor 1242	ND (0.1)		8082A		1	01/13/20 14:00	C0A0195	CA00825
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 14:00	C0A0195	CA00825
Aroclor 1254	ND (0.1)		8082A		1	01/13/20 14:00	C0A0195	CA00825
Aroclor 1260	ND (0.1)		8082A		1	01/13/20 14:00	C0A0195	CA00825
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 14:00	C0A0195	CA00825
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 14:00	C0A0195	CA00825

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-27 0.5-1
Date Sampled: 01/03/20 11:30
Percent Solids: 99
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 14:19	C0A0195	CA00825
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 14:19	C0A0195	CA00825
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 14:19	C0A0195	CA00825
Aroclor 1242	ND (0.1)		8082A		1	01/13/20 14:19	C0A0195	CA00825
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 14:19	C0A0195	CA00825
Aroclor 1254	ND (0.1)		8082A		1	01/13/20 14:19	C0A0195	CA00825
Aroclor 1260	ND (0.1)		8082A		1	01/13/20 14:19	C0A0195	CA00825
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 14:19	C0A0195	CA00825
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 14:19	C0A0195	CA00825

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-27 1-2
Date Sampled: 01/03/20 11:45
Percent Solids: 98
Initial Volume: 5.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 14:38	C0A0195	CA00825
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 14:38	C0A0195	CA00825
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 14:38	C0A0195	CA00825
Aroclor 1242	ND (0.1)		8082A		1	01/13/20 14:38	C0A0195	CA00825
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 14:38	C0A0195	CA00825
Aroclor 1254	ND (0.1)		8082A		1	01/13/20 14:38	C0A0195	CA00825
Aroclor 1260	ND (0.1)		8082A		1	01/13/20 14:38	C0A0195	CA00825
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 14:38	C0A0195	CA00825
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 14:38	C0A0195	CA00825

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-27 2-3
Date Sampled: 01/03/20 12:00
Percent Solids: 98
Initial Volume: 5.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-14
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 14:57	C0A0195	CA00825
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 14:57	C0A0195	CA00825
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 14:57	C0A0195	CA00825
Aroclor 1242	ND (0.1)		8082A		1	01/13/20 14:57	C0A0195	CA00825
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 14:57	C0A0195	CA00825
Aroclor 1254	ND (0.1)		8082A		1	01/13/20 14:57	C0A0195	CA00825
Aroclor 1260	ND (0.1)		8082A		1	01/13/20 14:57	C0A0195	CA00825
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 14:57	C0A0195	CA00825
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 14:57	C0A0195	CA00825

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*63 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*64 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-33 0.5-1
Date Sampled: 01/03/20 12:15
Percent Solids: 99
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-15
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 15:17	C0A0195	CA00825
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 15:17	C0A0195	CA00825
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 15:17	C0A0195	CA00825
Aroclor 1242	ND (0.1)		8082A		1	01/13/20 15:17	C0A0195	CA00825
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 15:17	C0A0195	CA00825
Aroclor 1254 [2C]	**1.1** (0.1)		8082A		1	01/13/20 15:17	C0A0195	CA00825
Aroclor 1260 [2C]	**1.2** (0.1)		8082A		1	01/13/20 15:17	C0A0195	CA00825
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 15:17	C0A0195	CA00825
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 15:17	C0A0195	CA00825

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-33 1-2
Date Sampled: 01/03/20 12:30
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-16
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 15:36	C0A0195	CA00825
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 15:36	C0A0195	CA00825
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 15:36	C0A0195	CA00825
Aroclor 1242	ND (0.1)		8082A		1	01/13/20 15:36	C0A0195	CA00825
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 15:36	C0A0195	CA00825
Aroclor 1254 [2C]	**0.4** (0.1)		8082A		1	01/13/20 15:36	C0A0195	CA00825
Aroclor 1260 [2C]	**0.3** (0.1)		8082A		1	01/13/20 15:36	C0A0195	CA00825
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 15:36	C0A0195	CA00825
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 15:36	C0A0195	CA00825

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-33 2-3
Date Sampled: 01/03/20 12:45
Percent Solids: 99
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-17
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 15:55	C0A0195	CA00825
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 15:55	C0A0195	CA00825
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 15:55	C0A0195	CA00825
Aroclor 1242	ND (0.1)		8082A		1	01/13/20 15:55	C0A0195	CA00825
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 15:55	C0A0195	CA00825
Aroclor 1254 [2C]	**0.2** (0.1)		8082A		1	01/13/20 15:55	C0A0195	CA00825
Aroclor 1260 [2C]	**0.1** (0.1)		8082A		1	01/13/20 15:55	C0A0195	CA00825
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 15:55	C0A0195	CA00825
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 15:55	C0A0195	CA00825

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-49
Date Sampled: 01/03/20 13:00
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-18
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 18:49	C0A0195	CA00825
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 18:49	C0A0195	CA00825
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 18:49	C0A0195	CA00825
Aroclor 1242	ND (0.1)		8082A		1	01/13/20 18:49	C0A0195	CA00825
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 18:49	C0A0195	CA00825
Aroclor 1254	ND (0.1)		8082A		1	01/13/20 18:49	C0A0195	CA00825
Aroclor 1260 [2C]	**0.3** (0.1)		8082A		1	01/13/20 18:49	C0A0195	CA00825
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 18:49	C0A0195	CA00825
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 18:49	C0A0195	CA00825

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-50
Date Sampled: 01/03/20 13:05
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-19
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 19:08	C0A0195	CA00825
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 19:08	C0A0195	CA00825
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 19:08	C0A0195	CA00825
Aroclor 1242	ND (0.1)		8082A		1	01/13/20 19:08	C0A0195	CA00825
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 19:08	C0A0195	CA00825
Aroclor 1254	ND (0.1)		8082A		1	01/13/20 19:08	C0A0195	CA00825
Aroclor 1260 [2C]	**0.4** (0.1)		8082A		1	01/13/20 19:08	C0A0195	CA00825
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 19:08	C0A0195	CA00825
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 19:08	C0A0195	CA00825

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-51
Date Sampled: 01/03/20 13:10
Percent Solids: 99
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0100
ESS Laboratory Sample ID: 20A0100-20
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 19:28	C0A0195	CA00825
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 19:28	C0A0195	CA00825
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 19:28	C0A0195	CA00825
Aroclor 1242	ND (0.1)		8082A		1	01/13/20 19:28	C0A0195	CA00825
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 19:28	C0A0195	CA00825
Aroclor 1254	ND (0.1)		8082A		1	01/13/20 19:28	C0A0195	CA00825
Aroclor 1260 [2C]	**0.7** (0.1)		8082A		1	01/13/20 19:28	C0A0195	CA00825
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 19:28	C0A0195	CA00825
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 19:28	C0A0195	CA00825

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0100

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CA00825 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		83	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		90	40-140			
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0271*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		83	40-140	2	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		85	40-140	3	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		81	40-140	3	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		87	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0261*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0211*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0100

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0100

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 20A0100
Date Received: 1/7/2020
Project Due Date: 1/13/2020
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.5 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

Rec'd an unmarked 4oz jar of paint chips.
"PS-125" is inked over in marker on cap.

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Mark Zoller Date: 1/8/20 Time: By: LLB

Add sample to WO 20A0097 for PCB

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	796	Yes	N/A	Yes	8 oz jar	NP	
2	797	Yes	N/A	Yes	8 oz jar	NP	
3	798	Yes	N/A	Yes	8 oz jar	NP	
4	799	Yes	N/A	Yes	8 oz jar	NP	
5	800	Yes	N/A	Yes	8 oz jar	NP	
6	801	Yes	N/A	Yes	8 oz jar	NP	
7	802	Yes	N/A	Yes	8 oz jar	NP	
8	803	Yes	N/A	Yes	8 oz jar	NP	
9	804	Yes	N/A	Yes	8 oz jar	NP	
10	805	Yes	N/A	Yes	8 oz jar	NP	
11	806	Yes	N/A	Yes	8 oz jar	NP	
12	807	Yes	N/A	Yes	8 oz jar	NP	
13	808	Yes	N/A	Yes	8 oz jar	NP	
14	809	Yes	N/A	Yes	8 oz jar	NP	
15	810	Yes	N/A	Yes	8 oz jar	NP	
16	811	Yes	N/A	Yes	8 oz jar	NP	
17	812	Yes	N/A	Yes	8 oz jar	NP	

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 20A0100
Date Received: 1/7/2020

18	813	Yes	N/A	Yes	4 oz. Jar	NP
19	814	Yes	N/A	Yes	4 oz. Jar	NP
20	815	Yes	N/A	Yes	4 oz. Jar	NP

2nd Review

Initials

Were all containers scanned into storage/lab? Yes / No
Are barcode labels on correct containers? Yes / No / NA
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted?

Completed By: _____ Date & Time: 1/7/20 2046

Reviewed By: _____ Date & Time: 1/7/20 2057

Delivered By: _____ 1/7/20 2057

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20A0100

Turn Time	5-Day **Rush**
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	<0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name Coneco Engineers & Scientists	**Project #** 5675.F	**Project Name** Pawtucket Control House, 6 Thorton Ave, Pawtucket, RI	
Contact Person Mark Zoller		**Address** 4 First Street	
City Bridgewater	**State** Massachusetts	**Zip Code** 02324	**PO #** 5675.F
Telephone Number (508) 697-3191	**FAX Number**	**Email Address** Jaevaelis, Mzoller, Kloftus, Ddifrancesco@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by 8082
01	1/3/2020	8:30 a.m.	Grab	Solid	ICS-03-44 (0.5-1)	X
02	1/3/2020	8:45 a.m.	Grab	Solid	ICS-03-44 (1-2)	X
03	1/3/2020	9:00 a.m.	Grab	Solid	ICS-03-44 (2-3)	X
04	1/3/2020	9:15 a.m.	Grab	Solid	ICS-03-44 (3-4)	X
05	1/3/2020	9:45 a.m.	Grab	Solid	ICS-03-45 (0.5-1)	X
06	1/3/2020	10:00 a.m.	Grab	Solid	ICS-03-45 (1-2)	X
07	1/3/2020	10:15 a.m.	Grab	Solid	ICS-03-45 (2-3)	X
08	1/3/2020	10:30 a.m.	Grab	Solid	ICS-03-45 (3-4)	X
09	1/3/2020	10:45 a.m.	Grab	Solid	ICS-03-23 (0.5-1)	X
10	1/3/2020	11:00 a.m.	Grab	Solid	ICS-03-23 (1-2)	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 10
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: Y
Seals Intact: Y
Cooler Temperature: 2.5 °C

Sampled by : DJD/CKL

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice

Homogenize Sample TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Daniel D'Amico 1/6/2020	1/7 11:20	1/7 15:08	1/7/20 1508
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
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Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20A0100

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	<0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Excel ☑ Other (Please Specify →)

Company Name	Project #	Project Name
Coneco Engineers & Scientists	5675.F	Pawtucket Control House, 6 Thorton Ave,
Contact Person	**Address**	
Mark Zoller	4 First Street	
City	**State**	**Zip Code** / **PO #**
Bridgewater	Massachusetts	02324 / 5675.F
Telephone Number	**FAX Number**	**Email Address**
(508) 697-3191		Jaevaelis, Mzoller, Kloftus, DDiFrancesco@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by 8082
11	1/3/2020	11:15 a.m.	Grab	Solid	ICS-03-23 (2-3)	X
12	1/3/2020	11:30 a.m.	Grab	Solid	ICS-03-27 (0.5-1)	X
13	1/3/2020	11:45 a.m.	Grab	Solid	ICS-03-27 (1-2)	X
14	1/3/2020	12:00 p.m.	Grab	Solid	ICS-03-27 (2-3)	X
15	1/3/2020	12:15 p.m.	Grab	Solid	ICS-03-33 (0.5-1)	X
16	1/3/2020	12:30 p.m.	Grab	Solid	ICS-03-33 (1-2)	X
17	1/3/2020	12:45 p.m.	Grab	Solid	ICS-03-33 (2-3)	X
18	1/3/2020	1:00 p.m.	Grab	Solid	ICS-03-49	X
19	1/3/2020	1:05 p.m.	Grab	Solid	ICS-03-50	X
20	1/3/2020	1:10 p.m.	Grab	Solid	ICS-03-51	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9/10

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: Y
Seals Intact: Y
Cooler Temperature: 3.5 °C

Sampled by : DJD/CKL

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice

Homogenize Sample TSCA Requirements, Provide Full Data P

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Daniel DiFrancesco 1/6/2020	1/7 11:20	1/7 15:08	1/7/20 1508
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 20F0218

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 12:52 pm, Jun 11, 2020

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0218

SAMPLE RECEIPT

The following samples were received on June 04, 2020 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
20F0218-01	ICS-01-74	Solid	8082A
20F0218-02	ICS-01-75	Solid	8082A
20F0218-03	ICS-01-76	Solid	8082A
20F0218-04	ICS-01-77	Solid	8082A
20F0218-05	ICS-01-78	Solid	8082A
20F0218-06	ICS-01-79	Solid	8082A
20F0218-07	ICS-01-80	Solid	8082A
20F0218-08	ICS-01-81	Solid	8082A
20F0218-09	ICS-03-57	Solid	8082A
20F0218-10	ICS-03-58	Solid	8082A
20F0218-11	ICS-03-59	Solid	8082A
20F0218-12	ICS-03-60	Solid	8082A
20F0218-13	ICS-04-25	Solid	8082A
20F0218-14	ICS-04-26	Solid	8082A
20F0218-15	ICS-04-27	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0218

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0218

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-74
Date Sampled: 05/28/20 09:05
Percent Solids: 99
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 17:48	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 17:48	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 17:48	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 17:48	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 17:48	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 17:48	D0F0137	DF00810
Aroclor 1260	**0.2** (0.1)		8082A		1	06/09/20 17:48	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 17:48	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 17:48	D0F0137	DF00810

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-75
Date Sampled: 05/28/20 09:10
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 18:07	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 18:07	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 18:07	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 18:07	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 18:07	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 18:07	D0F0137	DF00810
Aroclor 1260	**0.2** (0.1)		8082A		1	06/09/20 18:07	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 18:07	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 18:07	D0F0137	DF00810

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-76
Date Sampled: 05/28/20 09:15
Percent Solids: 98
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 18:27	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 18:27	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 18:27	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 18:27	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 18:27	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 18:27	D0F0137	DF00810
Aroclor 1260	ND (0.1)		8082A		1	06/09/20 18:27	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 18:27	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 18:27	D0F0137	DF00810

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-77
Date Sampled: 05/28/20 09:20
Percent Solids: 95
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 18:47	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 18:47	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 18:47	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 18:47	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 18:47	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 18:47	D0F0137	DF00810
Aroclor 1260 [2C]	**0.3** (0.1)		8082A		1	06/09/20 18:47	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 18:47	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 18:47	D0F0137	DF00810

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-78
Date Sampled: 05/28/20 09:25
Percent Solids: 95
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 19:07	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 19:07	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 19:07	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 19:07	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 19:07	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 19:07	D0F0137	DF00810
Aroclor 1260	**0.5** (0.1)		8082A		1	06/09/20 19:07	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 19:07	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 19:07	D0F0137	DF00810

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*48 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*45 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-79
Date Sampled: 05/28/20 09:30
Percent Solids: 98
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 19:27	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 19:27	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 19:27	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 19:27	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 19:27	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 19:27	D0F0137	DF00810
Aroclor 1260 [2C]	**0.5** (0.1)		8082A		1	06/09/20 19:27	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 19:27	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 19:27	D0F0137	DF00810

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-80
Date Sampled: 05/28/20 09:35
Percent Solids: 98
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 19:46	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 19:46	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 19:46	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 19:46	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 19:46	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 19:46	D0F0137	DF00810
Aroclor 1260	ND (0.1)		8082A		1	06/09/20 19:46	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 19:46	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 19:46	D0F0137	DF00810

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-81
Date Sampled: 05/28/20 09:40
Percent Solids: 95
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 20:06	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 20:06	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 20:06	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 20:06	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 20:06	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 20:06	D0F0137	DF00810
Aroclor 1260	**0.6** (0.1)		8082A		1	06/09/20 20:06	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 20:06	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 20:06	D0F0137	DF00810

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*45 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-57
Date Sampled: 05/28/20 09:45
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 20:26	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 20:26	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 20:26	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 20:26	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 20:26	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 20:26	D0F0137	DF00810
Aroclor 1260	**0.3** (0.1)		8082A		1	06/09/20 20:26	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 20:26	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 20:26	D0F0137	DF00810

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*113 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-58
Date Sampled: 05/28/20 09:50
Percent Solids: 99
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 20:46	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 20:46	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 20:46	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 20:46	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 20:46	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 20:46	D0F0137	DF00810
Aroclor 1260	**0.5** (0.1)		8082A		1	06/09/20 20:46	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 20:46	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 20:46	D0F0137	DF00810

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-59
Date Sampled: 05/28/20 09:55
Percent Solids: 98
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 21:05	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 21:05	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 21:05	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 21:05	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 21:05	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 21:05	D0F0137	DF00810
Aroclor 1260	**0.9** (0.1)		8082A		1	06/09/20 21:05	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 21:05	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 21:05	D0F0137	DF00810

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*82 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-60
Date Sampled: 05/28/20 10:00
Percent Solids: 99
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 21:25	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 21:25	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 21:25	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 21:25	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 21:25	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 21:25	D0F0137	DF00810
Aroclor 1260	**0.9** (0.1)		8082A		1	06/09/20 21:25	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 21:25	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 21:25	D0F0137	DF00810

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-25
Date Sampled: 05/29/20 13:00
Percent Solids: 99
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 21:45	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 21:45	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 21:45	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 21:45	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 21:45	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 21:45	D0F0137	DF00810
Aroclor 1260	**0.7** (0.1)		8082A		1	06/09/20 21:45	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 21:45	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 21:45	D0F0137	DF00810

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-26
Date Sampled: 05/29/20 13:05
Percent Solids: 99
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-14
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 22:05	D0F0137	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 22:05	D0F0137	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 22:05	D0F0137	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 22:05	D0F0137	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 22:05	D0F0137	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/09/20 22:05	D0F0137	DF00810
Aroclor 1260	**3.0** (0.1)		8082A		1	06/09/20 22:05	D0F0137	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 22:05	D0F0137	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 22:05	D0F0137	DF00810

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-27
Date Sampled: 05/29/20 13:10
Percent Solids: 99
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0218
ESS Laboratory Sample ID: 20F0218-15
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/8/20 12:49

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 12:35	D0F0185	DF00810
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 12:35	D0F0185	DF00810
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 12:35	D0F0185	DF00810
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 12:35	D0F0185	DF00810
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 12:35	D0F0185	DF00810
Aroclor 1254	ND (0.1)		8082A		1	06/10/20 12:35	D0F0185	DF00810
Aroclor 1260	**2.1** (0.1)		8082A		1	06/10/20 12:35	D0F0185	DF00810
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 12:35	D0F0185	DF00810
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 12:35	D0F0185	DF00810

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0218

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DF00810 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0178*		mg/kg wet	*0.02500*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0204*		mg/kg wet	*0.02500*		*82*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		98	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		90	40-140			
Surrogate: Decachlorobiphenyl	*0.0231*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0194*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		85	40-140	0.3	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		85	40-140	3	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		98	40-140	0.4	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		90	40-140	0.2	30	
Surrogate: Decachlorobiphenyl	*0.0231*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0194*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0218

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0218

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 20F0218
Date Received: 6/4/2020
Project Due Date: 6/11/2020
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / (NA)

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	49826	Yes	N/A	Yes	4 oz. Jar	NP	
2	49827	Yes	N/A	Yes	4 oz. Jar	NP	
3	49828	Yes	N/A	Yes	4 oz. Jar	NP	
4	49829	Yes	N/A	Yes	4 oz. Jar	NP	
5	49830	Yes	N/A	Yes	4 oz. Jar	NP	
6	49831	Yes	N/A	Yes	4 oz. Jar	NP	
7	49832	Yes	N/A	Yes	4 oz. Jar	NP	
8	49833	Yes	N/A	Yes	4 oz. Jar	NP	
9	49834	Yes	N/A	Yes	4 oz. Jar	NP	
10	49835	Yes	N/A	Yes	4 oz. Jar	NP	
11	49836	Yes	N/A	Yes	4 oz. Jar	NP	
12	49837	Yes	N/A	Yes	4 oz. Jar	NP	
13	49838	Yes	N/A	Yes	4 oz. Jar	NP	
14	49839	Yes	N/A	Yes	4 oz. Jar	NP	
15	49840	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 20F0218
Date Received: 6/4/2020

Were all containers scanned into storage/lab? Initials

Are barcode labels on correct containers? Yes / No

Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA

Are all Hex Chrome stickers attached? Yes / No / NA

Are all QC stickers attached? Yes / No / NA

Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Date & Time: 6/4/20 1950

Reviewed By: Date & Time: 6/4/20 2000

Delivered By: 6/4/20 2000

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20F0218

Turn Time: (5-Day) Rush
Regulatory State: Rhode Island
Is this project for any of the following?: ○ CT RCP ○ MA MCP ○ RGP
Reporting Limits: 2.05 mg/kg
Electonic Deliverables: ☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	Project #	Project Name
Conecto Engineers and scientists	5675.F	Pawtucket Control House, 1 Thornton Ave
Contact Person	**Address**	
Katie Loftus	4 First Street	Pawtucket, RI
City	**State**	**Zip Code** / **PO #**
Bridgewater	Massachusetts	02324 / 5675.F
Telephone Number	**FAX Number**	**Email Address**
508-697-3191		Jcarvazelis, MZoller, Kloftus,

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID (DDiFrancesco@Conecto.com)	Analysis: PCBs by 8082
1	5/28/20	9:05 am	Grab	Concrete	ICS-01-74	X
2		9:10 am			ICS-01-75	X
3		9:15 am			ICS-01-76	X
4		9:20 am			ICS-01-77	X
5		9:25 am			ICS-01-78	X
6		9:30 am			ICS-01-79	X
7		9:35 am			ICS-01-80	X
8		9:40 am			ICS-01-81	X
9		9:45 am			ICS-03-57	X
10		9:50 am			ICS-03-58	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G-Glass O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: _____
Seals Intact: _____
Cooler Temperature: -0.1/1.2 °C

Sampled by: DJD/LGG

Comments: Please specify "Other" preservative and containers types in this space
National Grid Project, Use Manual Soxhlet extraction per EPA Method 3540. Report dry weight, homogenize sample, TSCA Requirements, Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Daniel DiFrancesco 6/4/20 1440	6/4/20 1440	6/4/20 1541	6/4/20 1541
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20F0218

Turn Time: 5-Day (circled) Rush
Regulatory State: Rhode Island
Is this project for any of the following?: ○ CT RCP ○ MA MCP ○ RGP
Reporting Limits: 2.05 mg/kg
Electonic Deliverables: ☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name: Conecco Engineers and Scientists	Project #: 5675.F	Project Name: Pawtucket Control House, 1 Thornton Ave	
Contact Person: Katie Loftus		Address: 4 First Street	Pawtucket, RI
City: Bridgewater	State: Massachusetts	Zip Code: 02324	PO #: 5675.F
Telephone Number: 508-697-3191	FAX Number:	Email Address: Jaruzelis, MZoller, Hyden, Kloftus, DDiFrancesco@Conecco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by 8082
11	5/28/20	9:55 am	Grab	Concrete	ICS-03-59	X
12	5/28/20	10:00 am	↓	↓	ICS-03-60	X
13	5/29/20	1:00 pm			ICS-04-25	X
14	5/29/20	1:05 pm			ICS-04-26	X
15	5/29/20	1:10 pm	↓	↓	ICS-04-27	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G-Glass O-Other P-Poly S-Sterile V-Vial — A6
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: 1

Labpratory Use Only
Cooler Present: _____
Seals Intact: _____
Cooler Temperature: -0.1/1.7 °C

Sampled by: DJD/LGG

Comments: Please specify "Other" preservative and containers types in this space
National Grid Project, Use Manual Soxhlet extraction per EPA Method 3540. Report dry weight, homogenize sample, TSCA Requirements, Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Donna DiFrancesco 6/4/20 1440	6/4/20 1440	6/4/20 1541	6/4/20 1541
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 20I0163

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 1:56 pm, Sep 18, 2020

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0163

SAMPLE RECEIPT

The following samples were received on September 03, 2020 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
20I0163-01	ICS-01-82	Solid	8082A
20I0163-02	ICS-01-83	Solid	8082A
20I0163-03	ICS-01-84	Solid	8082A
20I0163-04	ICS-01-85	Solid	8082A
20I0163-05	ICS-01-86	Solid	8082A
20I0163-06	DUP-12	Solid	8082A
20I0163-07	DUP-13	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0163

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

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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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0163

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-82
Date Sampled: 09/02/20 09:05
Percent Solids: 99
Initial Volume: 5.54
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0163
ESS Laboratory Sample ID: 20I0163-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 12:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	09/09/20 5:35	D0I0062	DI01019
Aroclor 1221	ND (0.09)		8082A		1	09/09/20 5:35	D0I0062	DI01019
Aroclor 1232	ND (0.09)		8082A		1	09/09/20 5:35	D0I0062	DI01019
Aroclor 1242	ND (0.09)		8082A		1	09/09/20 5:35	D0I0062	DI01019
Aroclor 1248	ND (0.09)		8082A		1	09/09/20 5:35	D0I0062	DI01019
Aroclor 1254	ND (0.09)		8082A		1	09/09/20 5:35	D0I0062	DI01019
Aroclor 1260	ND (0.09)		8082A		1	09/09/20 5:35	D0I0062	DI01019
Aroclor 1262	ND (0.09)		8082A		1	09/09/20 5:35	D0I0062	DI01019
Aroclor 1268	ND (0.09)		8082A		1	09/09/20 5:35	D0I0062	DI01019

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-83
Date Sampled: 09/02/20 09:10
Percent Solids: 96
Initial Volume: 5.25
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0163
ESS Laboratory Sample ID: 20I0163-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 12:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/09/20 5:54	D0I0062	DI01019
Aroclor 1221	ND (0.1)		8082A		1	09/09/20 5:54	D0I0062	DI01019
Aroclor 1232	ND (0.1)		8082A		1	09/09/20 5:54	D0I0062	DI01019
Aroclor 1242	ND (0.1)		8082A		1	09/09/20 5:54	D0I0062	DI01019
Aroclor 1248	ND (0.1)		8082A		1	09/09/20 5:54	D0I0062	DI01019
Aroclor 1254	ND (0.1)		8082A		1	09/09/20 5:54	D0I0062	DI01019
Aroclor 1260	**4.0** (0.1)		8082A		1	09/09/20 5:54	D0I0062	DI01019
Aroclor 1262	ND (0.1)		8082A		1	09/09/20 5:54	D0I0062	DI01019
Aroclor 1268	ND (0.1)		8082A		1	09/09/20 5:54	D0I0062	DI01019

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-84
Date Sampled: 09/02/20 09:15
Percent Solids: 99
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0163
ESS Laboratory Sample ID: 20I0163-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 12:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/09/20 6:13	D0I0062	DI01019
Aroclor 1221	ND (0.1)		8082A		1	09/09/20 6:13	D0I0062	DI01019
Aroclor 1232	ND (0.1)		8082A		1	09/09/20 6:13	D0I0062	DI01019
Aroclor 1242	ND (0.1)		8082A		1	09/09/20 6:13	D0I0062	DI01019
Aroclor 1248	ND (0.1)		8082A		1	09/09/20 6:13	D0I0062	DI01019
Aroclor 1254	ND (0.1)		8082A		1	09/09/20 6:13	D0I0062	DI01019
Aroclor 1260	ND (0.1)		8082A		1	09/09/20 6:13	D0I0062	DI01019
Aroclor 1262	ND (0.1)		8082A		1	09/09/20 6:13	D0I0062	DI01019
Aroclor 1268	ND (0.1)		8082A		1	09/09/20 6:13	D0I0062	DI01019

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-85
Date Sampled: 09/02/20 09:20
Percent Solids: 98
Initial Volume: 5.34
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0163
ESS Laboratory Sample ID: 20I0163-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 12:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/09/20 6:33	D0I0062	DI01019
Aroclor 1221	ND (0.1)		8082A		1	09/09/20 6:33	D0I0062	DI01019
Aroclor 1232	ND (0.1)		8082A		1	09/09/20 6:33	D0I0062	DI01019
Aroclor 1242	ND (0.1)		8082A		1	09/09/20 6:33	D0I0062	DI01019
Aroclor 1248	ND (0.1)		8082A		1	09/09/20 6:33	D0I0062	DI01019
Aroclor 1254	ND (0.1)		8082A		1	09/09/20 6:33	D0I0062	DI01019
Aroclor 1260	**0.5** (0.1)		8082A		1	09/09/20 6:33	D0I0062	DI01019
Aroclor 1262	ND (0.1)		8082A		1	09/09/20 6:33	D0I0062	DI01019
Aroclor 1268	ND (0.1)		8082A		1	09/09/20 6:33	D0I0062	DI01019

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*59 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*60 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-86
Date Sampled: 09/02/20 09:25
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0163
ESS Laboratory Sample ID: 20I0163-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 12:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/09/20 6:52	D0I0062	DI01019
Aroclor 1221	ND (0.1)		8082A		1	09/09/20 6:52	D0I0062	DI01019
Aroclor 1232	ND (0.1)		8082A		1	09/09/20 6:52	D0I0062	DI01019
Aroclor 1242	ND (0.1)		8082A		1	09/09/20 6:52	D0I0062	DI01019
Aroclor 1248	ND (0.1)		8082A		1	09/09/20 6:52	D0I0062	DI01019
Aroclor 1254	ND (0.1)		8082A		1	09/09/20 6:52	D0I0062	DI01019
Aroclor 1260	**0.9** (0.1)		8082A		1	09/09/20 6:52	D0I0062	DI01019
Aroclor 1262	ND (0.1)		8082A		1	09/09/20 6:52	D0I0062	DI01019
Aroclor 1268	ND (0.1)		8082A		1	09/09/20 6:52	D0I0062	DI01019

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-12
Date Sampled: 09/02/20 11:15
Percent Solids: 100
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0163
ESS Laboratory Sample ID: 20I0163-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 12:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/09/20 7:11	D0I0062	DI01019
Aroclor 1221	ND (0.1)		8082A		1	09/09/20 7:11	D0I0062	DI01019
Aroclor 1232	ND (0.1)		8082A		1	09/09/20 7:11	D0I0062	DI01019
Aroclor 1242	ND (0.1)		8082A		1	09/09/20 7:11	D0I0062	DI01019
Aroclor 1248	ND (0.1)		8082A		1	09/09/20 7:11	D0I0062	DI01019
Aroclor 1254	ND (0.1)		8082A		1	09/09/20 7:11	D0I0062	DI01019
Aroclor 1260	**1.0** (0.1)		8082A		1	09/09/20 7:11	D0I0062	DI01019
Aroclor 1262	ND (0.1)		8082A		1	09/09/20 7:11	D0I0062	DI01019
Aroclor 1268	ND (0.1)		8082A		1	09/09/20 7:11	D0I0062	DI01019

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-13
Date Sampled: 09/02/20 11:30
Percent Solids: 99
Initial Volume: 5.46
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0163
ESS Laboratory Sample ID: 20I0163-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 12:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	09/09/20 7:30	D0I0062	DI01019
Aroclor 1221	ND (0.09)		8082A		1	09/09/20 7:30	D0I0062	DI01019
Aroclor 1232	ND (0.09)		8082A		1	09/09/20 7:30	D0I0062	DI01019
Aroclor 1242	ND (0.09)		8082A		1	09/09/20 7:30	D0I0062	DI01019
Aroclor 1248	ND (0.09)		8082A		1	09/09/20 7:30	D0I0062	DI01019
Aroclor 1254	ND (0.09)		8082A		1	09/09/20 7:30	D0I0062	DI01019
Aroclor 1260 [2C]	ND (0.09)		8082A		1	09/09/20 7:30	D0I0062	DI01019
Aroclor 1262	ND (0.09)		8082A		1	09/09/20 7:30	D0I0062	DI01019
Aroclor 1268	ND (0.09)		8082A		1	09/09/20 7:30	D0I0062	DI01019

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0163

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI01019 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0198*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0131*		mg/kg wet	*0.02500*		*52*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0142*		mg/kg wet	*0.02500*		*57*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		83	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		79	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		94	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		79	40-140			
Surrogate: Decachlorobiphenyl	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0189*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0176*		mg/kg wet	*0.02500*		*70*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0174*		mg/kg wet	*0.02500*		*70*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		84	40-140	2	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		80	40-140	2	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		100	40-140	6	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		84	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0169*		mg/kg wet	*0.02500*		*68*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0168*		mg/kg wet	*0.02500*		*67*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0163

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0163

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Conoco

Shipped/Delivered Via: ESS Courier

ESS Project ID: 20T0163
Date Received: 9/3/20
Project Due Date: 9/11/20
Days for Project: 5

1. Air bill manifest present? –
   Air No.: NA
2. Were custody seals present? N
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Y
   Temp: -.8 Iced with: Ice
5. Was COC signed and dated by client? Y
6. Does COC match bottles? Y
7. Is COC complete and correct? Y
8. Were samples received intact? Y
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)

2nd Review

Were all containers scanned into storage/lab? Initials

Are barcode labels on correct containers?	Yes / No
Are all Flashpoint stickers attached/container ID # circled?	Yes / No / NA
Are all Hex Chrome stickers attached?	Yes / No / NA
Are all QC stickers attached?	Yes / No / NA
Are VOA stickers attached if bubbles noted?	Yes / No / NA

Completed By: Date & Time: 9/4/20 11:39
Reviewed By: Date & Time: 9/4/20 1217
Delivered By: 9/14/20 1217

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20I0163

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	<0.5 mg/kg PCBs
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers & Scientists, Inc.	5675.F	Pawtucket 1 Control House, 6 Thorton St, Pawtucket RI
Contact Person	**Address**	
Mark Zoller	4 First Street	
City	**State**	**Zip Code** / **PO #**
Bridgewater	Massachusetts	02324 / 5675.F
Telephone Number	**FAX Number**	**Email Address**
508-697-3191		Mzoller, Kloftus, Ddifrancesco, Lquiry@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBS 8082
01	9/2/20	9:05 a.m.	Grab	Solid	ICS-01-82	X
02	9/2/20	9:10 a.m.	Grab	Solid	ICS-01-83	X
03	9/2/20	9:15 a.m.	Grab	Solid	ICS-01-84	X
04	9/2/20	9:20 a.m.	Grab	Solid	ICS-01-85	X
05	9/2/20	9:25 a.m.	Grab	Solid	ICS-01-86	X
06	9/2/20	11:15 a.m.	Grab	Solid	DUP-12	X
07	9/2/20	11:30 a.m.	Grab	Solid	DUP-13	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: _____
Seals Intact: _____
Cooler Temperature: −0.8 °C

Sampled by : DJD/LGG

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice
Homogenize Sample TSCA Requirements, Provide Full Data Package
Add email: Jaevazelis@coneco.com

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
9/3/20 2:30 PM	9/3/20 1440	9/3/20 1755	9/3/20 17:55
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 20I0165

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 2:04 pm, Sep 18, 2020

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0165

SAMPLE RECEIPT

The following samples were received on September 03, 2020 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
20I0165-01	ICS-03-61	Solid	8082A
20I0165-02	ICS-03-62	Solid	8082A
20I0165-03	ICS-03-63	Solid	8082A
20I0165-04	ICS-03-64	Solid	8082A
20I0165-05	ICS-03-65	Solid	8082A
20I0165-06	ICS-03-66	Solid	8082A
20I0165-07	ICS-03-67	Solid	8082A
20I0165-08	ICS-03-68	Solid	8082A
20I0165-09	ICS-03-69	Solid	8082A
20I0165-10	ICS-03-70	Solid	8082A
20I0165-11	ICS-04-28	Solid	8082A
20I0165-12	ICS-04-29	Solid	8082A
20I0165-13	ICS-04-30	Solid	8082A
20I0165-14	ICS-04-31	Solid	8082A
20I0165-15	ICS-04-32	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0165

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0165

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-61
Date Sampled: 09/02/20 09:40
Percent Solids: 100
Initial Volume: 5.15
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/20 3:02	D0I0145	DI01018
Aroclor 1221	ND (0.1)		8082A		1	09/10/20 3:02	D0I0145	DI01018
Aroclor 1232	ND (0.1)		8082A		1	09/10/20 3:02	D0I0145	DI01018
Aroclor 1242	ND (0.1)		8082A		1	09/10/20 3:02	D0I0145	DI01018
Aroclor 1248	ND (0.1)		8082A		1	09/10/20 3:02	D0I0145	DI01018
Aroclor 1254	ND (0.1)		8082A		1	09/10/20 3:02	D0I0145	DI01018
Aroclor 1260	**0.6** (0.1)		8082A		1	09/10/20 3:02	D0I0145	DI01018
Aroclor 1262	ND (0.1)		8082A		1	09/10/20 3:02	D0I0145	DI01018
Aroclor 1268	ND (0.1)		8082A		1	09/10/20 3:02	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-62
Date Sampled: 09/02/20 09:45
Percent Solids: 100
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/20 3:21	D0I0145	DI01018
Aroclor 1221	ND (0.1)		8082A		1	09/10/20 3:21	D0I0145	DI01018
Aroclor 1232	ND (0.1)		8082A		1	09/10/20 3:21	D0I0145	DI01018
Aroclor 1242	ND (0.1)		8082A		1	09/10/20 3:21	D0I0145	DI01018
Aroclor 1248	ND (0.1)		8082A		1	09/10/20 3:21	D0I0145	DI01018
Aroclor 1254	ND (0.1)		8082A		1	09/10/20 3:21	D0I0145	DI01018
Aroclor 1260	**0.6** (0.1)		8082A		1	09/10/20 3:21	D0I0145	DI01018
Aroclor 1262	ND (0.1)		8082A		1	09/10/20 3:21	D0I0145	DI01018
Aroclor 1268	ND (0.1)		8082A		1	09/10/20 3:21	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*56 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-63
Date Sampled: 09/02/20 09:50
Percent Solids: 100
Initial Volume: 5.44
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	09/10/20 3:41	D0I0145	DI01018
Aroclor 1221	ND (0.09)		8082A		1	09/10/20 3:41	D0I0145	DI01018
Aroclor 1232	ND (0.09)		8082A		1	09/10/20 3:41	D0I0145	DI01018
Aroclor 1242	ND (0.09)		8082A		1	09/10/20 3:41	D0I0145	DI01018
Aroclor 1248	ND (0.09)		8082A		1	09/10/20 3:41	D0I0145	DI01018
Aroclor 1254	ND (0.09)		8082A		1	09/10/20 3:41	D0I0145	DI01018
Aroclor 1260	**0.4** (0.09)		8082A		1	09/10/20 3:41	D0I0145	DI01018
Aroclor 1262	ND (0.09)		8082A		1	09/10/20 3:41	D0I0145	DI01018
Aroclor 1268	ND (0.09)		8082A		1	09/10/20 3:41	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-64
Date Sampled: 09/02/20 09:55
Percent Solids: 100
Initial Volume: 5.63
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	09/10/20 4:01	D0I0145	DI01018
Aroclor 1221	ND (0.09)		8082A		1	09/10/20 4:01	D0I0145	DI01018
Aroclor 1232	ND (0.09)		8082A		1	09/10/20 4:01	D0I0145	DI01018
Aroclor 1242	ND (0.09)		8082A		1	09/10/20 4:01	D0I0145	DI01018
Aroclor 1248	ND (0.09)		8082A		1	09/10/20 4:01	D0I0145	DI01018
Aroclor 1254	ND (0.09)		8082A		1	09/10/20 4:01	D0I0145	DI01018
Aroclor 1260	**0.3** (0.09)		8082A		1	09/10/20 4:01	D0I0145	DI01018
Aroclor 1262	ND (0.09)		8082A		1	09/10/20 4:01	D0I0145	DI01018
Aroclor 1268	ND (0.09)		8082A		1	09/10/20 4:01	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-65
Date Sampled: 09/02/20 10:00
Percent Solids: 100
Initial Volume: 5.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/20 4:20	D0I0145	DI01018
Aroclor 1221	ND (0.1)		8082A		1	09/10/20 4:20	D0I0145	DI01018
Aroclor 1232	ND (0.1)		8082A		1	09/10/20 4:20	D0I0145	DI01018
Aroclor 1242	ND (0.1)		8082A		1	09/10/20 4:20	D0I0145	DI01018
Aroclor 1248	ND (0.1)		8082A		1	09/10/20 4:20	D0I0145	DI01018
Aroclor 1254	ND (0.1)		8082A		1	09/10/20 4:20	D0I0145	DI01018
Aroclor 1260	**0.5** (0.1)		8082A		1	09/10/20 4:20	D0I0145	DI01018
Aroclor 1262	ND (0.1)		8082A		1	09/10/20 4:20	D0I0145	DI01018
Aroclor 1268	ND (0.1)		8082A		1	09/10/20 4:20	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-66
Date Sampled: 09/02/20 10:05
Percent Solids: 99
Initial Volume: 5.18
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/20 4:40	D0I0145	DI01018
Aroclor 1221	ND (0.1)		8082A		1	09/10/20 4:40	D0I0145	DI01018
Aroclor 1232	ND (0.1)		8082A		1	09/10/20 4:40	D0I0145	DI01018
Aroclor 1242	ND (0.1)		8082A		1	09/10/20 4:40	D0I0145	DI01018
Aroclor 1248	ND (0.1)		8082A		1	09/10/20 4:40	D0I0145	DI01018
Aroclor 1254	ND (0.1)		8082A		1	09/10/20 4:40	D0I0145	DI01018
Aroclor 1260	**0.4** (0.1)		8082A		1	09/10/20 4:40	D0I0145	DI01018
Aroclor 1262	ND (0.1)		8082A		1	09/10/20 4:40	D0I0145	DI01018
Aroclor 1268	ND (0.1)		8082A		1	09/10/20 4:40	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*54 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*64 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-67
Date Sampled: 09/02/20 10:10
Percent Solids: 99
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/20 5:00	D0I0145	DI01018
Aroclor 1221	ND (0.1)		8082A		1	09/10/20 5:00	D0I0145	DI01018
Aroclor 1232	ND (0.1)		8082A		1	09/10/20 5:00	D0I0145	DI01018
Aroclor 1242	ND (0.1)		8082A		1	09/10/20 5:00	D0I0145	DI01018
Aroclor 1248	ND (0.1)		8082A		1	09/10/20 5:00	D0I0145	DI01018
Aroclor 1254	ND (0.1)		8082A		1	09/10/20 5:00	D0I0145	DI01018
Aroclor 1260	**0.5** (0.1)		8082A		1	09/10/20 5:00	D0I0145	DI01018
Aroclor 1262	ND (0.1)		8082A		1	09/10/20 5:00	D0I0145	DI01018
Aroclor 1268	ND (0.1)		8082A		1	09/10/20 5:00	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*53 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*51 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*46 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-68
Date Sampled: 09/02/20 10:15
Percent Solids: 100
Initial Volume: 5.41
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	09/10/20 5:20	D0I0145	DI01018
Aroclor 1221	ND (0.09)		8082A		1	09/10/20 5:20	D0I0145	DI01018
Aroclor 1232	ND (0.09)		8082A		1	09/10/20 5:20	D0I0145	DI01018
Aroclor 1242	ND (0.09)		8082A		1	09/10/20 5:20	D0I0145	DI01018
Aroclor 1248	ND (0.09)		8082A		1	09/10/20 5:20	D0I0145	DI01018
Aroclor 1254	ND (0.09)		8082A		1	09/10/20 5:20	D0I0145	DI01018
Aroclor 1260	**0.7** (0.09)		8082A		1	09/10/20 5:20	D0I0145	DI01018
Aroclor 1262	ND (0.09)		8082A		1	09/10/20 5:20	D0I0145	DI01018
Aroclor 1268	ND (0.09)		8082A		1	09/10/20 5:20	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*64 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-69
Date Sampled: 09/02/20 10:20
Percent Solids: 100
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/20 5:39	D0I0145	DI01018
Aroclor 1221	ND (0.1)		8082A		1	09/10/20 5:39	D0I0145	DI01018
Aroclor 1232	ND (0.1)		8082A		1	09/10/20 5:39	D0I0145	DI01018
Aroclor 1242	ND (0.1)		8082A		1	09/10/20 5:39	D0I0145	DI01018
Aroclor 1248	ND (0.1)		8082A		1	09/10/20 5:39	D0I0145	DI01018
Aroclor 1254	ND (0.1)		8082A		1	09/10/20 5:39	D0I0145	DI01018
Aroclor 1260	**0.5** (0.1)		8082A		1	09/10/20 5:39	D0I0145	DI01018
Aroclor 1262	ND (0.1)		8082A		1	09/10/20 5:39	D0I0145	DI01018
Aroclor 1268	ND (0.1)		8082A		1	09/10/20 5:39	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*53 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-70
Date Sampled: 09/02/20 10:25
Percent Solids: 100
Initial Volume: 5.42
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	09/10/20 5:59	D0I0145	DI01018
Aroclor 1221	ND (0.09)		8082A		1	09/10/20 5:59	D0I0145	DI01018
Aroclor 1232	ND (0.09)		8082A		1	09/10/20 5:59	D0I0145	DI01018
Aroclor 1242	ND (0.09)		8082A		1	09/10/20 5:59	D0I0145	DI01018
Aroclor 1248	ND (0.09)		8082A		1	09/10/20 5:59	D0I0145	DI01018
Aroclor 1254	ND (0.09)		8082A		1	09/10/20 5:59	D0I0145	DI01018
Aroclor 1260	**0.3** (0.09)		8082A		1	09/10/20 5:59	D0I0145	DI01018
Aroclor 1262	ND (0.09)		8082A		1	09/10/20 5:59	D0I0145	DI01018
Aroclor 1268	ND (0.09)		8082A		1	09/10/20 5:59	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*52 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*64 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-28
Date Sampled: 09/02/20 10:30
Percent Solids: 99
Initial Volume: 5.42
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	09/10/20 6:19	D0I0145	DI01018
Aroclor 1221	ND (0.09)		8082A		1	09/10/20 6:19	D0I0145	DI01018
Aroclor 1232	ND (0.09)		8082A		1	09/10/20 6:19	D0I0145	DI01018
Aroclor 1242	ND (0.09)		8082A		1	09/10/20 6:19	D0I0145	DI01018
Aroclor 1248	ND (0.09)		8082A		1	09/10/20 6:19	D0I0145	DI01018
Aroclor 1254	ND (0.09)		8082A		1	09/10/20 6:19	D0I0145	DI01018
Aroclor 1260	**0.9** (0.09)		8082A		1	09/10/20 6:19	D0I0145	DI01018
Aroclor 1262	ND (0.09)		8082A		1	09/10/20 6:19	D0I0145	DI01018
Aroclor 1268	ND (0.09)		8082A		1	09/10/20 6:19	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*47 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*59 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-29
Date Sampled: 09/02/20 10:35
Percent Solids: 99
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/20 6:39	D0I0145	DI01018
Aroclor 1221	ND (0.1)		8082A		1	09/10/20 6:39	D0I0145	DI01018
Aroclor 1232	ND (0.1)		8082A		1	09/10/20 6:39	D0I0145	DI01018
Aroclor 1242	ND (0.1)		8082A		1	09/10/20 6:39	D0I0145	DI01018
Aroclor 1248	ND (0.1)		8082A		1	09/10/20 6:39	D0I0145	DI01018
Aroclor 1254	ND (0.1)		8082A		1	09/10/20 6:39	D0I0145	DI01018
Aroclor 1260	**0.5** (0.1)		8082A		1	09/10/20 6:39	D0I0145	DI01018
Aroclor 1262	ND (0.1)		8082A		1	09/10/20 6:39	D0I0145	DI01018
Aroclor 1268	ND (0.1)		8082A		1	09/10/20 6:39	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*56 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*57 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-30
Date Sampled: 09/02/20 10:40
Percent Solids: 100
Initial Volume: 5.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	09/10/20 6:58	D0I0145	DI01018
Aroclor 1221	ND (0.09)		8082A		1	09/10/20 6:58	D0I0145	DI01018
Aroclor 1232	ND (0.09)		8082A		1	09/10/20 6:58	D0I0145	DI01018
Aroclor 1242	ND (0.09)		8082A		1	09/10/20 6:58	D0I0145	DI01018
Aroclor 1248	ND (0.09)		8082A		1	09/10/20 6:58	D0I0145	DI01018
Aroclor 1254	ND (0.09)		8082A		1	09/10/20 6:58	D0I0145	DI01018
Aroclor 1260	**0.3** (0.09)		8082A		1	09/10/20 6:58	D0I0145	DI01018
Aroclor 1262	ND (0.09)		8082A		1	09/10/20 6:58	D0I0145	DI01018
Aroclor 1268	ND (0.09)		8082A		1	09/10/20 6:58	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*47 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-31
Date Sampled: 09/02/20 10:45
Percent Solids: 99
Initial Volume: 5.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-14
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	09/10/20 7:18	D0I0145	DI01018
Aroclor 1221	ND (0.09)		8082A		1	09/10/20 7:18	D0I0145	DI01018
Aroclor 1232	ND (0.09)		8082A		1	09/10/20 7:18	D0I0145	DI01018
Aroclor 1242	ND (0.09)		8082A		1	09/10/20 7:18	D0I0145	DI01018
Aroclor 1248	ND (0.09)		8082A		1	09/10/20 7:18	D0I0145	DI01018
Aroclor 1254	ND (0.09)		8082A		1	09/10/20 7:18	D0I0145	DI01018
Aroclor 1260	**0.5** (0.09)		8082A		1	09/10/20 7:18	D0I0145	DI01018
Aroclor 1262	ND (0.09)		8082A		1	09/10/20 7:18	D0I0145	DI01018
Aroclor 1268	ND (0.09)		8082A		1	09/10/20 7:18	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*53 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-32
Date Sampled: 09/02/20 10:50
Percent Solids: 99
Initial Volume: 5.37
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0165
ESS Laboratory Sample ID: 20I0165-15
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 13:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	09/10/20 7:38	D0I0145	DI01018
Aroclor 1221	ND (0.09)		8082A		1	09/10/20 7:38	D0I0145	DI01018
Aroclor 1232	ND (0.09)		8082A		1	09/10/20 7:38	D0I0145	DI01018
Aroclor 1242	ND (0.09)		8082A		1	09/10/20 7:38	D0I0145	DI01018
Aroclor 1248	ND (0.09)		8082A		1	09/10/20 7:38	D0I0145	DI01018
Aroclor 1254	ND (0.09)		8082A		1	09/10/20 7:38	D0I0145	DI01018
Aroclor 1260	**0.5** (0.09)		8082A		1	09/10/20 7:38	D0I0145	DI01018
Aroclor 1262	ND (0.09)		8082A		1	09/10/20 7:38	D0I0145	DI01018
Aroclor 1268	ND (0.09)		8082A		1	09/10/20 7:38	D0I0145	DI01018

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*59 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0165

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI01018 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0159*		mg/kg wet	*0.02500*		*64*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0159*		mg/kg wet	*0.02500*		*64*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		81	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		84	40-140			
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		90	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Surrogate: Decachlorobiphenyl	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0153*		mg/kg wet	*0.02500*		*61*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0150*		mg/kg wet	*0.02500*		*60*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		82	40-140	1	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		85	40-140	1	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		93	40-140	4	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		88	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0158*		mg/kg wet	*0.02500*		*63*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0155*		mg/kg wet	*0.02500*		*62*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0165

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0165

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Conoco

Shipped/Delivered Via: ESS Courier

ESS Project ID: 201065
Date Received: 9/3/20
Project Due Date: 9/11/20
Days for Project: 5

1. Air bill manifest present? —
   Air No.: NA
2. Were custody seals present? N
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Y
   Temp: -18 Iced with: Ice
5. Was COC signed and dated by client? ✓
6. Does COC match bottles? Y
7. Is COC complete and correct? Y
8. Were samples received intact? Y
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)

2nd Review

Were all containers scanned into storage/lab? Initials

Are barcode labels on correct containers?	Yes / No
Are all Flashpoint stickers attached/container ID # circled?	Yes / No / NA
Are all Hex Chrome stickers attached?	Yes / No / NA
Are all QC stickers attached?	Yes / No / NA
Are VOA stickers attached if bubbles noted?	Yes / No / NA

Completed By: Date & Time: 9/4/20 11:26
Reviewed By: Date & Time: 9/4/20 1237
Delivered By: 9/4/20 1237

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20I0165

Turn Time	5-Day **Rush**
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	<0.5 mg/kg PCBs
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	**Project #**	**Project Name**
Coneco Engineers & Scientists, Inc	5675.F	Pawtucket 1 Control House, 6 Thorton St, Pawtucket RI
Contact Person Mark Zoller	**Address** 4 First Street	
City Bridgewater	**State** Massachusetts	**Zip Code** 02324 / **PO #** 5675.F
Telephone Number 508-697-3191	**FAX Number**	**Email Address** Mzoller, Kloftus, Ddifrancesco, Lquiry@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	9/2/20	9:40 a.m.	Grab	Solid	ICS-03-61	X
02	9/2/20	9:45 a.m.	Grab	Solid	ICS-03-62	X
03	9/2/20	9:50 a.m.	Grab	Solid	ICS-03-63	X
04	9/2/20	9:55 a.m.	Grab	Solid	ICS-03-64	X
05	9/2/20	10:00 a.m.	Grab	Solid	ICS-03-65	X
06	9/2/20	10:05 a.m.	Grab	Solid	ICS-03-66	X
07	9/2/20	10:10 a.m.	Grab	Solid	ICS-03-67	X
08	9/2/20	10:15 a.m.	Grab	Solid	ICS-03-68	X
09	9/2/20	10:20 a.m.	Grab	Solid	ICS-03-69	X
10	9/2/20	10:25 a.m.	Grab	Solid	ICS-03-70	X

Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*	11
	Number of Containers per Sample:	1

Laboratory Use Only

Cooler Present: _____

Seals Intact: _____

Cooler Temperature: −0.8 °C

Sampled by : DJD/LGG

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice

Homogenize Sample TSCA Requirements, Provide Full Data Package

Add email: Jaevazelis@coneco.com

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
9/3/20 2:30 pm	9/3/20 1440	9/3/20 1755	9/3/20 17:55
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
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185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20I0165

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	<0.5 mg/kg PCBs
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers & Scientists, Inc	5675.F	Pawtucket 1 Control House, 6 Thorton St, Pawtucket RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	Massachusetts	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		Mzoller, Kloftus, Ddifrancesco, Lquiry@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01 11	9/2/20	10:30 a.m.	Grab	Solid	ICS-04-28	X
02 12	9/2/20	10:35 a.m.	Grab	Solid	ICS-04-29	X
03 13	9/2/20	10:40 a.m.	Grab	Solid	ICS-04-30	X
04 14	9/2/20	10:45 a.m.	Grab	Solid	ICS-04-31	X
05 15	9/2/20	10:50 a.m.	Grab	Solid	ICS-04-32	X

Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*	11
	Number of Containers per Sample:	1

Laboratory Use Only

Cooler Present: _____

Seals Intact: _____

Cooler Temperature: 0.8 °C

Sampled by : DJD/LGG

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice

Homogenize Sample TSCA Requirements, Provide Full Data Package

Add email: Jaevazelis@coneco.com

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
9/3/20 2:30 pm	9/3/20 1440	9/3/20 1755	9/3/20 17:55
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 21E0025

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 12:17 pm, May 10, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0025

SAMPLE RECEIPT

The following samples were received on May 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21E0025-01	ICS-01-87	Solid	8082A
21E0025-02	ICS-01-88	Solid	8082A
21E0025-03	ICS-01-89	Solid	8082A
21E0025-04	ICS-01-90	Solid	8082A
21E0025-05	ICS-01-91	Solid	8082A
21E0025-06	ICS-01-92	Solid	8082A
21E0025-07	ICS-01-93	Solid	8082A
21E0025-08	ICS-01-94	Solid	8082A
21E0025-09	ICS-01-95	Solid	8082A
21E0025-10	ICS-01-96	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0025

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0025

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-87
Date Sampled: 04/27/21 08:00
Percent Solids: 98
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0025
ESS Laboratory Sample ID: 21E0025-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 21:00	D1E0066	DE10406
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 21:00	D1E0066	DE10406
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 21:00	D1E0066	DE10406
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 21:00	D1E0066	DE10406
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 21:00	D1E0066	DE10406
Aroclor 1254 [2C]	**0.3** (0.1)		8082A		1	05/05/21 21:00	D1E0066	DE10406
Aroclor 1260 [2C]	**0.5** (0.1)		8082A		1	05/05/21 21:00	D1E0066	DE10406
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 21:00	D1E0066	DE10406
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 21:00	D1E0066	DE10406

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-88
Date Sampled: 04/27/21 08:05
Percent Solids: 98
Initial Volume: 5.41
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0025
ESS Laboratory Sample ID: 21E0025-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 21:19	D1E0066	DE10406
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 21:19	D1E0066	DE10406
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 21:19	D1E0066	DE10406
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 21:19	D1E0066	DE10406
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 21:19	D1E0066	DE10406
Aroclor 1254 [2C]	**0.2** (0.09)		8082A		1	05/05/21 21:19	D1E0066	DE10406
Aroclor 1260 [2C]	**0.2** (0.09)		8082A		1	05/05/21 21:19	D1E0066	DE10406
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 21:19	D1E0066	DE10406
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 21:19	D1E0066	DE10406

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-89
Date Sampled: 04/27/21 08:10
Percent Solids: 98
Initial Volume: 5.51
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0025
ESS Laboratory Sample ID: 21E0025-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 21:38	D1E0066	DE10406
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 21:38	D1E0066	DE10406
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 21:38	D1E0066	DE10406
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 21:38	D1E0066	DE10406
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 21:38	D1E0066	DE10406
Aroclor 1254 [2C]	**0.2** (0.09)		8082A		1	05/05/21 21:38	D1E0066	DE10406
Aroclor 1260 [2C]	**0.2** (0.09)		8082A		1	05/05/21 21:38	D1E0066	DE10406
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 21:38	D1E0066	DE10406
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 21:38	D1E0066	DE10406

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-90
Date Sampled: 04/27/21 08:15
Percent Solids: 98
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0025
ESS Laboratory Sample ID: 21E0025-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 21:58	D1E0066	DE10406
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 21:58	D1E0066	DE10406
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 21:58	D1E0066	DE10406
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 21:58	D1E0066	DE10406
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 21:58	D1E0066	DE10406
Aroclor 1254	ND (0.1)		8082A		1	05/05/21 21:58	D1E0066	DE10406
Aroclor 1260	ND (0.1)		8082A		1	05/05/21 21:58	D1E0066	DE10406
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 21:58	D1E0066	DE10406
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 21:58	D1E0066	DE10406

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-91
Date Sampled: 04/27/21 08:20
Percent Solids: 98
Initial Volume: 5.28
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0025
ESS Laboratory Sample ID: 21E0025-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 22:17	D1E0066	DE10406
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 22:17	D1E0066	DE10406
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 22:17	D1E0066	DE10406
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 22:17	D1E0066	DE10406
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 22:17	D1E0066	DE10406
Aroclor 1254	ND (0.1)		8082A		1	05/05/21 22:17	D1E0066	DE10406
Aroclor 1260	ND (0.1)		8082A		1	05/05/21 22:17	D1E0066	DE10406
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 22:17	D1E0066	DE10406
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 22:17	D1E0066	DE10406

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-92
Date Sampled: 04/27/21 08:25
Percent Solids: 97
Initial Volume: 5.34
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0025
ESS Laboratory Sample ID: 21E0025-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 23:15	D1E0066	DE10406
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 23:15	D1E0066	DE10406
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 23:15	D1E0066	DE10406
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 23:15	D1E0066	DE10406
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 23:15	D1E0066	DE10406
Aroclor 1254	ND (0.1)		8082A		1	05/05/21 23:15	D1E0066	DE10406
Aroclor 1260	ND (0.1)		8082A		1	05/05/21 23:15	D1E0066	DE10406
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 23:15	D1E0066	DE10406
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 23:15	D1E0066	DE10406

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-93
Date Sampled: 04/27/21 08:30
Percent Solids: 100
Initial Volume: 5.15
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0025
ESS Laboratory Sample ID: 21E0025-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 23:34	D1E0066	DE10406
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 23:34	D1E0066	DE10406
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 23:34	D1E0066	DE10406
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 23:34	D1E0066	DE10406
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 23:34	D1E0066	DE10406
Aroclor 1254 [2C]	ND (0.1)		8082A		1	05/05/21 23:34	D1E0066	DE10406
Aroclor 1260	ND (0.1)		8082A		1	05/05/21 23:34	D1E0066	DE10406
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 23:34	D1E0066	DE10406
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 23:34	D1E0066	DE10406

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*64 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-94
Date Sampled: 04/27/21 08:35
Percent Solids: 99
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0025
ESS Laboratory Sample ID: 21E0025-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 23:54	D1E0066	DE10406
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 23:54	D1E0066	DE10406
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 23:54	D1E0066	DE10406
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 23:54	D1E0066	DE10406
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 23:54	D1E0066	DE10406
Aroclor 1254	**0.2** (0.1)		8082A		1	05/05/21 23:54	D1E0066	DE10406
Aroclor 1260	ND (0.1)		8082A		1	05/05/21 23:54	D1E0066	DE10406
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 23:54	D1E0066	DE10406
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 23:54	D1E0066	DE10406

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*82 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-95
Date Sampled: 04/27/21 08:40
Percent Solids: 99
Initial Volume: 5.44
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0025
ESS Laboratory Sample ID: 21E0025-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/06/21 0:13	D1E0066	DE10406
Aroclor 1221	ND (0.09)		8082A		1	05/06/21 0:13	D1E0066	DE10406
Aroclor 1232	ND (0.09)		8082A		1	05/06/21 0:13	D1E0066	DE10406
Aroclor 1242	ND (0.09)		8082A		1	05/06/21 0:13	D1E0066	DE10406
Aroclor 1248	ND (0.09)		8082A		1	05/06/21 0:13	D1E0066	DE10406
Aroclor 1254	ND (0.09)		8082A		1	05/06/21 0:13	D1E0066	DE10406
Aroclor 1260	ND (0.09)		8082A		1	05/06/21 0:13	D1E0066	DE10406
Aroclor 1262	ND (0.09)		8082A		1	05/06/21 0:13	D1E0066	DE10406
Aroclor 1268	ND (0.09)		8082A		1	05/06/21 0:13	D1E0066	DE10406

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-96
Date Sampled: 04/27/21 08:45
Percent Solids: 97
Initial Volume: 5.31
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0025
ESS Laboratory Sample ID: 21E0025-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/06/21 0:32	D1E0066	DE10406
Aroclor 1221	ND (0.1)		8082A		1	05/06/21 0:32	D1E0066	DE10406
Aroclor 1232	ND (0.1)		8082A		1	05/06/21 0:32	D1E0066	DE10406
Aroclor 1242	ND (0.1)		8082A		1	05/06/21 0:32	D1E0066	DE10406
Aroclor 1248	ND (0.1)		8082A		1	05/06/21 0:32	D1E0066	DE10406
Aroclor 1254	ND (0.1)		8082A		1	05/06/21 0:32	D1E0066	DE10406
Aroclor 1260	ND (0.1)		8082A		1	05/06/21 0:32	D1E0066	DE10406
Aroclor 1262	ND (0.1)		8082A		1	05/06/21 0:32	D1E0066	DE10406
Aroclor 1268	ND (0.1)		8082A		1	05/06/21 0:32	D1E0066	DE10406

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0025

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10406 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		86	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		90	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140			
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		86	40-140	0.3	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		90	40-140	0.6	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		92	40-140	0.7	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140	0.3	30	
Surrogate: Decachlorobiphenyl	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*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*			
Matrix Spike **Source: 21E0025-05**										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0025

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10406 - 3540C										
Aroclor 1016	1.4	0.1	mg/kg dry	1.992	ND	72	40-140			
Aroclor 1016 [2C]	1.5	0.1	mg/kg dry	1.992	ND	73	40-140			
Aroclor 1260	1.5	0.1	mg/kg dry	1.992	ND	77	40-140			
Aroclor 1260 [2C]	1.5	0.1	mg/kg dry	1.992	ND	76	40-140			
Surrogate: Decachlorobiphenyl	*0.0856*		mg/kg dry	*0.09962*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0897*		mg/kg dry	*0.09962*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0742*		mg/kg dry	*0.09962*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0784*		mg/kg dry	*0.09962*		*79*	*30-150*			
Matrix Spike Dup Source: 21E0025-05										
Aroclor 1016	1.5	0.09	mg/kg dry	1.831	ND	80	40-140	1	30	
Aroclor 1016 [2C]	1.5	0.09	mg/kg dry	1.831	ND	81	40-140	2	30	
Aroclor 1260	1.5	0.09	mg/kg dry	1.831	ND	83	40-140	1	30	
Aroclor 1260 [2C]	1.5	0.09	mg/kg dry	1.831	ND	83	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0851*		mg/kg dry	*0.09154*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0899*		mg/kg dry	*0.09154*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0758*		mg/kg dry	*0.09154*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0805*		mg/kg dry	*0.09154*		*88*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0025

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0025

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21E0025
Date Received: 5/3/2021
Project Due Date: 5/10/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.9 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	160978	Yes	N/A	Yes	4 oz. Jar	NP	
2	160979	Yes	N/A	Yes	4 oz. Jar	NP	
3	160980	Yes	N/A	Yes	4 oz. Jar	NP	
4	160981	Yes	N/A	Yes	4 oz. Jar	NP	
5	160982	Yes	N/A	Yes	4 oz. Jar	NP	
6	160983	Yes	N/A	Yes	4 oz. Jar	NP	
7	160984	Yes	N/A	Yes	4 oz. Jar	NP	
8	160985	Yes	N/A	Yes	4 oz. Jar	NP	
9	160986	Yes	N/A	Yes	4 oz. Jar	NP	
10	160987	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials
Are barcode labels on correct containers? Yes / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 21E0025

Date Received: 5/3/2021

Are VOA stickers attached if bubbles noted? Yes / No / (NA)

Completed By: Taylor Davis Date & Time: 1820 5/3/21

Reviewed By: Date & Time: 5/3/21 0840

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 210025 | Page 1 of 3

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island **Criteria:** <0.5 mg/kg

Is this project for any of the following?:
☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	MS/MSD	Total Number of Bottles
1	4/27/21	8:00 am	Grab	Concrete	ICS-01-87	X		
2	↓	8:05 am	↓	↓	ICS-01-88	X		
3		8:10 am			ICS-01-89	X		
4		8:15 am			ICS-01-90	X		
5		8:20 am			ICS-01-91	X	X	
6		8:25 am			ICS-01-92	X		
7		8:30 am			ICS-01-93	X		
8		8:35 am			ICS-01-94	X		
9		8:40 am			ICS-01-95	X		
10	↓	8:45 am	↓	↓	ICS-01-96	X		
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial					AG		
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					9		
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					11		

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.9 / Ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Dan Dbrunner	4/30/21	1:01 pm	5/3/21 12:11		5/3/21	16:44	Gaynor Downs 5/3/21 1644

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 21E0026

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 3:18 pm, May 10, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0026

SAMPLE RECEIPT

The following samples were received on May 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21E0026-01	ICS-01-97	Solid	8082A
21E0026-02	ICS-03-71	Solid	8082A
21E0026-03	ICS-04-33	Solid	8082A
21E0026-04	ICS-04-34	Solid	8082A
21E0026-05	ICS-04-35	Solid	8082A
21E0026-06	ICS-04-36	Solid	8082A
21E0026-07	ICS-05-11	Solid	8082A
21E0026-08	ICS-05-12	Solid	8082A
21E0026-09	DUP-14	Solid	8082A
21E0026-10	ICS-01-33 0.5-1.0	Solid	8082A
21E0026-11	ICS-01-33 1-2	Solid	8082A
21E0026-12	ICS-01-33 2-3	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0026

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

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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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0026

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-97
Date Sampled: 04/27/21 08:50
Percent Solids: 99
Initial Volume: 5.26
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0026
ESS Laboratory Sample ID: 21E0026-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/3/21 20:40

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 22:33	D1E0038	DE10325
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 22:33	D1E0038	DE10325
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 22:33	D1E0038	DE10325
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 22:33	D1E0038	DE10325
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 22:33	D1E0038	DE10325
Aroclor 1254	ND (0.1)		8082A		1	05/04/21 22:33	D1E0038	DE10325
Aroclor 1260 [2C]	**5.8** (0.5)		8082A		5	05/06/21 6:02	D1E0038	DE10325
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 22:33	D1E0038	DE10325
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 22:33	D1E0038	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-03-71
Date Sampled: 04/27/21 08:55
Percent Solids: 99
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0026
ESS Laboratory Sample ID: 21E0026-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/3/21 20:40

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 22:53	D1E0038	DE10325
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 22:53	D1E0038	DE10325
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 22:53	D1E0038	DE10325
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 22:53	D1E0038	DE10325
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 22:53	D1E0038	DE10325
Aroclor 1254	ND (0.1)		8082A		1	05/04/21 22:53	D1E0038	DE10325
Aroclor 1260 [2C]	**5.6** (0.5)		8082A		5	05/06/21 6:21	D1E0038	DE10325
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 22:53	D1E0038	DE10325
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 22:53	D1E0038	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-33
Date Sampled: 04/27/21 09:00
Percent Solids: 99
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0026
ESS Laboratory Sample ID: 21E0026-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/3/21 20:40

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 23:12	D1E0038	DE10325
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 23:12	D1E0038	DE10325
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 23:12	D1E0038	DE10325
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 23:12	D1E0038	DE10325
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 23:12	D1E0038	DE10325
Aroclor 1254	**0.5** (0.1)		8082A		1	05/04/21 23:12	D1E0038	DE10325
Aroclor 1260 [2C]	**0.5** (0.1)		8082A		1	05/04/21 23:12	D1E0038	DE10325
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 23:12	D1E0038	DE10325
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 23:12	D1E0038	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-34
Date Sampled: 04/27/21 09:05
Percent Solids: 99
Initial Volume: 5.37
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0026
ESS Laboratory Sample ID: 21E0026-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/3/21 20:40

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/04/21 23:31	D1E0038	DE10325
Aroclor 1221	ND (0.09)		8082A		1	05/04/21 23:31	D1E0038	DE10325
Aroclor 1232	ND (0.09)		8082A		1	05/04/21 23:31	D1E0038	DE10325
Aroclor 1242	ND (0.09)		8082A		1	05/04/21 23:31	D1E0038	DE10325
Aroclor 1248	ND (0.09)		8082A		1	05/04/21 23:31	D1E0038	DE10325
Aroclor 1254	**0.2** (0.09)		8082A		1	05/04/21 23:31	D1E0038	DE10325
Aroclor 1260 [2C]	**0.3** (0.09)		8082A		1	05/04/21 23:31	D1E0038	DE10325
Aroclor 1262	ND (0.09)		8082A		1	05/04/21 23:31	D1E0038	DE10325
Aroclor 1268	ND (0.09)		8082A		1	05/04/21 23:31	D1E0038	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-35
Date Sampled: 04/27/21 09:10
Percent Solids: 99
Initial Volume: 5.15
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0026
ESS Laboratory Sample ID: 21E0026-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/3/21 20:40

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 23:51	D1E0038	DE10325
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 23:51	D1E0038	DE10325
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 23:51	D1E0038	DE10325
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 23:51	D1E0038	DE10325
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 23:51	D1E0038	DE10325
Aroclor 1254	**0.5** (0.1)		8082A		1	05/04/21 23:51	D1E0038	DE10325
Aroclor 1260	**0.7** (0.1)		8082A		1	05/04/21 23:51	D1E0038	DE10325
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 23:51	D1E0038	DE10325
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 23:51	D1E0038	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-04-36
Date Sampled: 04/27/21 09:15
Percent Solids: 99
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0026
ESS Laboratory Sample ID: 21E0026-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/3/21 20:40

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 0:10	D1E0038	DE10325
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 0:10	D1E0038	DE10325
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 0:10	D1E0038	DE10325
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 0:10	D1E0038	DE10325
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 0:10	D1E0038	DE10325
Aroclor 1254	**0.3** (0.1)		8082A		1	05/05/21 0:10	D1E0038	DE10325
Aroclor 1260	**0.4** (0.1)		8082A		1	05/05/21 0:10	D1E0038	DE10325
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 0:10	D1E0038	DE10325
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 0:10	D1E0038	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-05-11
Date Sampled: 04/27/21 09:20
Percent Solids: 100
Initial Volume: 5.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0026
ESS Laboratory Sample ID: 21E0026-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/3/21 20:40

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 3:43	D1E0038	DE10325
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 3:43	D1E0038	DE10325
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 3:43	D1E0038	DE10325
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 3:43	D1E0038	DE10325
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 0:30	D1E0038	DE10325
Aroclor 1254	**0.3** (0.1)		8082A		1	05/05/21 0:30	D1E0038	DE10325
Aroclor 1260 [2C]	**0.6** (0.1)		8082A		1	05/05/21 3:43	D1E0038	DE10325
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 3:43	D1E0038	DE10325
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 3:43	D1E0038	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-05-12
Date Sampled: 04/27/21 09:25
Percent Solids: 99
Initial Volume: 5.14
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0026
ESS Laboratory Sample ID: 21E0026-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/3/21 20:40

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 0:49	D1E0038	DE10325
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 0:49	D1E0038	DE10325
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 0:49	D1E0038	DE10325
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 0:49	D1E0038	DE10325
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 0:49	D1E0038	DE10325
Aroclor 1254	ND (0.1)		8082A		1	05/05/21 0:49	D1E0038	DE10325
Aroclor 1260 [2C]	**0.6** (0.1)		8082A		1	05/05/21 0:49	D1E0038	DE10325
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 0:49	D1E0038	DE10325
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 0:49	D1E0038	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*91 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-14
Date Sampled: 04/27/21 09:30
Percent Solids: 99
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0026
ESS Laboratory Sample ID: 21E0026-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/3/21 20:40

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 1:08	D1E0038	DE10325
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 1:08	D1E0038	DE10325
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 1:08	D1E0038	DE10325
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 1:08	D1E0038	DE10325
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 1:08	D1E0038	DE10325
Aroclor 1254	ND (0.1)		8082A		1	05/05/21 1:08	D1E0038	DE10325
Aroclor 1260 [2C]	ND (0.1)		8082A		1	05/05/21 1:08	D1E0038	DE10325
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 1:08	D1E0038	DE10325
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 1:08	D1E0038	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-33 0.5-1.0
Date Sampled: 04/28/21 08:00
Percent Solids: 98
Initial Volume: 5.27
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0026
ESS Laboratory Sample ID: 21E0026-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/3/21 20:40

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 1:28	D1E0038	DE10325
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 1:28	D1E0038	DE10325
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 1:28	D1E0038	DE10325
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 1:28	D1E0038	DE10325
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 1:28	D1E0038	DE10325
Aroclor 1254	ND (0.1)		8082A		1	05/05/21 1:28	D1E0038	DE10325
Aroclor 1260	ND (0.1)		8082A		1	05/05/21 1:28	D1E0038	DE10325
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 1:28	D1E0038	DE10325
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 1:28	D1E0038	DE10325

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*101 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-33 1-2
Date Sampled: 04/28/21 08:05
Percent Solids: 99
Initial Volume: 5.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0026
ESS Laboratory Sample ID: 21E0026-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/3/21 20:40

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 1:47	D1E0038	DE10325
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 1:47	D1E0038	DE10325
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 1:47	D1E0038	DE10325
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 1:47	D1E0038	DE10325
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 1:47	D1E0038	DE10325
Aroclor 1254	ND (0.1)		8082A		1	05/05/21 1:47	D1E0038	DE10325
Aroclor 1260	ND (0.1)		8082A		1	05/05/21 1:47	D1E0038	DE10325
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 1:47	D1E0038	DE10325
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 1:47	D1E0038	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-33 2-3
Date Sampled: 04/28/21 08:10
Percent Solids: 99
Initial Volume: 5.12
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0026
ESS Laboratory Sample ID: 21E0026-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/3/21 20:40

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 2:06	D1E0038	DE10325
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 2:06	D1E0038	DE10325
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 2:06	D1E0038	DE10325
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 2:06	D1E0038	DE10325
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 2:06	D1E0038	DE10325
Aroclor 1254	ND (0.1)		8082A		1	05/05/21 2:06	D1E0038	DE10325
Aroclor 1260	ND (0.1)		8082A		1	05/05/21 2:06	D1E0038	DE10325
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 2:06	D1E0038	DE10325
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 2:06	D1E0038	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0026

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10325 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		88	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		95	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		88	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	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		90	40-140	2	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140	3	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		96	40-140	1	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140	0.6	30	
Surrogate: Decachlorobiphenyl	*0.0267*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0026

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0026

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21E0026
Date Received: 5/3/2021
Project Due Date: 5/10/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.9 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: ____ Time: ____ By: ____
    b. Low Level VOA vials frozen: Date: ____ Time: ____ By: ____

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? ____ Date: ____ Time: ____ By: ____

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	160988	Yes	N/A	Yes	4 oz. Jar	NP	
2	160989	Yes	N/A	Yes	4 oz. Jar	NP	
3	160990	Yes	N/A	Yes	4 oz. Jar	NP	
4	160991	Yes	N/A	Yes	4 oz. Jar	NP	
5	160992	Yes	N/A	Yes	4 oz. Jar	NP	
6	160993	Yes	N/A	Yes	4 oz. Jar	NP	
7	160994	Yes	N/A	Yes	4 oz. Jar	NP	
8	160995	Yes	N/A	Yes	4 oz. Jar	NP	
9	160996	Yes	N/A	Yes	4 oz. Jar	NP	
10	160997	Yes	N/A	Yes	8 oz jar	NP	
11	160998	Yes	N/A	Yes	8 oz jar	NP	
12	160999	Yes	N/A	Yes	8 oz jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials ____
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / (NA)

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 21E0026

Date Received: 5/3/2021

Are all Hex Chrome stickers attached? Yes / No / NA

Are all QC stickers attached? Yes / No / NA

Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Taylor Davis Date & Time: 1823 5/3/21

Reviewed By: Date & Time: 5/3/21 1844

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21E0026 | Page 2 of 3

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island **Criteria:** <0.5 mg/kg

Is this project for any of the following?:
☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	Total Number of Bottles
1	4/27/21	8:50 am	Grab	Concrete	ICS-01-97	X	
2		8:55 am			ICS-03-71	X	
3		9:00 am			ICS-04-33	X	
4		9:05 am			ICS-04-34	X	
5		9:10 am			ICS-04-35	X	
6		9:15 am			ICS-04-36	X	
7		9:20 am			ICS-05-11	X	
8		9:25 am			ICS-05-12	X	
9		9:30 am			DUP-14	X	
10	4/28/21	8:00 am			ICS-01-33 (0.5-1.0)	X	
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial					AG	
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					9/10	
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					11	

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.9 ICE

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Daniel D'Ammuso	4/30/21	1:01 pm	5/3/21 12:11		5/3/21	16:44	Taylor Davis 5/3/21 16:44
Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)

(DD)

CHAIN OF CUSTODY

ESS Lab # 21E0026 | Page 3 of 3

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island Criteria: <0.5 mg/kg

Is this project for any of the following?: ☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	Total Number of Bottles
11	4/28/21	8:05 am	Grab	Concrete	ICS-01-33 (1-2)	X	
12	4/28/21	8:10 am	Grab	Concrete	ICS-01-33 (2-3)	X	

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 10
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.9 Ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Dominic Dimmmm	4/30/21	1:01 pm	5/3/21 10:11	5/3/21	16:44	Taylor Davis 5/3/21 1644	
Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 21I0146

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 3:33 pm, Sep 16, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0146

SAMPLE RECEIPT

The following samples were received on September 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Revision 1 September 16, 2021: This report has been revised to include updated IDs for 21I0146-08 through -10.

Lab Number	Sample Name	Matrix	Analysis
21I0146-01	ICS-01-98	Solid	8082A
21I0146-02	ICS-01-99	Solid	8082A
21I0146-03	ICS-01-100	Solid	8082A
21I0146-04	ICS-01-101	Solid	8082A
21I0146-05	DUP-15	Solid	8082A
21I0146-06	ICS-01-102	Solid	8082A
21I0146-07	ICS-01-103	Solid	8082A
21I0146-08	ICS-02-16	Solid	8082A
21I0146-09	ICS-02-17	Solid	8082A
21I0146-10	ICS-02-18	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0146

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0146

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-98
Date Sampled: 09/01/21 09:05
Percent Solids: 98
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0146
ESS Laboratory Sample ID: 21I0146-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 19:20	D1I0112	DI10709
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 19:20	D1I0112	DI10709
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 19:20	D1I0112	DI10709
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 19:20	D1I0112	DI10709
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 19:20	D1I0112	DI10709
Aroclor 1254	ND (0.1)		8082A		1	09/10/21 19:20	D1I0112	DI10709
Aroclor 1260	**0.3** (0.1)		8082A		1	09/10/21 19:20	D1I0112	DI10709
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 19:20	D1I0112	DI10709
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 19:20	D1I0112	DI10709

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-99
Date Sampled: 09/01/21 09:35
Percent Solids: 96
Initial Volume: 5.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0146
ESS Laboratory Sample ID: 21I0146-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 20:19	D1I0112	DI10709
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 20:19	D1I0112	DI10709
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 20:19	D1I0112	DI10709
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 20:19	D1I0112	DI10709
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 20:19	D1I0112	DI10709
Aroclor 1254	ND (0.1)		8082A		1	09/10/21 20:19	D1I0112	DI10709
Aroclor 1260	ND (0.1)		8082A		1	09/10/21 20:19	D1I0112	DI10709
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 20:19	D1I0112	DI10709
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 20:19	D1I0112	DI10709

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-100
Date Sampled: 09/01/21 09:45
Percent Solids: 97
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0146
ESS Laboratory Sample ID: 21I0146-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 20:39	D1I0112	DI10709
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 20:39	D1I0112	DI10709
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 20:39	D1I0112	DI10709
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 20:39	D1I0112	DI10709
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 20:39	D1I0112	DI10709
Aroclor 1254	ND (0.1)		8082A		1	09/10/21 20:39	D1I0112	DI10709
Aroclor 1260	ND (0.1)		8082A		1	09/10/21 20:39	D1I0112	DI10709
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 20:39	D1I0112	DI10709
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 20:39	D1I0112	DI10709

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-101
Date Sampled: 09/01/21 09:15
Percent Solids: 97
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0146
ESS Laboratory Sample ID: 21I0146-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 20:59	D1I0112	DI10709
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 20:59	D1I0112	DI10709
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 20:59	D1I0112	DI10709
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 20:59	D1I0112	DI10709
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 20:59	D1I0112	DI10709
Aroclor 1254	ND (0.1)		8082A		1	09/10/21 20:59	D1I0112	DI10709
Aroclor 1260 [2C]	**0.6** (0.1)		8082A		1	09/10/21 20:59	D1I0112	DI10709
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 20:59	D1I0112	DI10709
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 20:59	D1I0112	DI10709

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-15
Date Sampled: 09/01/21 09:20
Percent Solids: 96
Initial Volume: 5.15
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0146
ESS Laboratory Sample ID: 21I0146-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 21:18	D1I0112	DI10709
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 21:18	D1I0112	DI10709
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 21:18	D1I0112	DI10709
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 21:18	D1I0112	DI10709
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 21:18	D1I0112	DI10709
Aroclor 1254	ND (0.1)		8082A		1	09/10/21 21:18	D1I0112	DI10709
Aroclor 1260	**0.2** (0.1)		8082A		1	09/10/21 21:18	D1I0112	DI10709
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 21:18	D1I0112	DI10709
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 21:18	D1I0112	DI10709

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

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-102
Date Sampled: 09/01/21 09:25
Percent Solids: 96
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0146
ESS Laboratory Sample ID: 21I0146-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/11/21 0:16	D1I0112	DI10709
Aroclor 1221	ND (0.1)		8082A		1	09/11/21 0:16	D1I0112	DI10709
Aroclor 1232	ND (0.1)		8082A		1	09/11/21 0:16	D1I0112	DI10709
Aroclor 1242	ND (0.1)		8082A		1	09/11/21 0:16	D1I0112	DI10709
Aroclor 1248	ND (0.1)		8082A		1	09/11/21 0:16	D1I0112	DI10709
Aroclor 1254	ND (0.1)		8082A		1	09/11/21 0:16	D1I0112	DI10709
Aroclor 1260 [2C]	**1.0** (0.1)		8082A		1	09/11/21 0:16	D1I0112	DI10709
Aroclor 1262	ND (0.1)		8082A		1	09/11/21 0:16	D1I0112	DI10709
Aroclor 1268	ND (0.1)		8082A		1	09/11/21 0:16	D1I0112	DI10709

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-103
Date Sampled: 09/01/21 09:30
Percent Solids: 93
Initial Volume: 5.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0146
ESS Laboratory Sample ID: 21I0146-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/11/21 0:35	D1I0112	DI10709
Aroclor 1221	ND (0.1)		8082A		1	09/11/21 0:35	D1I0112	DI10709
Aroclor 1232	ND (0.1)		8082A		1	09/11/21 0:35	D1I0112	DI10709
Aroclor 1242	ND (0.1)		8082A		1	09/11/21 0:35	D1I0112	DI10709
Aroclor 1248	ND (0.1)		8082A		1	09/11/21 0:35	D1I0112	DI10709
Aroclor 1254	ND (0.1)		8082A		1	09/11/21 0:35	D1I0112	DI10709
Aroclor 1260	ND (0.1)		8082A		1	09/11/21 0:35	D1I0112	DI10709
Aroclor 1262	ND (0.1)		8082A		1	09/11/21 0:35	D1I0112	DI10709
Aroclor 1268	ND (0.1)		8082A		1	09/11/21 0:35	D1I0112	DI10709

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-16
Date Sampled: 09/01/21 12:20
Percent Solids: 100
Initial Volume: 5.12
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0146
ESS Laboratory Sample ID: 21I0146-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/11/21 0:55	D1I0112	DI10709
Aroclor 1221	ND (0.1)		8082A		1	09/11/21 0:55	D1I0112	DI10709
Aroclor 1232	ND (0.1)		8082A		1	09/11/21 0:55	D1I0112	DI10709
Aroclor 1242	ND (0.1)		8082A		1	09/11/21 0:55	D1I0112	DI10709
Aroclor 1248	ND (0.1)		8082A		1	09/11/21 0:55	D1I0112	DI10709
Aroclor 1254	ND (0.1)		8082A		1	09/11/21 0:55	D1I0112	DI10709
Aroclor 1260	ND (0.1)		8082A		1	09/11/21 0:55	D1I0112	DI10709
Aroclor 1262	ND (0.1)		8082A		1	09/11/21 0:55	D1I0112	DI10709
Aroclor 1268	ND (0.1)		8082A		1	09/11/21 0:55	D1I0112	DI10709

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-17
Date Sampled: 09/01/21 12:25
Percent Solids: 100
Initial Volume: 5.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0146
ESS Laboratory Sample ID: 21I0146-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/11/21 1:15	D1I0112	DI10709
Aroclor 1221	ND (0.1)		8082A		1	09/11/21 1:15	D1I0112	DI10709
Aroclor 1232	ND (0.1)		8082A		1	09/11/21 1:15	D1I0112	DI10709
Aroclor 1242	ND (0.1)		8082A		1	09/11/21 1:15	D1I0112	DI10709
Aroclor 1248	ND (0.1)		8082A		1	09/11/21 1:15	D1I0112	DI10709
Aroclor 1254	ND (0.1)		8082A		1	09/11/21 1:15	D1I0112	DI10709
Aroclor 1260	ND (0.1)		8082A		1	09/11/21 1:15	D1I0112	DI10709
Aroclor 1262	ND (0.1)		8082A		1	09/11/21 1:15	D1I0112	DI10709
Aroclor 1268	ND (0.1)		8082A		1	09/11/21 1:15	D1I0112	DI10709

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*73 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-02-18
Date Sampled: 09/02/21 09:15
Percent Solids: 100
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0146
ESS Laboratory Sample ID: 21I0146-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/11/21 1:35	D1I0112	DI10709
Aroclor 1221	ND (0.1)		8082A		1	09/11/21 1:35	D1I0112	DI10709
Aroclor 1232	ND (0.1)		8082A		1	09/11/21 1:35	D1I0112	DI10709
Aroclor 1242	ND (0.1)		8082A		1	09/11/21 1:35	D1I0112	DI10709
Aroclor 1248	ND (0.1)		8082A		1	09/11/21 1:35	D1I0112	DI10709
Aroclor 1254 [2C]	**16.4** (0.5)		8082A		5	09/12/21 11:24	D1I0112	DI10709
Aroclor 1260	ND (0.1)		8082A		1	09/11/21 1:35	D1I0112	DI10709
Aroclor 1262	ND (0.1)		8082A		1	09/11/21 1:35	D1I0112	DI10709
Aroclor 1268	ND (0.1)		8082A		1	09/11/21 1:35	D1I0112	DI10709

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0146

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI10709 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0196*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		89	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		88	40-140			
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		89	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Surrogate: Decachlorobiphenyl	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0226*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0204*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		87	40-140	3	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140	3	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		88	40-140	1	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		88	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0216*		mg/kg wet	*0.02500*		*87*	*30-150*			
Matrix Spike **Source: 21I0146-01**										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0146

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI10709 - 3540C										
Aroclor 1016	1.8	0.1	mg/kg dry	2.015	ND	89	40-140			
Aroclor 1016 [2C]	1.7	0.1	mg/kg dry	2.015	ND	85	40-140			
Aroclor 1260	1.9	0.1	mg/kg dry	2.015	0.3	79	40-140			
Aroclor 1260 [2C]	2.0	0.1	mg/kg dry	2.015	0.3	83	40-140			
Surrogate: Decachlorobiphenyl	*0.0831*		mg/kg dry	*0.1007*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0900*		mg/kg dry	*0.1007*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0764*		mg/kg dry	*0.1007*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0868*		mg/kg dry	*0.1007*		*86*	*30-150*			
Matrix Spike Source: 21I0146-05										
Aroclor 1016	1.4	0.1	mg/kg dry	2.015	ND	69	40-140			
Aroclor 1016 [2C]	1.4	0.1	mg/kg dry	2.015	ND	69	40-140			
Aroclor 1260	1.4	0.1	mg/kg dry	2.015	0.2	59	40-140			
Aroclor 1260 [2C]	1.6	0.1	mg/kg dry	2.015	0.2	70	40-140			
Surrogate: Decachlorobiphenyl	*0.0731*		mg/kg dry	*0.1007*		*73*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0804*		mg/kg dry	*0.1007*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0720*		mg/kg dry	*0.1007*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0800*		mg/kg dry	*0.1007*		*79*	*30-150*			
Matrix Spike Dup Source: 21I0146-01										
Aroclor 1016	1.8	0.1	mg/kg dry	2.027	ND	89	40-140	0.3	30	
Aroclor 1016 [2C]	1.7	0.1	mg/kg dry	2.027	ND	84	40-140	0.5	30	
Aroclor 1260	1.9	0.1	mg/kg dry	2.027	0.3	79	40-140	0.4	30	
Aroclor 1260 [2C]	1.9	0.1	mg/kg dry	2.027	0.3	81	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0813*		mg/kg dry	*0.1013*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0865*		mg/kg dry	*0.1013*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0706*		mg/kg dry	*0.1013*		*70*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0820*		mg/kg dry	*0.1013*		*81*	*30-150*			
Matrix Spike Dup Source: 21I0146-05										
Aroclor 1016	1.6	0.1	mg/kg dry	2.055	ND	78	40-140	15	30	
Aroclor 1016 [2C]	1.6	0.1	mg/kg dry	2.055	ND	79	40-140	15	30	
Aroclor 1260	1.7	0.1	mg/kg dry	2.055	0.2	72	40-140	20	30	
Aroclor 1260 [2C]	1.8	0.1	mg/kg dry	2.055	0.2	80	40-140	14	30	
Surrogate: Decachlorobiphenyl	*0.0835*		mg/kg dry	*0.1027*		*81*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0893*		mg/kg dry	*0.1027*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0803*		mg/kg dry	*0.1027*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0902*		mg/kg dry	*0.1027*		*88*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0146

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0146

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 2110146
Date Received: 9/3/2021
Project Due Date: 9/13/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 4.1 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	204248	Yes	N/A	Yes	4 oz. Jar	NP	
2	204249	Yes	N/A	Yes	4 oz. Jar	NP	
3	204250	Yes	N/A	Yes	4 oz. Jar	NP	
4	204251	Yes	N/A	Yes	4 oz. Jar	NP	
5	204252	Yes	N/A	Yes	4 oz. Jar	NP	
6	204253	Yes	N/A	Yes	4 oz. Jar	NP	
7	204254	Yes	N/A	Yes	4 oz. Jar	NP	
8	204255	Yes	N/A	Yes	4 oz. Jar	NP	
9	204256	Yes	N/A	Yes	4 oz. Jar	NP	
10	204257	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials KL
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? (Yes) / No / ~~NA~~

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 2110146

Date Received: 9/3/2021

Are VOA stickers attached if bubbles noted? Yes / No (NA)

Completed By: [signature] Date & Time: 9-3-21 18:19

Reviewed By: [signature] Date & Time: 9/3/21 1911

185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21J0146 | Page 1 of 1

Turn Time (Days) ☐>5 ☒5 ☐4 ☐3 ☐2 ☐1 ☐Same Day

Regulatory State: Rhode Island Criteria: <0.5 ppm

Is this project for any of the following?: ☐CT RCP ☐MA MCP ☐RGP ☐Permit ☐401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☒ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers & Scientists, Inc
Address: 4 First Street, Bridgewater, Massachusetts 02324
Phone: 508-697-3191
Email Distribution List: Jaevazelis, mzoller, Kleftus, jkearney, cmacuch, mnash, mlabelle@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 control House
Project Location: 6 Thornton St / Pawtucket RI
Project Number: 5675.F
Project Manager: Katie Leftus
Bill to: Environmental AP
PO#: 5675.F.101.4
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs 8082	MS/MSD											Total Number of Bottles
1	9/1/21	9:05 am	Grab	Concrete	ICS-01-98	X	X											1
2		9:35 am			ICS-01-99	X												1
3		9:45 am			ICS-01-100	X												1
4		9:15 am			ICS-01-101	X												1
5		9:20 am			DUP-15	X	X											1
6		9:25 am			ICS-01-102	X												1
7		9:30 am			ICS-01-103	X												1
8		12:20 pm			~~ICS-02-01~~ ICS-02-16	X												1
9	↓	12:25 pm			~~ICS-02-02~~ ICS-02-17	X												1
10	9/2/21	9:15 am			~~ICS-02-03~~ ICS-02-18 JA 9-14-21	X												1
						A6												10
						9												
						11												

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*

Sampled by : ML/DCK/CSM/MHN

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 4.1 ice

Comments: * Please specify "Other" preservative and containers types in this space
11 = ice
ManVal Soxhlet Extraction per EPA Method 3540. DM weight, National Grid Project Homogenize, TSCA Requirements, full Data Package

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
	9-2-2021	7:51 pm	9/3/21 12:28		9/3/21	16:42	9-3-21 16:42

185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 210146 | Page 1 of 1

Turn Time (Days) ☐>5 ☒5 ☐4 ☐3 ☐2 ☐1 ☐ Same Day

Regulatory State: Rhode Island Criteria: <0.5 ppm

Is this project for any of the following?:

☐CT RCP ☐MA MCP ☐RGP ☐Permit ☐401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☒ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers & Scientists, Inc
Address: 4 First Street
Bridgewater, Massachusetts 02324
Phone: 508-697-3191

Email Distribution List: Jaevazelis, mzoller, kleftus, jkearney, cmacuch, mnash, mlabelle@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 control House
Project Location: 6 Thornton St / Pawtucket RI
Project Number: 5675.F
Project Manager: Katie Leftus
Bill to: Environmental AP
PO#: 5675.F.101.4
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs 8082	MS/MSD	Total Number of Bottles
1	9/1/21	9:05 am	Grab	Concrete	ICS-01-98	X	X	1
2		9:35 am			ICS-01-99	X		1
3		9:45 am			ICS-01-100	X		1
4		9:15 am			ICS-01-101	X		1
5		9:20 am			DUP-15	X	X	1
6		9:25 am			ICS-01-102	X		1
7		9:30 am			ICS-01-103	X		1
8		12:20 pm			ICS-02-01	X		1
9	↓	12:25 pm			ICS-02-02	X		1
10	9/2/21	9:15 am			ICS-02-03	X		1
						A6		10
						9		
						11		

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*

Sampled by : ML/DCK/CSM/MHN

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only

Cooler Temperature (°C): 4.1 / ICE

Comments: * Please specify "Other" preservative and containers types in this space

11 = ice

ManVal Soxhlet Extraction per EPA Method 3540. DM weight, Homogenize, TSCA Requirements, Full Data Package

National Grid Project

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration

☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
	9-2-2021	7:51 pm	9/3/21 12:28		9/3/21	16:42	9-3-21 16:42
Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F.101.4)
ESS Laboratory Work Order Number: 21J0813

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 1:23 pm, Oct 29, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0813

SAMPLE RECEIPT

The following samples were received on October 22, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21J0813-01	ICS-01-104	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0813

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0813

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: ICS-01-104
Date Sampled: 10/21/21 09:44
Percent Solids: 98
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0813
ESS Laboratory Sample ID: 21J0813-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: JLG
Prepared: 10/22/21 20:10

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/25/21 17:04	D1J0395	DJ12206
Aroclor 1221	ND (0.1)		8082A		1	10/25/21 17:04	D1J0395	DJ12206
Aroclor 1232	ND (0.1)		8082A		1	10/25/21 17:04	D1J0395	DJ12206
Aroclor 1242	ND (0.1)		8082A		1	10/25/21 17:04	D1J0395	DJ12206
Aroclor 1248	ND (0.1)		8082A		1	10/25/21 17:04	D1J0395	DJ12206
Aroclor 1254	ND (0.1)		8082A		1	10/25/21 17:04	D1J0395	DJ12206
Aroclor 1260	ND (0.1)		8082A		1	10/25/21 17:04	D1J0395	DJ12206
Aroclor 1262	ND (0.1)		8082A		1	10/25/21 17:04	D1J0395	DJ12206
Aroclor 1268	ND (0.1)		8082A		1	10/25/21 17:04	D1J0395	DJ12206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*111 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*104 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0813

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DJ12206 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		94	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		90	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		101	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Surrogate: Decachlorobiphenyl	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		91	40-140	4	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		87	40-140	3	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		97	40-140	3	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		88	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0224*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0241*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0813

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probable Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0813

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21J0813
Date Received: 10/22/2021
Project Due Date: 10/29/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 2.1 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	221481	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review

Were all containers scanned into storage/lab? Initials: [illegible]
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: [signature] Date & Time: 10/22/21 1628
Reviewed By: Taylor Davis Date & Time: 10/22/21 1630

185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21J0813 | Page 1 of 1

Turn Time (Days) ☐>5 ☑5 ☐4 ☐3 ☐2 ☐1 ☐Same Day

Regulatory State: RI **Criteria:** <0.5 mg/kg

Is this project for any of the following?:
☐CT RCP ☐MA MCP ☐RGP ☐Permit ☐401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☑ Limit Checker ☐ State Forms ☐ EQuIS
☑ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☐ Other (Specify) →

CLIENT INFORMATION

Client: Coneco Engineers & Scientists, Inc
Address: 4 First Street
Bridgewater, Massachusetts 02324
Phone: 508-697-3191

Email Distribution List: dkearney, cmacuch, kloftus, jaevazelis@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket Control House
Project Location: 6 Thorton Street, Pawtucket, RI
Project Number: 5675.F.101.4
Project Manager: Katie Loftus
Bill to: Environmental AP
PO#: 5675.F.101.4
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by EPA 8082	Total Number of Bottles
1	10/21/2021	0944	Grab	Concrete	ICS-01-104	X	1

Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*	11

1

Sampled by : DCK

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 2.1
1 Ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project Preservation code 11 = ice Homogenize samples
Use manual soxhlet extraction per EPA Method 3540 TSCA Requirements
Please provide full data package

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
	10/21/21	1400	10/22/21 11:52		10/22/21	10:03	
Relinquished by (Signature)	**Date**	**Time**	**Received by (Signature)**	**Relinquished by (Signature)**	**Date**	**Time**	**Received by (Signature)**

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 19J0022

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 3:42 pm, Oct 09, 2019

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0022

SAMPLE RECEIPT

The following samples were received on October 01, 2019 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
19J0022-01	CW-03-01	Solid	8082A
19J0022-02	CW-03-02	Solid	8082A
19J0022-03	CW-03-03	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0022

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0022

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-03-01
Date Sampled: 09/27/19 08:30
Percent Solids: 100
Initial Volume: 5.37
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0022
ESS Laboratory Sample ID: 19J0022-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/07/19 22:56	C9J0157	CJ90208
Aroclor 1221	ND (0.09)		8082A		1	10/07/19 22:56	C9J0157	CJ90208
Aroclor 1232	ND (0.09)		8082A		1	10/07/19 22:56	C9J0157	CJ90208
Aroclor 1242	ND (0.09)		8082A		1	10/07/19 22:56	C9J0157	CJ90208
Aroclor 1248	ND (0.09)		8082A		1	10/07/19 22:56	C9J0157	CJ90208
Aroclor 1254	ND (0.09)		8082A		1	10/07/19 22:56	C9J0157	CJ90208
Aroclor 1260 [2C]	ND (0.09)		8082A		1	10/07/19 22:56	C9J0157	CJ90208
Aroclor 1262	ND (0.09)		8082A		1	10/07/19 22:56	C9J0157	CJ90208
Aroclor 1268	ND (0.09)		8082A		1	10/07/19 22:56	C9J0157	CJ90208

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-03-02
Date Sampled: 09/27/19 08:35
Percent Solids: 100
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0022
ESS Laboratory Sample ID: 19J0022-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/07/19 23:15	C9J0157	CJ90208
Aroclor 1221	ND (0.1)		8082A		1	10/07/19 23:15	C9J0157	CJ90208
Aroclor 1232	ND (0.1)		8082A		1	10/07/19 23:15	C9J0157	CJ90208
Aroclor 1242	ND (0.1)		8082A		1	10/07/19 23:15	C9J0157	CJ90208
Aroclor 1248	ND (0.1)		8082A		1	10/07/19 23:15	C9J0157	CJ90208
Aroclor 1254	ND (0.1)		8082A		1	10/07/19 23:15	C9J0157	CJ90208
Aroclor 1260	**0.6** (0.1)		8082A		1	10/07/19 23:15	C9J0157	CJ90208
Aroclor 1262	ND (0.1)		8082A		1	10/07/19 23:15	C9J0157	CJ90208
Aroclor 1268	ND (0.1)		8082A		1	10/07/19 23:15	C9J0157	CJ90208

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-03-03
Date Sampled: 09/27/19 08:40
Percent Solids: 100
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0022
ESS Laboratory Sample ID: 19J0022-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/07/19 23:34	C9J0157	CJ90208
Aroclor 1221	ND (0.1)		8082A		1	10/07/19 23:34	C9J0157	CJ90208
Aroclor 1232	ND (0.1)		8082A		1	10/07/19 23:34	C9J0157	CJ90208
Aroclor 1242	ND (0.1)		8082A		1	10/07/19 23:34	C9J0157	CJ90208
Aroclor 1248	ND (0.1)		8082A		1	10/07/19 23:34	C9J0157	CJ90208
Aroclor 1254	ND (0.1)		8082A		1	10/07/19 23:34	C9J0157	CJ90208
Aroclor 1260	ND (0.1)		8082A		1	10/07/19 23:34	C9J0157	CJ90208
Aroclor 1262	ND (0.1)		8082A		1	10/07/19 23:34	C9J0157	CJ90208
Aroclor 1268	ND (0.1)		8082A		1	10/07/19 23:34	C9J0157	CJ90208

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0022

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ90208 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0226*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		105	40-140			
Aroclor 1016 [2C]	0.6	0.02	mg/kg wet	0.5000		125	40-140			
Aroclor 1260	0.6	0.02	mg/kg wet	0.5000		119	40-140			
Aroclor 1260 [2C]	0.6	0.02	mg/kg wet	0.5000		122	40-140			
Surrogate: Decachlorobiphenyl	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0275*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0261*		mg/kg wet	*0.02500*		*105*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		101	40-140	4	30	
Aroclor 1016 [2C]	0.6	0.02	mg/kg wet	0.5000		121	40-140	3	30	
Aroclor 1260	0.6	0.02	mg/kg wet	0.5000		116	40-140	3	30	
Aroclor 1260 [2C]	0.6	0.02	mg/kg wet	0.5000		119	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0261*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0274*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0022

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0022

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 19J0022
Date Received: 10/1/2019
Project Due Date: 10/8/2019
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 0.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	393726	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	393725	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	393724	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Were all containers scanned into storage/lab? Initials
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / (NA)
Are all Hex Chrome stickers attached? Yes / No / (NA)
Are all QC stickers attached? Yes / No / (NA)
Are VOA stickers attached if bubbles noted? Yes / No / (NA)

Completed By: Date & Time: 10/1/19 1937
Reviewed By: Date & Time: 10/1/19 2046
Delivered By: 10/1/19 2046

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 19J0022

Turn Time	5-Day **Rush**
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	PCBs <0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name Coneco Engineers and Scientists	**Project #** 5675.F	**Project Name** Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI	
Contact Person Mark Zoller	**Address** 4 First Street		
City Bridgewater	**State** MA	**Zip Code** 02324	**PO #** 5675.F
Telephone Number 508-697-3191	**FAX Number**	**Email Address** jaevazalis, mzoller,kloftus,@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID (DDiFrancesco)	Analysis: PCBs 8082
01	9/27/2019	8:30 a.m.	Grab	Solid	CW-03-01	X
02	9/27/2019	8:35 a.m.	Grab	Solid	CW-03-02	X
03	9/27/2019	8:40 a.m.	Grab	Solid	CW-03-03	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: ✓
Seals Intact: NA
Cooler Temperature: °C IR-1 temp 0.4

Sampled by : DJD/MJM

Comments: **Please specify "Other" preservative and containers types in this space**
National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ICE,
Homogenize Sample TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
9/30/19 1:20 pm	10/1/19 12:36	10/1/19 16:37	10/1/19 1637
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 20A0098

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 1:54 pm, Jan 14, 2020

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0098

SAMPLE RECEIPT

The following samples were received on January 07, 2020 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
20A0098-01	CW-04-01	Solid	8082A
20A0098-02	CW-04-02	Solid	8082A
20A0098-03	CW-04-03	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0098

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0098

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-04-01
Date Sampled: 01/03/20 11:00
Percent Solids: 97
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0098
ESS Laboratory Sample ID: 20A0098-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/09/20 19:25	C0A0124	CA00826
Aroclor 1221	ND (0.1)		8082A		1	01/09/20 19:25	C0A0124	CA00826
Aroclor 1232	ND (0.1)		8082A		1	01/09/20 19:25	C0A0124	CA00826
Aroclor 1242	ND (0.1)		8082A		1	01/09/20 19:25	C0A0124	CA00826
Aroclor 1248	ND (0.1)		8082A		1	01/09/20 19:25	C0A0124	CA00826
Aroclor 1254	ND (0.1)		8082A		1	01/09/20 19:25	C0A0124	CA00826
Aroclor 1260 [2C]	ND (0.1)		8082A		1	01/09/20 19:25	C0A0124	CA00826
Aroclor 1262	ND (0.1)		8082A		1	01/09/20 19:25	C0A0124	CA00826
Aroclor 1268	ND (0.1)		8082A		1	01/09/20 19:25	C0A0124	CA00826

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*61 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-04-02
Date Sampled: 01/03/20 11:10
Percent Solids: 96
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0098
ESS Laboratory Sample ID: 20A0098-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/09/20 19:45	C0A0124	CA00826
Aroclor 1221	ND (0.1)		8082A		1	01/09/20 19:45	C0A0124	CA00826
Aroclor 1232	ND (0.1)		8082A		1	01/09/20 19:45	C0A0124	CA00826
Aroclor 1242	ND (0.1)		8082A		1	01/09/20 19:45	C0A0124	CA00826
Aroclor 1248	ND (0.1)		8082A		1	01/09/20 19:45	C0A0124	CA00826
Aroclor 1254	ND (0.1)		8082A		1	01/09/20 19:45	C0A0124	CA00826
Aroclor 1260	**0.2** (0.1)		8082A		1	01/09/20 19:45	C0A0124	CA00826
Aroclor 1262	ND (0.1)		8082A		1	01/09/20 19:45	C0A0124	CA00826
Aroclor 1268	ND (0.1)		8082A		1	01/09/20 19:45	C0A0124	CA00826

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-04-03
Date Sampled: 01/03/20 11:20
Percent Solids: 95
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0098
ESS Laboratory Sample ID: 20A0098-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 1/8/20 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/09/20 20:04	C0A0124	CA00826
Aroclor 1221	ND (0.1)		8082A		1	01/09/20 20:04	C0A0124	CA00826
Aroclor 1232	ND (0.1)		8082A		1	01/09/20 20:04	C0A0124	CA00826
Aroclor 1242	ND (0.1)		8082A		1	01/09/20 20:04	C0A0124	CA00826
Aroclor 1248	ND (0.1)		8082A		1	01/09/20 20:04	C0A0124	CA00826
Aroclor 1254	ND (0.1)		8082A		1	01/09/20 20:04	C0A0124	CA00826
Aroclor 1260 [2C]	ND (0.1)		8082A		1	01/09/20 20:04	C0A0124	CA00826
Aroclor 1262	ND (0.1)		8082A		1	01/09/20 20:04	C0A0124	CA00826
Aroclor 1268	ND (0.1)		8082A		1	01/09/20 20:04	C0A0124	CA00826

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0098

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CA00826 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0162*		mg/kg wet	*0.02500*		*65*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0167*		mg/kg wet	*0.02500*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0196*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0209*		mg/kg wet	*0.02500*		*83*	*30-150*			
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0161*		mg/kg wet	*0.02500*		*65*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0172*		mg/kg wet	*0.02500*		*69*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0098

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CA00826 - 3540C										
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		98	40-140			
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		85	40-140			
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		90	40-140			
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		85	40-140			
Surrogate: Decachlorobiphenyl	*0.0197*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0196*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		94	40-140			
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		87	40-140			
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		88	40-140			
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		86	40-140			
Surrogate: Decachlorobiphenyl	*0.0186*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0186*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		96	40-140	2	30	
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		86	40-140	1	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		90	40-140	0.7	30	
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		86	40-140	0.8	30	
Surrogate: Decachlorobiphenyl	*0.0190*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		98	40-140	4	30	
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		89	40-140	2	30	
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		89	40-140	1	30	
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		88	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0190*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0188*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0098

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0098

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 20A0098
Date Received: 1/7/2020
Project Due Date: 1/13/2020
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.5 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	773	Yes	N/A	Yes	4 oz. Jar	NP	
2	774	Yes	N/A	Yes	4 oz. Jar	NP	
3	775	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials
Are barcode labels on correct containers? Yes / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Date & Time: 1/7/20 2018
Reviewed By: Date & Time: 1/7/20 2035
Delivered By: 1/7/20 2035

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20A0098

Turn Time	5-Day **Rush**
Regulatory State	Rhode Island
Is this project for any of the following?:	O CT RCP O MA MCP O RGP
Reporting Limits	PCBs <0.5 mg/kg
Electronic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	**Project #**	**Project Name**	
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI	
Contact Person	**Address**		
Mark Zoller	4 First Street		
City	**State**	**Zip Code**	**PO #**
Bridgewater	MA	02324	5675.F
Telephone Number	**FAX Number**	**Email Address**	
508-697-3191		jaevazalis, mzoller,kloftus, ddifrancesco@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	1/3/2020	11:00 a.m.	Grab	Solid	CW-04-01	X
02	1/3/2020	11:10 a.m.	Grab	Solid	CW-04-02	X
03	1/3/2020	11:20 a.m.	Grab	Solid	CW-04-03	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓
Seals Intact: ✓
Cooler Temperature: 3.5 °C

Sampled by : DJD

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ICE, Homogenize Sample TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Donald D Thurman 1/6/2020	1/7/2020	1/7 15:05	1/7/20 1509
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 20F0219

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 5:58 pm, Jun 11, 2020

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0219

SAMPLE RECEIPT

The following samples were received on June 04, 2020 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
20F0219-01	CW-01-01	Solid	8082A
20F0219-02	CW-01-02	Solid	8082A
20F0219-03	CW-01-03	Solid	8082A
20F0219-04	CW-01-04	Solid	8082A
20F0219-05	CW-01-05	Solid	8082A
20F0219-06	CW-01-06	Solid	8082A
20F0219-07	CW-01-07	Solid	8082A
20F0219-08	CW-01-08	Solid	8082A
20F0219-09	CW-01-09	Solid	8082A
20F0219-10	CW-03-04	Solid	8082A
20F0219-11	CW-03-05	Solid	8082A
20F0219-12	CW-04-04	Solid	8082A
20F0219-13	CW-DUP-01	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0219

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0219

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-01-01
Date Sampled: 05/28/20 11:00
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0219
ESS Laboratory Sample ID: 20F0219-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/9/20 13:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 16:13	D0F0185	DF00904
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 16:13	D0F0185	DF00904
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 16:13	D0F0185	DF00904
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 16:13	D0F0185	DF00904
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 16:13	D0F0185	DF00904
Aroclor 1254 [2C]	**0.5** (0.1)		8082A		1	06/10/20 16:13	D0F0185	DF00904
Aroclor 1260	**0.3** (0.1)		8082A		1	06/10/20 16:13	D0F0185	DF00904
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 16:13	D0F0185	DF00904
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 16:13	D0F0185	DF00904

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-01-02
Date Sampled: 05/28/20 11:05
Percent Solids: 98
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0219
ESS Laboratory Sample ID: 20F0219-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/9/20 13:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 16:33	D0F0185	DF00904
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 16:33	D0F0185	DF00904
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 16:33	D0F0185	DF00904
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 16:33	D0F0185	DF00904
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 16:33	D0F0185	DF00904
Aroclor 1254 [2C]	**0.5** (0.1)		8082A		1	06/10/20 16:33	D0F0185	DF00904
Aroclor 1260	**0.2** (0.1)		8082A		1	06/10/20 16:33	D0F0185	DF00904
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 16:33	D0F0185	DF00904
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 16:33	D0F0185	DF00904

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-01-03
Date Sampled: 05/28/20 11:10
Percent Solids: 99
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0219
ESS Laboratory Sample ID: 20F0219-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/9/20 13:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 16:53	D0F0185	DF00904
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 16:53	D0F0185	DF00904
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 16:53	D0F0185	DF00904
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 16:53	D0F0185	DF00904
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 16:53	D0F0185	DF00904
Aroclor 1254 [2C]	ND (0.1)		8082A		1	06/10/20 16:53	D0F0185	DF00904
Aroclor 1260	ND (0.1)		8082A		1	06/10/20 16:53	D0F0185	DF00904
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 16:53	D0F0185	DF00904
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 16:53	D0F0185	DF00904

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-01-04
Date Sampled: 05/28/20 11:15
Percent Solids: 99
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0219
ESS Laboratory Sample ID: 20F0219-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/9/20 13:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 17:12	D0F0185	DF00904
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 17:12	D0F0185	DF00904
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 17:12	D0F0185	DF00904
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 17:12	D0F0185	DF00904
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 17:12	D0F0185	DF00904
Aroclor 1254 [2C]	**0.1** (0.1)		8082A		1	06/10/20 17:12	D0F0185	DF00904
Aroclor 1260	ND (0.1)		8082A		1	06/10/20 17:12	D0F0185	DF00904
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 17:12	D0F0185	DF00904
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 17:12	D0F0185	DF00904

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*82 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-01-05
Date Sampled: 05/28/20 11:20
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0219
ESS Laboratory Sample ID: 20F0219-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/9/20 13:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 17:32	D0F0185	DF00904
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 17:32	D0F0185	DF00904
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 17:32	D0F0185	DF00904
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 17:32	D0F0185	DF00904
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 17:32	D0F0185	DF00904
Aroclor 1254	ND (0.1)		8082A		1	06/10/20 17:32	D0F0185	DF00904
Aroclor 1260	ND (0.1)		8082A		1	06/10/20 17:32	D0F0185	DF00904
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 17:32	D0F0185	DF00904
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 17:32	D0F0185	DF00904

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-01-06
Date Sampled: 05/28/20 11:25
Percent Solids: 100
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0219
ESS Laboratory Sample ID: 20F0219-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/9/20 13:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 17:52	D0F0185	DF00904
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 17:52	D0F0185	DF00904
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 17:52	D0F0185	DF00904
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 17:52	D0F0185	DF00904
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 17:52	D0F0185	DF00904
Aroclor 1254	ND (0.1)		8082A		1	06/10/20 17:52	D0F0185	DF00904
Aroclor 1260	ND (0.1)		8082A		1	06/10/20 17:52	D0F0185	DF00904
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 17:52	D0F0185	DF00904
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 17:52	D0F0185	DF00904

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-01-07
Date Sampled: 05/28/20 11:30
Percent Solids: 99
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0219
ESS Laboratory Sample ID: 20F0219-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/9/20 13:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 18:12	D0F0185	DF00904
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 18:12	D0F0185	DF00904
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 18:12	D0F0185	DF00904
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 18:12	D0F0185	DF00904
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 18:12	D0F0185	DF00904
Aroclor 1254	ND (0.1)		8082A		1	06/10/20 18:12	D0F0185	DF00904
Aroclor 1260	**0.1** (0.1)		8082A		1	06/10/20 18:12	D0F0185	DF00904
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 18:12	D0F0185	DF00904
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 18:12	D0F0185	DF00904

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-01-08
Date Sampled: 05/28/20 11:35
Percent Solids: 99
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0219
ESS Laboratory Sample ID: 20F0219-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/9/20 13:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 18:31	D0F0185	DF00904
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 18:31	D0F0185	DF00904
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 18:31	D0F0185	DF00904
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 18:31	D0F0185	DF00904
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 18:31	D0F0185	DF00904
Aroclor 1254	ND (0.1)		8082A		1	06/10/20 18:31	D0F0185	DF00904
Aroclor 1260	ND (0.1)		8082A		1	06/10/20 18:31	D0F0185	DF00904
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 18:31	D0F0185	DF00904
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 18:31	D0F0185	DF00904

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-01-09
Date Sampled: 05/28/20 11:40
Percent Solids: 99
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0219
ESS Laboratory Sample ID: 20F0219-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/9/20 13:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 18:51	D0F0185	DF00904
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 18:51	D0F0185	DF00904
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 18:51	D0F0185	DF00904
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 18:51	D0F0185	DF00904
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 18:51	D0F0185	DF00904
Aroclor 1254	ND (0.1)		8082A		1	06/10/20 18:51	D0F0185	DF00904
Aroclor 1260	ND (0.1)		8082A		1	06/10/20 18:51	D0F0185	DF00904
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 18:51	D0F0185	DF00904
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 18:51	D0F0185	DF00904

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-03-04
Date Sampled: 05/28/20 11:45
Percent Solids: 100
Initial Volume: 5.14
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0219
ESS Laboratory Sample ID: 20F0219-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/9/20 13:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 19:11	D0F0185	DF00904
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 19:11	D0F0185	DF00904
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 19:11	D0F0185	DF00904
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 19:11	D0F0185	DF00904
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 19:11	D0F0185	DF00904
Aroclor 1254	ND (0.1)		8082A		1	06/10/20 19:11	D0F0185	DF00904
Aroclor 1260	**0.5** (0.1)		8082A		1	06/10/20 19:11	D0F0185	DF00904
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 19:11	D0F0185	DF00904
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 19:11	D0F0185	DF00904

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-03-05
Date Sampled: 05/28/20 11:50
Percent Solids: 100
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0219
ESS Laboratory Sample ID: 20F0219-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/9/20 13:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 19:31	D0F0185	DF00904
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 19:31	D0F0185	DF00904
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 19:31	D0F0185	DF00904
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 19:31	D0F0185	DF00904
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 19:31	D0F0185	DF00904
Aroclor 1254	ND (0.1)		8082A		1	06/10/20 19:31	D0F0185	DF00904
Aroclor 1260	**0.6** (0.1)		8082A		1	06/10/20 19:31	D0F0185	DF00904
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 19:31	D0F0185	DF00904
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 19:31	D0F0185	DF00904

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-04-04
Date Sampled: 05/29/20 13:15
Percent Solids: 97
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0219
ESS Laboratory Sample ID: 20F0219-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/9/20 13:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 19:51	D0F0185	DF00904
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 19:51	D0F0185	DF00904
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 19:51	D0F0185	DF00904
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 19:51	D0F0185	DF00904
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 19:51	D0F0185	DF00904
Aroclor 1254	ND (0.1)		8082A		1	06/10/20 19:51	D0F0185	DF00904
Aroclor 1260 [2C]	ND (0.1)		8082A		1	06/10/20 19:51	D0F0185	DF00904
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 19:51	D0F0185	DF00904
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 19:51	D0F0185	DF00904

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-DUP-01
Date Sampled: 05/29/20 00:00
Percent Solids: 96
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0219
ESS Laboratory Sample ID: 20F0219-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 6/9/20 13:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 20:50	D0F0185	DF00904
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 20:50	D0F0185	DF00904
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 20:50	D0F0185	DF00904
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 20:50	D0F0185	DF00904
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 20:50	D0F0185	DF00904
Aroclor 1254	ND (0.1)		8082A		1	06/10/20 20:50	D0F0185	DF00904
Aroclor 1260	ND (0.1)		8082A		1	06/10/20 20:50	D0F0185	DF00904
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 20:50	D0F0185	DF00904
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 20:50	D0F0185	DF00904

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0219

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DF00904 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0219*		mg/kg wet	*0.02500*		*87*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		90	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		102	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		94	40-140			
Surrogate: Decachlorobiphenyl	*0.0242*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0245*		mg/kg wet	*0.02500*		*98*	*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 Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		82	40-140	9	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		84	40-140	6	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		93	40-140	9	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		88	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0191*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Matrix Spike **Source: 20F0219-12**										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0219

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DF00904 - 3540C										
Aroclor 1016	1.8	0.1	mg/kg dry	2.062	ND	88	40-140			
Aroclor 1016 [2C]	1.9	0.1	mg/kg dry	2.062	ND	92	40-140			
Aroclor 1260	2.0	0.1	mg/kg dry	2.062	0.09	92	40-140			
Aroclor 1260 [2C]	1.9	0.1	mg/kg dry	2.062	0.09	86	40-140			
Surrogate: Decachlorobiphenyl	*0.0958*		mg/kg dry	*0.1031*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0976*		mg/kg dry	*0.1031*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0865*		mg/kg dry	*0.1031*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0943*		mg/kg dry	*0.1031*		*91*	*30-150*			
Matrix Spike **Source: 20F0219-13**										
Aroclor 1016	1.9	0.1	mg/kg dry	2.075	ND	91	40-140			
Aroclor 1016 [2C]	1.9	0.1	mg/kg dry	2.075	ND	94	40-140			
Aroclor 1260	2.0	0.1	mg/kg dry	2.075	ND	98	40-140			
Aroclor 1260 [2C]	1.9	0.1	mg/kg dry	2.075	ND	92	40-140			
Surrogate: Decachlorobiphenyl	*0.0982*		mg/kg dry	*0.1038*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.100*		mg/kg dry	*0.1038*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0893*		mg/kg dry	*0.1038*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0972*		mg/kg dry	*0.1038*		*94*	*30-150*			
Matrix Spike Dup **Source: 20F0219-12**										
Aroclor 1016	1.9	0.1	mg/kg dry	2.066	ND	92	40-140	5	30	
Aroclor 1016 [2C]	1.9	0.1	mg/kg dry	2.066	ND	94	40-140	2	30	
Aroclor 1260	2.0	0.1	mg/kg dry	2.066	0.09	92	40-140	0.3	30	
Aroclor 1260 [2C]	1.9	0.1	mg/kg dry	2.066	0.09	86	40-140	0.3	30	
Surrogate: Decachlorobiphenyl	*0.0978*		mg/kg dry	*0.1033*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.100*		mg/kg dry	*0.1033*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0893*		mg/kg dry	*0.1033*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0976*		mg/kg dry	*0.1033*		*94*	*30-150*			
Matrix Spike Dup **Source: 20F0219-13**										
Aroclor 1016	1.8	0.1	mg/kg dry	2.059	ND	87	40-140	6	30	
Aroclor 1016 [2C]	1.8	0.1	mg/kg dry	2.059	ND	88	40-140	7	30	
Aroclor 1260	1.8	0.1	mg/kg dry	2.059	ND	90	40-140	10	30	
Aroclor 1260 [2C]	1.8	0.1	mg/kg dry	2.059	ND	86	40-140	7	30	
Surrogate: Decachlorobiphenyl	*0.0946*		mg/kg dry	*0.1029*		*92*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0961*		mg/kg dry	*0.1029*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0842*		mg/kg dry	*0.1029*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0916*		mg/kg dry	*0.1029*		*89*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0219

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0219

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 20F0219
Date Received: 6/4/2020
Project Due Date: 6/11/2020
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (NA)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	49845	Yes	N/A	Yes	4 oz. Jar	NP	
2	49846	Yes	N/A	Yes	4 oz. Jar	NP	
3	49847	Yes	N/A	Yes	4 oz. Jar	NP	
4	49848	Yes	N/A	Yes	4 oz. Jar	NP	
5	49849	Yes	N/A	Yes	4 oz. Jar	NP	
6	49850	Yes	N/A	Yes	4 oz. Jar	NP	
7	49851	Yes	N/A	Yes	4 oz. Jar	NP	
8	49852	Yes	N/A	Yes	4 oz. Jar	NP	
9	49853	Yes	N/A	Yes	4 oz. Jar	NP	
10	49854	Yes	N/A	Yes	4 oz. Jar	NP	
11	49855	Yes	N/A	Yes	4 oz. Jar	NP	
12	49856	Yes	N/A	Yes	4 oz. Jar	NP	
13	49857	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / (NA)

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 20F0219
Date Received: 6/4/2020

Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By:		Date & Time:	6/4/20 1953
Reviewed By:		Date & Time:	6/4/20 2002
Delivered By:			6/4/20 2002

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20F0819

Turn Time (5-Day) Rush
Regulatory State Rhode Island
Is this project for any of the following?: ○ CT RCP ○ MA MCP ○ RGP
Reporting Limits 2.05 mg/kg
Electonic Deliverables ☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name: Conecto Engineers and Scientists
Contact Person: Katie Loftus
Project #: 5675.F
Project Name: Pawtucket Control House, 1 Thornton Ave
Address: 4 First Street Pawtucket, RI
City: Bridgewater
State: Massachusetts
Zip Code: 02324
PO #: 5675.F
Telephone Number: 508-697-3191
FAX Number:
Email Address: Jcavacelis, Mzoller, Rhyden, Kloftus, DDiFrancesco @Conecto.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PUBS by 8082
1	5/28/20	11:00 am	Grab	Solid	CW-01-01	X
2		11:05 am			CW-01-02	X
3		11:10 am			CW-01-03	X
4		11:15 am			CW-01-04	X
5		11:20 am			CW-01-05	X
6		11:25 am			CW-01-06	X
7		11:30 am			CW-01-07	X
8		11:35 am			CW-01-08	X
9		11:40 am			CW-01-09	X
10	↓	11:45 am	↓	↓	CW-03-04	

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G-Glass O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: _____
Seals Intact: _____
Cooler Temperature: -0.1/1.2 °C

Sampled by: DJD/LGS

Comments: Please specify "Other" preservative and containers types in this space
National Grid Project, Use Manual Soxhlet extraction per EPA Method 3540. Report dry weight, homogenize sample, TSCA Requirements, Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Daniel D'Ammen 6/4/20 1440	[signature] 6/4/20 1440	[signature] 6/4/20 1541	[signature] 6/4/20 1541
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
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www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20F0219

Turn Time (5-Day) Rush
Regulatory State Rhode Island
Is this project for any of the following?: ○ CT RCP ○ MA MCP ○ RGP
Reporting Limits 2.05 mg/kg
Electonic Deliverables ☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	Project #	Project Name	Analysis
Conecto Engineers and Scientists	5675.F	Pawtucket Control House, 6 Thornton Ave	
Contact Person		**Address**	
Katie Loftus	4 First Street	Pawtucket, RI	
City	**State**	**Zip Code**	**PO #**
Bridgewater	Massachusetts	02324	5675.F
Telephone Number	**FAX Number**	**Email Address**	
508-697-3191		Tavacazelis, MZoller, Phelan, kloftus, DDiFrancesco@Conecto.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	TS/MSD
11	5/28/20	11:50 am	Grab	Solid	CW-03-05	X	
12	5/29/20	1:15 pm	Grab	Solid	CW-04-04	X	X
					CW-DUP-01	X	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G-Glass O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: 1

Labpratory Use Only
Cooler Present: _____
Seals Intact: _____
Cooler Temperature: -0.1/1.2 °C

Sampled by: DJD/LGG

Comments: Please specify "Other" preservative and containers types in this space
National Grid Project, Use Manual Soxhlet extraction per EPA Method 3540. Report dry weight, homogenize sample, TSCA Requirements, Full Data Package 11 Cl

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Dana Thomson 6/4/20 1440	6/4/20 1440	6/4/20 1541	
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 20I0164

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 2:02 pm, Sep 18, 2020

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0164

SAMPLE RECEIPT

The following samples were received on September 03, 2020 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
20I0164-01	CW-01-10	Solid	8082A
20I0164-02	CW-01-11	Solid	8082A
20I0164-03	CW-04-05	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0164

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0164

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-01-10
Date Sampled: 09/02/20 09:30
Percent Solids: 99
Initial Volume: 5.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0164
ESS Laboratory Sample ID: 20I0164-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 12:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/09/20 7:50	D0I0062	DI01019
Aroclor 1221	ND (0.1)		8082A		1	09/09/20 7:50	D0I0062	DI01019
Aroclor 1232	ND (0.1)		8082A		1	09/09/20 7:50	D0I0062	DI01019
Aroclor 1242	ND (0.1)		8082A		1	09/09/20 7:50	D0I0062	DI01019
Aroclor 1248	ND (0.1)		8082A		1	09/09/20 7:50	D0I0062	DI01019
Aroclor 1254	ND (0.1)		8082A		1	09/09/20 7:50	D0I0062	DI01019
Aroclor 1260 [2C]	ND (0.1)		8082A		1	09/09/20 7:50	D0I0062	DI01019
Aroclor 1262	ND (0.1)		8082A		1	09/09/20 7:50	D0I0062	DI01019
Aroclor 1268	ND (0.1)		8082A		1	09/09/20 7:50	D0I0062	DI01019

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-01-11
Date Sampled: 09/02/20 09:35
Percent Solids: 99
Initial Volume: 5.24
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0164
ESS Laboratory Sample ID: 20I0164-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 12:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/09/20 8:09	D0I0062	DI01019
Aroclor 1221	ND (0.1)		8082A		1	09/09/20 8:09	D0I0062	DI01019
Aroclor 1232	ND (0.1)		8082A		1	09/09/20 8:09	D0I0062	DI01019
Aroclor 1242	ND (0.1)		8082A		1	09/09/20 8:09	D0I0062	DI01019
Aroclor 1248	ND (0.1)		8082A		1	09/09/20 8:09	D0I0062	DI01019
Aroclor 1254	**0.2** (0.1)		8082A		1	09/09/20 8:09	D0I0062	DI01019
Aroclor 1260	ND (0.1)		8082A		1	09/09/20 8:09	D0I0062	DI01019
Aroclor 1262	ND (0.1)		8082A		1	09/09/20 8:09	D0I0062	DI01019
Aroclor 1268	ND (0.1)		8082A		1	09/09/20 8:09	D0I0062	DI01019

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*64 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-04-05
Date Sampled: 09/02/20 11:00
Percent Solids: 97
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0164
ESS Laboratory Sample ID: 20I0164-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 12:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/09/20 8:28	D0I0062	DI01019
Aroclor 1221	ND (0.1)		8082A		1	09/09/20 8:28	D0I0062	DI01019
Aroclor 1232	ND (0.1)		8082A		1	09/09/20 8:28	D0I0062	DI01019
Aroclor 1242	ND (0.1)		8082A		1	09/09/20 8:28	D0I0062	DI01019
Aroclor 1248	ND (0.1)		8082A		1	09/09/20 8:28	D0I0062	DI01019
Aroclor 1254	ND (0.1)		8082A		1	09/09/20 8:28	D0I0062	DI01019
Aroclor 1260	ND (0.1)		8082A		1	09/09/20 8:28	D0I0062	DI01019
Aroclor 1262	ND (0.1)		8082A		1	09/09/20 8:28	D0I0062	DI01019
Aroclor 1268	ND (0.1)		8082A		1	09/09/20 8:28	D0I0062	DI01019

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0164

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI01019 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0198*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0131*		mg/kg wet	*0.02500*		*52*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0142*		mg/kg wet	*0.02500*		*57*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		83	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		79	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		94	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		79	40-140			
Surrogate: Decachlorobiphenyl	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0189*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0176*		mg/kg wet	*0.02500*		*70*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0174*		mg/kg wet	*0.02500*		*70*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		84	40-140	2	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		80	40-140	2	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		100	40-140	6	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		84	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0169*		mg/kg wet	*0.02500*		*68*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0168*		mg/kg wet	*0.02500*		*67*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0164

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0164

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Conoco

Shipped/Delivered Via: ESS Carrier

ESS Project ID: ~~2016168~~ 2016164
Date Received: 9/3/20
Project Due Date: 9/11/20
Days for Project: 5D

1. Air bill manifest present? —
   Air No.: NA
2. Were custody seals present? N/A
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Y
   Temp: -1C Iced with: Ice
5. Was COC signed and dated by client? Y
6. Does COC match bottles? Y
7. Is COC complete and correct? Y
8. Were samples received intact? Y
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)

2nd Review

Were all containers scanned into storage/lab? Initials

Are barcode labels on correct containers?	Yes / No
Are all Flashpoint stickers attached/container ID # circled?	Yes / No / NA
Are all Hex Chrome stickers attached?	Yes / No / NA
Are all QC stickers attached?	Yes / No / NA
Are VOA stickers attached if bubbles noted?	Yes / No / NA

Completed By: Date & Time: 9/4/20 11:58
Reviewed By: Date & Time: 9/4/20 1220
Delivered By: 9/4/20 1220

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20I0164

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	< 0.5 mg/kg PCBs
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers & Scientists, Inc	5675.F	Pawtucket 1 Control House, 6 Thorton St, Pawtucket RI
Contact Person	**Address**	
Mark Zoller	4 First Street	
City	**State**	**Zip Code** / **PO #**
Bridgewater	Massachusetts	02324 / 5675.F
Telephone Number	**FAX Number**	**Email Address**
508-697-3191		Mzoller, Kloftus, Ddifrancesco, Lguiry@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	9/2/20	9:30 a.m.	Grab	Solid	CW-01-10	X
02	9/2/20	9:35 a.m.	Grab	Solid	CW-01-11	X
03	9/2/20	11:00 a.m.	Grab	Solid	CW-04-05	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: _____

Seals Intact: _____

Cooler Temperature: -0.8 °C

Sampled by : DJD/LGG

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ICE,

Homogenize Sample TSCA Requirements, Provide Full Data Package

Add email: Jaevazelis@coneco.com

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
9/3/20 2:30 pm	9/3/20 1440	9/3/20 1755	9/3/20 17:55
Relinquished by: (Signature, Date & Time)	**Received By: (Signature, Date & Time)**	**Relinquished By: (Signature, Date & Time)**	**Received By: (Signature, Date & Time)**

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 21E0024

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 2:28 pm, May 10, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0024

SAMPLE RECEIPT

The following samples were received on May 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21E0024-01	CW-01-12	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0024

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0024

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: CW-01-12
Date Sampled: 04/27/21 11:15
Percent Solids: 99
Initial Volume: 5.69
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0024
ESS Laboratory Sample ID: 21E0024-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: DMC
Prepared: 5/5/21 12:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/06/21 13:09	D1E0066	DE10406
Aroclor 1221	ND (0.09)		8082A		1	05/06/21 13:09	D1E0066	DE10406
Aroclor 1232	ND (0.09)		8082A		1	05/06/21 13:09	D1E0066	DE10406
Aroclor 1242	ND (0.09)		8082A		1	05/06/21 13:09	D1E0066	DE10406
Aroclor 1248	ND (0.09)		8082A		1	05/06/21 13:09	D1E0066	DE10406
Aroclor 1254 [2C]	**0.3** (0.09)		8082A		1	05/06/21 13:09	D1E0066	DE10406
Aroclor 1260 [2C]	**0.3** (0.09)		8082A		1	05/06/21 13:09	D1E0066	DE10406
Aroclor 1262	ND (0.09)		8082A		1	05/06/21 13:09	D1E0066	DE10406
Aroclor 1268	ND (0.09)		8082A		1	05/06/21 13:09	D1E0066	DE10406

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0024

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10406 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		86	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		90	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140			
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		86	40-140	0.3	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		90	40-140	0.6	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		92	40-140	0.7	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140	0.3	30	
Surrogate: Decachlorobiphenyl	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*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*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0024

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0024

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21E0024
Date Received: 5/3/2021
Project Due Date: 5/10/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.9 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

Rec'd unlabeled container pm to confirm sample origin

14. Was there a need to contact Project Manager? Yes / (No) 5/4/21
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Dan DiFrancesco Date: 5/5/21 Time: 1514 By: JA

Client confirmed sample rec'd is CW-01-12

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	161622	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review

Were all containers scanned into storage/lab? Initials: ll
Are barcode labels on correct containers? Yes / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Date & Time: 5/4/21 1543
Reviewed By: Date & Time: 5/4/21 1556

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21E0024
Date Received: 5/3/2021
Project Due Date: 5/10/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.9 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	161622	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials: ill
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Date & Time: 5/4/21 1543
Reviewed By: Date & Time: 5/4/21 15:55

ESS LABORATORY
185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21E0024 | Page 1 of 1

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island **Criteria:** <0.5 mg/kg

Is this project for any of the following?:
☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	Total Number of Bottles
1	4/27/21	11:15 am	Grab	Solid	CW-01-12	X	

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.9 / Ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Daniel DeFrancesco	4/27/21	10:01 am	5/3/21 12:11		5/3/21	16:44	Mayson Davis 5/3/21 16:44
Relinquished by (Signature)	**Date**	**Time**	**Received by (Signature)**	**Relinquished by (Signature)**	**Date**	**Time**	**Received by (Signature)**

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 19J0015

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 5:28 pm, Oct 08, 2019

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0015

SAMPLE RECEIPT

The following samples were received on October 01, 2019 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
19J0015-01	BR-03-01	Soil	8082A
19J0015-02	BR-03-02	Soil	8082A
19J0015-03	BR-03-03	Soil	8082A
19J0015-04	BR-03-04	Soil	8082A
19J0015-05	BR-03-05	Soil	8082A
19J0015-06	BR-03-06	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0015

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0015

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: BR-03-01
Date Sampled: 09/27/19 08:00
Percent Solids: 100
Initial Volume: 5.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0015
ESS Laboratory Sample ID: 19J0015-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 23:26	C9J0067	CJ90206
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 23:26	C9J0067	CJ90206
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 23:26	C9J0067	CJ90206
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 23:26	C9J0067	CJ90206
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 23:26	C9J0067	CJ90206
Aroclor 1254	ND (0.1)		8082A		1	10/03/19 23:26	C9J0067	CJ90206
Aroclor 1260	**1.4** (0.1)		8082A		1	10/03/19 23:26	C9J0067	CJ90206
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 23:26	C9J0067	CJ90206
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 23:26	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: BR-03-02
Date Sampled: 09/27/19 08:05
Percent Solids: 100
Initial Volume: 5.36
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0015
ESS Laboratory Sample ID: 19J0015-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 23:45	C9J0067	CJ90206
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 23:45	C9J0067	CJ90206
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 23:45	C9J0067	CJ90206
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 23:45	C9J0067	CJ90206
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 23:45	C9J0067	CJ90206
Aroclor 1254	ND (0.09)		8082A		1	10/03/19 23:45	C9J0067	CJ90206
Aroclor 1260	**0.4** (0.09)		8082A		1	10/03/19 23:45	C9J0067	CJ90206
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 23:45	C9J0067	CJ90206
Aroclor 1268	ND (0.09)		8082A		1	10/03/19 23:45	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: BR-03-03
Date Sampled: 09/27/19 08:10
Percent Solids: 100
Initial Volume: 5.15
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0015
ESS Laboratory Sample ID: 19J0015-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/04/19 0:04	C9J0067	CJ90206
Aroclor 1221	ND (0.1)		8082A		1	10/04/19 0:04	C9J0067	CJ90206
Aroclor 1232	ND (0.1)		8082A		1	10/04/19 0:04	C9J0067	CJ90206
Aroclor 1242	ND (0.1)		8082A		1	10/04/19 0:04	C9J0067	CJ90206
Aroclor 1248	ND (0.1)		8082A		1	10/04/19 0:04	C9J0067	CJ90206
Aroclor 1254	ND (0.1)		8082A		1	10/04/19 0:04	C9J0067	CJ90206
Aroclor 1260	**0.1** (0.1)		8082A		1	10/04/19 0:04	C9J0067	CJ90206
Aroclor 1262	ND (0.1)		8082A		1	10/04/19 0:04	C9J0067	CJ90206
Aroclor 1268	ND (0.1)		8082A		1	10/04/19 0:04	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: BR-03-04
Date Sampled: 09/27/19 08:15
Percent Solids: 100
Initial Volume: 5.41
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0015
ESS Laboratory Sample ID: 19J0015-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/04/19 0:23	C9J0067	CJ90206
Aroclor 1221	ND (0.09)		8082A		1	10/04/19 0:23	C9J0067	CJ90206
Aroclor 1232	ND (0.09)		8082A		1	10/04/19 0:23	C9J0067	CJ90206
Aroclor 1242	ND (0.09)		8082A		1	10/04/19 0:23	C9J0067	CJ90206
Aroclor 1248	ND (0.09)		8082A		1	10/04/19 0:23	C9J0067	CJ90206
Aroclor 1254	ND (0.09)		8082A		1	10/04/19 0:23	C9J0067	CJ90206
Aroclor 1260	**0.2** (0.09)		8082A		1	10/04/19 0:23	C9J0067	CJ90206
Aroclor 1262	ND (0.09)		8082A		1	10/04/19 0:23	C9J0067	CJ90206
Aroclor 1268	ND (0.09)		8082A		1	10/04/19 0:23	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: BR-03-05
Date Sampled: 09/27/19 08:20
Percent Solids: 100
Initial Volume: 5.33
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0015
ESS Laboratory Sample ID: 19J0015-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/04/19 0:43	C9J0067	CJ90206
Aroclor 1221	ND (0.09)		8082A		1	10/04/19 0:43	C9J0067	CJ90206
Aroclor 1232	ND (0.09)		8082A		1	10/04/19 0:43	C9J0067	CJ90206
Aroclor 1242	ND (0.09)		8082A		1	10/04/19 0:43	C9J0067	CJ90206
Aroclor 1248	ND (0.09)		8082A		1	10/04/19 0:43	C9J0067	CJ90206
Aroclor 1254	ND (0.09)		8082A		1	10/04/19 0:43	C9J0067	CJ90206
Aroclor 1260	ND (0.09)		8082A		1	10/04/19 0:43	C9J0067	CJ90206
Aroclor 1262	ND (0.09)		8082A		1	10/04/19 0:43	C9J0067	CJ90206
Aroclor 1268	ND (0.09)		8082A		1	10/04/19 0:43	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: BR-03-06
Date Sampled: 09/27/19 08:25
Percent Solids: 100
Initial Volume: 5.15
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0015
ESS Laboratory Sample ID: 19J0015-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/04/19 1:02	C9J0067	CJ90206
Aroclor 1221	ND (0.1)		8082A		1	10/04/19 1:02	C9J0067	CJ90206
Aroclor 1232	ND (0.1)		8082A		1	10/04/19 1:02	C9J0067	CJ90206
Aroclor 1242	ND (0.1)		8082A		1	10/04/19 1:02	C9J0067	CJ90206
Aroclor 1248	ND (0.1)		8082A		1	10/04/19 1:02	C9J0067	CJ90206
Aroclor 1254	ND (0.1)		8082A		1	10/04/19 1:02	C9J0067	CJ90206
Aroclor 1260	**0.2** (0.1)		8082A		1	10/04/19 1:02	C9J0067	CJ90206
Aroclor 1262	ND (0.1)		8082A		1	10/04/19 1:02	C9J0067	CJ90206
Aroclor 1268	ND (0.1)		8082A		1	10/04/19 1:02	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0015

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ90206 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0181*		mg/kg wet	*0.02500*		*72*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0191*		mg/kg wet	*0.02500*		*77*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		92	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		90	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		100	40-140			
Surrogate: Decachlorobiphenyl	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0197*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0188*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0191*		mg/kg wet	*0.02500*		*77*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		88	40-140	4	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		95	40-140	3	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		93	40-140	3	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		102	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0196*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0015

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0015

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 19J0015
Date Received: 10/1/2019
Project Due Date: 10/8/2019
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 0.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted: Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	393647	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	393646	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	393645	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	393644	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	393643	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	393642	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Were all containers scanned into storage/lab? Initials
Are barcode labels on correct containers? Yes / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Date & Time: 10/1/19 1915
Reviewed By: Date & Time: 10/1/19 2048
Delivered By: 10/1/19 2048

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 195005

Turn Time	5-Day **Rush**
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	PCBs <0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name Coneco Engineers and Scientists	**Project #** 5675.F	**Project Name** Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI	
Contact Person Mark Zoller		**Address** 4 First Street	
City Bridgewater	**State** MA	**Zip Code** 02324	**PO #** 5675.F
Telephone Number 508-697-3191	**FAX Number**	**Email Address** jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	DD;Frankes- Sample ID	Analysis: PCBs 8082
01	9/27/2019	8:00 a.m.	Grab	Solid	BR-03-01	X
02	9/27/2019	8:05 a.m.	Grab	Solid	BR-03-02	X
03	9/27/2019	8:10 a.m.	Grab	Solid	BR-03-03	X
04	9/27/2019	8:15 a.m.	Grab	Solid	BR-03-04	X
05	9/27/2019	8:20 a.m.	Grab	Solid	BR-03-05	X
06	9/27/2019	8:25 a.m.	Grab	Solid	BR-03-06	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓
Seals Intact: N/A
Cooler Temperature: °C receipt 0.4

Sampled by : DJD/MJM

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ICE

Homogenize Sample TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
9/30/19 1:21 p.m.	10/1/19 12:36	10/1/19 1637	10/1/19 1637
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 20I0161

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 1:49 pm, Sep 18, 2020

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0161

SAMPLE RECEIPT

The following samples were received on September 03, 2020 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
20I0161-01	Brick-04-01	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0161

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0161

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: Brick-04-01
Date Sampled: 09/02/20 09:00
Percent Solids: 100
Initial Volume: 5.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20I0161
ESS Laboratory Sample ID: 20I0161-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MJV
Prepared: 9/4/20 12:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/09/20 5:16	D0I0062	DI01019
Aroclor 1221	ND (0.1)		8082A		1	09/09/20 5:16	D0I0062	DI01019
Aroclor 1232	ND (0.1)		8082A		1	09/09/20 5:16	D0I0062	DI01019
Aroclor 1242	ND (0.1)		8082A		1	09/09/20 5:16	D0I0062	DI01019
Aroclor 1248	ND (0.1)		8082A		1	09/09/20 5:16	D0I0062	DI01019
Aroclor 1254	ND (0.1)		8082A		1	09/09/20 5:16	D0I0062	DI01019
Aroclor 1260	ND (0.1)		8082A		1	09/09/20 5:16	D0I0062	DI01019
Aroclor 1262	ND (0.1)		8082A		1	09/09/20 5:16	D0I0062	DI01019
Aroclor 1268	ND (0.1)		8082A		1	09/09/20 5:16	D0I0062	DI01019

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*49 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0161

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI01019 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0198*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0131*		mg/kg wet	*0.02500*		*52*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0142*		mg/kg wet	*0.02500*		*57*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		83	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		79	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		94	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		79	40-140			
Surrogate: Decachlorobiphenyl	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0189*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0176*		mg/kg wet	*0.02500*		*70*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0174*		mg/kg wet	*0.02500*		*70*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		84	40-140	2	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		80	40-140	2	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		100	40-140	6	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		84	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0169*		mg/kg wet	*0.02500*		*68*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0168*		mg/kg wet	*0.02500*		*67*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0161

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20I0161

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: ConeCo

Shipped/Delivered Via: ESS Carrier

ESS Project ID: 20T0161
Date Received: 9/3/20
Project Due Date: 9/4/20
Days for Project: 5

1. Air bill manifest present? —
   Air No.: NA
2. Were custody seals present? N
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Y
   Temp: -.8 Iced with: Ice
5. Was COC signed and dated by client? Y
6. Does COC match bottles? Y
7. Is COC complete and correct? Y
8. Were samples received intact? Y
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)

2nd Review

Were all containers scanned into storage/lab? Initials

Are barcode labels on correct containers?	Yes / No
Are all Flashpoint stickers attached/container ID # circled?	Yes / No / NA
Are all Hex Chrome stickers attached?	Yes / No / NA
Are all QC stickers attached?	Yes / No / NA
Are VOA stickers attached if bubbles noted?	Yes / No / NA

Completed By: Date & Time: 9/4/20 11:46
Reviewed By: Date & Time: 9/4/20 1203
Delivered By: 9/4/20 1203

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20I0161

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	<0.5 mg/kg PCBs
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers & Scientists, Inc.	5675.F	Pawtucket 1 Control House, 6 Thorton St, Pawtucket RI

Contact Person	Address		
Mark Zoller	4 First Street		
City	**State**	**Zip Code**	**PO #**
Bridgewater	Massachusetts	02324	5675.F
Telephone Number	**FAX Number**	**Email Address**	
508-697-3191		Mzoller, Kloftus, Ddifrancesco, Lquiry@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	9/2/2020	9:00 a.m.	Grab	Solid	Brick-04-01	X

Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*	11
	Number of Containers per Sample:	1

Laboratory Use Only

Cooler Present: _____
Seals Intact: _____
Cooler Temperature: −0.8 °C

Sampled by : DJD/LGG

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ICE
Homogenize Sample TSCA Requirements, Provide Full Data Package Add email: Jaevazelis@coneco.com

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
9/3/20 2:30pm	9/3/20 1440	9/3/20 1755	9/3/20 17:55
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 21E0023

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 12:13 pm, May 10, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0023

SAMPLE RECEIPT

The following samples were received on May 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21E0023-01	BR-03-07	Solid	8082A
21E0023-02	BR-03-08	Solid	8082A
21E0023-03	BR-03-09	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0023

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0023

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: BR-03-07
Date Sampled: 04/27/21 11:00
Percent Solids: 100
Initial Volume: 5.25
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0023
ESS Laboratory Sample ID: 21E0023-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/4/21 11:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 16:48	D1E0066	DE10325
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 16:48	D1E0066	DE10325
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 16:48	D1E0066	DE10325
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 16:48	D1E0066	DE10325
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 16:48	D1E0066	DE10325
Aroclor 1254	ND (0.1)		8082A		1	05/05/21 16:48	D1E0066	DE10325
Aroclor 1260	**0.3** (0.1)		8082A		1	05/05/21 16:48	D1E0066	DE10325
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 16:48	D1E0066	DE10325
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 16:48	D1E0066	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*59 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: BR-03-08
Date Sampled: 04/27/21 11:05
Percent Solids: 95
Initial Volume: 5.74
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0023
ESS Laboratory Sample ID: 21E0023-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/4/21 11:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 17:07	D1E0066	DE10325
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 17:07	D1E0066	DE10325
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 17:07	D1E0066	DE10325
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 17:07	D1E0066	DE10325
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 17:07	D1E0066	DE10325
Aroclor 1254	ND (0.09)		8082A		1	05/05/21 17:07	D1E0066	DE10325
Aroclor 1260	**0.2** (0.09)		8082A		1	05/05/21 17:07	D1E0066	DE10325
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 17:07	D1E0066	DE10325
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 17:07	D1E0066	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*50 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: BR-03-09
Date Sampled: 04/27/21 11:10
Percent Solids: 100
Initial Volume: 5.25
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0023
ESS Laboratory Sample ID: 21E0023-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 5/4/21 11:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 17:26	D1E0066	DE10325
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 17:26	D1E0066	DE10325
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 17:26	D1E0066	DE10325
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 17:26	D1E0066	DE10325
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 17:26	D1E0066	DE10325
Aroclor 1254	ND (0.1)		8082A		1	05/05/21 17:26	D1E0066	DE10325
Aroclor 1260	**1.5** (0.1)		8082A		1	05/05/21 17:26	D1E0066	DE10325
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 17:26	D1E0066	DE10325
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 17:26	D1E0066	DE10325

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*60 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0023

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10325 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		88	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		95	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		88	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	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		90	40-140	2	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140	3	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		96	40-140	1	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140	0.6	30	
Surrogate: Decachlorobiphenyl	*0.0267*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0023

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0023

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21E0023
Date Received: 5/3/2021
Project Due Date: 5/10/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.9 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	160972	Yes	N/A	Yes	4 oz. Jar	NP	
2	160973	Yes	N/A	Yes	4 oz. Jar	NP	
3	160974	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review

Were all containers scanned into storage/lab? Initials
Are barcode labels on correct containers? Yes / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Taylor Davis Date & Time: 1807 5/3/21
Reviewed By: Date & Time: 5/3/21 1903

CHAIN OF CUSTODY

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

ESS Lab # 21E0023 | Page 1 of 1

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island **Criteria:** <0.5 mg/kg

Is this project for any of the following?:
☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jacvazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	Total Number of Bottles
1	4/27/21	11:00 am	Grab	Solid	BR-03-07	X	
2	↓	11:05 am	↓	↓	BR-03-08	X	
3	↓	11:10 am	↓	↓	BR-03-09	X	

Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*	11

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.9 / Ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Daniel D'Amore	4/30/21	1:01 pm	5/3/21 12:11		5/3/21	16:44	Taylor Davis 5/3/21 16:44

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 21I0144

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 12:11 pm, Sep 14, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0144

SAMPLE RECEIPT

The following samples were received on September 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21I0144-01	BR-03-10	Solid	8082A
21I0144-02	BR-04-02	Solid	8082A
21I0144-03	BR-DUP-01	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0144

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0144

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: BR-03-10
Date Sampled: 09/02/21 08:30
Percent Solids: 100
Initial Volume: 5.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0144
ESS Laboratory Sample ID: 21I0144-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/13/21 16:38	D1I0160	DI10708
Aroclor 1221	ND (0.1)		8082A		1	09/13/21 16:38	D1I0160	DI10708
Aroclor 1232	ND (0.1)		8082A		1	09/13/21 16:38	D1I0160	DI10708
Aroclor 1242	ND (0.1)		8082A		1	09/13/21 16:38	D1I0160	DI10708
Aroclor 1248	ND (0.1)		8082A		1	09/13/21 16:38	D1I0160	DI10708
Aroclor 1254	ND (0.1)		8082A		1	09/13/21 16:38	D1I0160	DI10708
Aroclor 1260 [2C]	**0.5** (0.1)		8082A		1	09/13/21 16:38	D1I0160	DI10708
Aroclor 1262	ND (0.1)		8082A		1	09/13/21 16:38	D1I0160	DI10708
Aroclor 1268	ND (0.1)		8082A		1	09/13/21 16:38	D1I0160	DI10708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: BR-04-02
Date Sampled: 09/02/21 09:00
Percent Solids: 100
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0144
ESS Laboratory Sample ID: 21I0144-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/13/21 16:58	D1I0160	DI10708
Aroclor 1221	ND (0.1)		8082A		1	09/13/21 16:58	D1I0160	DI10708
Aroclor 1232	ND (0.1)		8082A		1	09/13/21 16:58	D1I0160	DI10708
Aroclor 1242	ND (0.1)		8082A		1	09/13/21 16:58	D1I0160	DI10708
Aroclor 1248	ND (0.1)		8082A		1	09/13/21 16:58	D1I0160	DI10708
Aroclor 1254	ND (0.1)		8082A		1	09/13/21 16:58	D1I0160	DI10708
Aroclor 1260 [2C]	**0.3** (0.1)		8082A		1	09/13/21 16:58	D1I0160	DI10708
Aroclor 1262	ND (0.1)		8082A		1	09/13/21 16:58	D1I0160	DI10708
Aroclor 1268	ND (0.1)		8082A		1	09/13/21 16:58	D1I0160	DI10708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: BR-DUP-01
Date Sampled: 09/02/21 09:30
Percent Solids: 100
Initial Volume: 5.23
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0144
ESS Laboratory Sample ID: 21I0144-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/11/21 2:05	D1I0091	DI10708
Aroclor 1221	ND (0.1)		8082A		1	09/11/21 2:05	D1I0091	DI10708
Aroclor 1232	ND (0.1)		8082A		1	09/11/21 2:05	D1I0091	DI10708
Aroclor 1242	ND (0.1)		8082A		1	09/11/21 2:05	D1I0091	DI10708
Aroclor 1248	ND (0.1)		8082A		1	09/11/21 2:05	D1I0091	DI10708
Aroclor 1254	ND (0.1)		8082A		1	09/11/21 2:05	D1I0091	DI10708
Aroclor 1260 [2C]	**0.1** (0.1)		8082A		1	09/11/21 2:05	D1I0091	DI10708
Aroclor 1262	ND (0.1)		8082A		1	09/11/21 2:05	D1I0091	DI10708
Aroclor 1268	ND (0.1)		8082A		1	09/11/21 2:05	D1I0091	DI10708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*100 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0144

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI10708 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0189*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		92	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		92	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		96	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		96	40-140			
Surrogate: Decachlorobiphenyl	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0241*		mg/kg wet	*0.02500*		*97*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		86	40-140	7	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140	7	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		90	40-140	6	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		90	40-140	7	30	
Surrogate: Decachlorobiphenyl	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Matrix Spike **Source: 21I0144-02**										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0144

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI10708 - 3540C										
Aroclor 1016	1.7	0.1	mg/kg dry	2.008	ND	83	40-140			
Aroclor 1016 [2C]	1.7	0.1	mg/kg dry	2.008	ND	86	40-140			
Aroclor 1260	2.1	0.1	mg/kg dry	2.008	0.3	88	40-140			
Aroclor 1260 [2C]	2.1	0.1	mg/kg dry	2.008	0.3	89	40-140			
Surrogate: Decachlorobiphenyl	*0.0815*		mg/kg dry	*0.1004*		*81*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0866*		mg/kg dry	*0.1004*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0869*		mg/kg dry	*0.1004*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0962*		mg/kg dry	*0.1004*		*96*	*30-150*			
Matrix Spike Source: 21I0144-03										
Aroclor 1016	1.4	0.1	mg/kg dry	1.989	ND	73	40-140			
Aroclor 1016 [2C]	1.5	0.1	mg/kg dry	1.989	ND	78	40-140			
Aroclor 1260	1.7	0.1	mg/kg dry	1.989	0.1	79	40-140			
Aroclor 1260 [2C]	1.8	0.1	mg/kg dry	1.989	0.1	86	40-140			
Surrogate: Decachlorobiphenyl	*0.0779*		mg/kg dry	*0.09943*		*78*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0888*		mg/kg dry	*0.09943*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0784*		mg/kg dry	*0.09943*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0875*		mg/kg dry	*0.09943*		*88*	*30-150*			
Matrix Spike Dup Source: 21I0144-02										
Aroclor 1016	1.6	0.1	mg/kg dry	1.961	ND	84	40-140	2	30	
Aroclor 1016 [2C]	1.7	0.1	mg/kg dry	1.961	ND	86	40-140	2	30	
Aroclor 1260	1.8	0.1	mg/kg dry	1.961	0.3	73	40-140	17	30	
Aroclor 1260 [2C]	1.8	0.1	mg/kg dry	1.961	0.3	75	40-140	17	30	
Surrogate: Decachlorobiphenyl	*0.0798*		mg/kg dry	*0.09803*		*81*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0846*		mg/kg dry	*0.09803*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0790*		mg/kg dry	*0.09803*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0891*		mg/kg dry	*0.09803*		*91*	*30-150*			
Matrix Spike Dup Source: 21I0144-03										
Aroclor 1016	1.5	0.1	mg/kg dry	1.957	ND	76	40-140	2	30	
Aroclor 1016 [2C]	1.6	0.1	mg/kg dry	1.957	ND	81	40-140	2	30	
Aroclor 1260	1.9	0.1	mg/kg dry	1.957	0.1	89	40-140	10	30	
Aroclor 1260 [2C]	1.9	0.1	mg/kg dry	1.957	0.1	92	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0740*		mg/kg dry	*0.09787*		*76*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0884*		mg/kg dry	*0.09787*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0804*		mg/kg dry	*0.09787*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0894*		mg/kg dry	*0.09787*		*91*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0144

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0144

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 2110144
Date Received: 9/3/2021
Project Due Date: 9/13/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 4.1 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? (Yes) / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	204242	Yes	N/A	Yes	4 oz. Jar	NP	
2	204243	Yes	N/A	Yes	4 oz. Jar	NP	
3	204244	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials KL
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? (Yes) / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Date & Time: 9.3.21 18:20
Reviewed By: Date & Time: 9/3/21 1912

185 Frances Avenue
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CHAIN OF CUSTODY

ESS Lab # 21D0194 | Page 1 of 1

Turn Time (Days) ☐>5 ☒5 ☐4 ☐3 ☐2 ☐1 ☐ Same Day

Regulatory State: Rhode Island Criteria: <0.5 ppm

Is this project for any of the following?:
☐CT RCP ☐MA MCP ☐RGP ☐Permit ☐401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☒ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers & Scientists, Inc
Address: 4 First Street
Bridgewater, Massachusetts 02324
Phone: 508-697-3191

Email Distribution List: Jaevazlis, mzoller, klOftus, kearney, cmacivch, mnash, miabelle @coneco.com

PROJECT INFORMATION

Project Name: Pawtucket #1 Control House
Project Location: 6 Thornton St, Pawtucket RI
Project Number: 5675.F
Project Manager: Kate Loftus
Bill to: Environmental AP
PO#: 5675.F.101.4
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs 8082	MS/MSD	Total Number of Bottles
1	9/2/21	8:30	Grab	Brick	BR-03-10	X		1
2	↓	9:00	↓	↓	BR-04-02	X	X	1
3	↓	9:30	↓	↓	BR-DUP-01	X	X	1

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — ~~11~~ 9 (ML) — 3
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Sampled by : MH

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 4.1
1 Ice

Comments: * Please specify "Other" preservative and containers types in this space
11=ice. National Grid Proj. Manual Soxhlet Extraction per EPA Method 3540. Dry weight, homogenize, TSCA requirements. full data package please!

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
[signature]	9-2-2021	2:52 PM	[signature] 9/3/21 10:20	[signature]	9/3/21	16:42	[signature] 9-3-21 16:42

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1810171

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, Oct 12, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810171

SAMPLE RECEIPT

The following samples were received on October 04, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1810171-01	PS-01	Solid	6010C, 8082A
1810171-02	PS-02	Solid	6010C, 8082A
1810171-03	PS-03	Solid	6010C, 8082A
1810171-04	PS-04	Solid	6010C, 8082A
1810171-05	PS-05	Solid	6010C, 8082A
1810171-06	PS-06	Solid	6010C, 8082A
1810171-07	PS-07	Solid	6010C, 8082A
1810171-08	PS-08	Solid	6010C, 8082A
1810171-09	PS-09	Solid	6010C, 8082A
1810171-10	PS-10	Solid	6010C, 8082A
1810171-11	PS-11	Solid	6010C, 8082A
1810171-12	PS-12	Solid	6010C, 8082A
1810171-13	PS-13	Solid	6010C, 8082A
1810171-14	PS-14	Solid	6010C, 8082A
1810171-15	PS-15	Solid	6010C, 8082A
1810171-16	PS-16	Solid	6010C, 8082A
1810171-17	PS-17	Solid	6010C, 8082A
1810171-18	PS-18	Solid	6010C, 8082A
1810171-19	PS-19	Solid	6010C, 8082A
1810171-20	PS-20	Solid	6010C, 8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810171

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1810171-01 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (188% @ 30-150%), Decachlorobiphenyl [2C] (239% @ 30-150%)

1810171-02 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (244% @ 30-150%), Decachlorobiphenyl [2C] (220% @ 30-150%)

1810171-09 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl [2C] (155% @ 30-150%)

1810171-15 **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%)

1810171-17 **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%)

Total Metals

1810171-19 **Present in Method Blank (B).**
Chromium

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810171

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-01
Date Sampled: 10/01/18 09:05
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-01
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**3.20** (2.00)		6010C		1	KJK	10/10/18 19:22	0.5	100	CJ80961
Chromium	**10800** (20.0)		6010C		5	KJK	10/09/18 22:17	0.5	100	CJ80961
Lead	**107000** (1000)		6010C		50	KJK	10/10/18 19:38	0.5	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-01
Date Sampled: 10/01/18 09:05
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/08/18 14:27		CJ80502
Aroclor 1221	ND (0.05)		8082A		1	10/08/18 14:27		CJ80502
Aroclor 1232	ND (0.05)		8082A		1	10/08/18 14:27		CJ80502
Aroclor 1242	ND (0.05)		8082A		1	10/08/18 14:27		CJ80502
Aroclor 1248	ND (0.05)		8082A		1	10/08/18 14:27		CJ80502
Aroclor 1254 [2C]	**4.7** (0.2)		8082A		5	10/09/18 22:33		CJ80502
Aroclor 1260 [2C]	**5.5** (0.2)		8082A		5	10/09/18 22:33		CJ80502
Aroclor 1262	ND (0.05)		8082A		1	10/08/18 14:27		CJ80502
Aroclor 1268 [2C]	**0.7** (0.05)		8082A		1	10/08/18 14:27		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*188 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*239 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*130 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-02
Date Sampled: 10/01/18 09:20
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-02
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**3.52** (1.82)		6010C		1	KJK	10/10/18 19:26	0.55	100	CJ80961
Chromium	**8710** (18.2)		6010C		5	KJK	10/09/18 22:34	0.55	100	CJ80961
Lead	**50600** (455)		6010C		25	KJK	10/10/18 19:43	0.55	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-02
Date Sampled: 10/01/18 09:20
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/08/18 14:46		CJ80502
Aroclor 1221	ND (0.05)		8082A		1	10/08/18 14:46		CJ80502
Aroclor 1232	ND (0.05)		8082A		1	10/08/18 14:46		CJ80502
Aroclor 1242	ND (0.05)		8082A		1	10/08/18 14:46		CJ80502
Aroclor 1248	ND (0.05)		8082A		1	10/08/18 14:46		CJ80502
Aroclor 1254 [2C]	**5.1** (0.2)		8082A		5	10/09/18 22:52		CJ80502
Aroclor 1260 [2C]	**1.6** (0.05)		8082A		1	10/08/18 14:46		CJ80502
Aroclor 1262	ND (0.05)		8082A		1	10/08/18 14:46		CJ80502
Aroclor 1268 [2C]	**0.3** (0.05)		8082A		1	10/08/18 14:46		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*244 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*220 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*115 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-03
Date Sampled: 10/01/18 09:45
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-03
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**10.1** (1.85)		6010C		1	KJK	10/09/18 22:38	0.54	100	CJ80961
Chromium	ND (3.70)		6010C		1	KJK	10/09/18 22:38	0.54	100	CJ80961
Lead	**175** (18.5)		6010C		1	KJK	10/09/18 22:38	0.54	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-03
Date Sampled: 10/01/18 09:45
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/08/18 15:05		CJ80502
Aroclor 1221	ND (0.05)		8082A		1	10/08/18 15:05		CJ80502
Aroclor 1232	ND (0.05)		8082A		1	10/08/18 15:05		CJ80502
Aroclor 1242	ND (0.05)		8082A		1	10/08/18 15:05		CJ80502
Aroclor 1248	ND (0.05)		8082A		1	10/08/18 15:05		CJ80502
Aroclor 1254 [2C]	**1.3** (0.05)		8082A		1	10/08/18 15:05		CJ80502
Aroclor 1260 [2C]	**0.5** (0.05)		8082A		1	10/08/18 15:05		CJ80502
Aroclor 1262	ND (0.05)		8082A		1	10/08/18 15:05		CJ80502
Aroclor 1268	ND (0.05)		8082A		1	10/08/18 15:05		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-04
Date Sampled: 10/01/18 10:05
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-04
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**588** (1.61)		6010C		1	KJK	10/09/18 22:43	0.62	100	CJ80961
Chromium	**21.7** (3.23)		6010C		1	KJK	10/09/18 22:43	0.62	100	CJ80961
Lead	**64900** (1610)		6010C		100	KJK	10/10/18 20:57	0.62	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-04
Date Sampled: 10/01/18 10:05
Percent Solids: N/A
Initial Volume: 4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/08/18 15:24		CJ80502
Aroclor 1221	ND (0.1)		8082A		1	10/08/18 15:24		CJ80502
Aroclor 1232	ND (0.1)		8082A		1	10/08/18 15:24		CJ80502
Aroclor 1242	ND (0.1)		8082A		1	10/08/18 15:24		CJ80502
Aroclor 1248	ND (0.1)		8082A		1	10/08/18 15:24		CJ80502
Aroclor 1254 [2C]	**10.4** (0.6)		8082A		5	10/09/18 23:11		CJ80502
Aroclor 1260 [2C]	**3.8** (0.1)		8082A		1	10/08/18 15:24		CJ80502
Aroclor 1262	ND (0.1)		8082A		1	10/08/18 15:24		CJ80502
Aroclor 1268	ND (0.1)		8082A		1	10/08/18 15:24		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*73 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-05
Date Sampled: 10/01/18 10:25
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-05
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**12.0** (1.92)		6010C		1	KJK	10/10/18 19:30	0.52	100	CJ80961
Chromium	**26100** (38.5)		6010C		10	KJK	10/09/18 22:49	0.52	100	CJ80961
Lead	**88800** (385)		6010C		20	KJK	10/10/18 19:47	0.52	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-05
Date Sampled: 10/01/18 10:25
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/08/18 15:43		CJ80502
Aroclor 1221	ND (0.05)		8082A		1	10/08/18 15:43		CJ80502
Aroclor 1232	ND (0.05)		8082A		1	10/08/18 15:43		CJ80502
Aroclor 1242	ND (0.05)		8082A		1	10/08/18 15:43		CJ80502
Aroclor 1248	ND (0.05)		8082A		1	10/08/18 15:43		CJ80502
Aroclor 1254 [2C]	**7.4** (0.5)		8082A		10	10/09/18 23:30		CJ80502
Aroclor 1260 [2C]	**5.1** (0.5)		8082A		10	10/09/18 23:30		CJ80502
Aroclor 1262	ND (0.05)		8082A		1	10/08/18 15:43		CJ80502
Aroclor 1268	ND (0.05)		8082A		1	10/08/18 15:43		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*91 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*110 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-06
Date Sampled: 10/01/18 10:40
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-06
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**51.8** (9.62)		6010C		5	KJK	10/09/18 22:53	0.52	100	CJ80961
Chromium	**11200** (19.2)		6010C		5	KJK	10/09/18 22:53	0.52	100	CJ80961
Lead	**47300** (962)		6010C		50	KJK	10/10/18 19:51	0.52	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-06
Date Sampled: 10/01/18 10:40
Percent Solids: N/A
Initial Volume: 2.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	10/08/18 16:02		CJ80502
Aroclor 1221	ND (0.2)		8082A		1	10/08/18 16:02		CJ80502
Aroclor 1232	ND (0.2)		8082A		1	10/08/18 16:02		CJ80502
Aroclor 1242	ND (0.2)		8082A		1	10/08/18 16:02		CJ80502
Aroclor 1248	ND (0.2)		8082A		1	10/08/18 16:02		CJ80502
Aroclor 1254 [2C]	**3.3** (0.2)		8082A		1	10/08/18 16:02		CJ80502
Aroclor 1260 [2C]	**1.4** (0.2)		8082A		1	10/08/18 16:02		CJ80502
Aroclor 1262	ND (0.2)		8082A		1	10/08/18 16:02		CJ80502
Aroclor 1268	ND (0.2)		8082A		1	10/08/18 16:02		CJ80502

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-07
Date Sampled: 10/01/18 10:55
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-07
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**37.9** (16.7)		6010C		5	KJK	10/09/18 22:59	0.3	100	CJ80961
Chromium	**6980** (33.3)		6010C		5	KJK	10/09/18 22:59	0.3	100	CJ80961
Lead	**41500** (167)		6010C		5	KJK	10/09/18 22:59	0.3	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-07
Date Sampled: 10/01/18 10:55
Percent Solids: N/A
Initial Volume: 1.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	10/08/18 16:21		CJ80502
Aroclor 1221	ND (0.5)		8082A		1	10/08/18 16:21		CJ80502
Aroclor 1232	ND (0.5)		8082A		1	10/08/18 16:21		CJ80502
Aroclor 1242	ND (0.5)		8082A		1	10/08/18 16:21		CJ80502
Aroclor 1248	ND (0.5)		8082A		1	10/08/18 16:21		CJ80502
Aroclor 1254 [2C]	**4.6** (0.5)		8082A		1	10/08/18 16:21		CJ80502
Aroclor 1260 [2C]	**3.9** (0.5)		8082A		1	10/08/18 16:21		CJ80502
Aroclor 1262	ND (0.5)		8082A		1	10/08/18 16:21		CJ80502
Aroclor 1268	ND (0.5)		8082A		1	10/08/18 16:21		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*114 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*106 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-08
Date Sampled: 10/01/18 11:10
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-08
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**11.9** (9.62)		6010C		5	KJK	10/09/18 23:03	0.52	100	CJ80961
Chromium	**8820** (19.2)		6010C		5	KJK	10/09/18 23:03	0.52	100	CJ80961
Lead	**50300** (962)		6010C		50	KJK	10/10/18 19:56	0.52	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-08
Date Sampled: 10/01/18 11:10
Percent Solids: N/A
Initial Volume: 4.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/08/18 16:40		CJ80502
Aroclor 1221	ND (0.1)		8082A		1	10/08/18 16:40		CJ80502
Aroclor 1232	ND (0.1)		8082A		1	10/08/18 16:40		CJ80502
Aroclor 1242	ND (0.1)		8082A		1	10/08/18 16:40		CJ80502
Aroclor 1248	ND (0.1)		8082A		1	10/08/18 16:40		CJ80502
Aroclor 1254 [2C]	**2.4** (0.1)		8082A		1	10/08/18 16:40		CJ80502
Aroclor 1260	**1.4** (0.1)		8082A		1	10/08/18 16:40		CJ80502
Aroclor 1262	ND (0.1)		8082A		1	10/08/18 16:40		CJ80502
Aroclor 1268 [2C]	**0.3** (0.1)		8082A		1	10/08/18 16:40		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-09
Date Sampled: 10/01/18 11:25
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-09
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**3.83** (2.00)		6010C		1	KJK	10/10/18 19:34	0.5	100	CJ80961
Chromium	**7610** (20.0)		6010C		5	KJK	10/09/18 23:09	0.5	100	CJ80961
Lead	**82300** (1000)		6010C		50	KJK	10/10/18 20:00	0.5	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-09
Date Sampled: 10/01/18 11:25
Percent Solids: N/A
Initial Volume: 3.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	10/08/18 17:00		CJ80502
Aroclor 1221	ND (0.2)		8082A		1	10/08/18 17:00		CJ80502
Aroclor 1232	ND (0.2)		8082A		1	10/08/18 17:00		CJ80502
Aroclor 1242	ND (0.2)		8082A		1	10/08/18 17:00		CJ80502
Aroclor 1248	ND (0.2)		8082A		1	10/08/18 17:00		CJ80502
Aroclor 1254 [2C]	**4.5** (0.2)		8082A		1	10/08/18 17:00		CJ80502
Aroclor 1260 [2C]	**3.3** (0.2)		8082A		1	10/08/18 17:00		CJ80502
Aroclor 1262	ND (0.2)		8082A		1	10/08/18 17:00		CJ80502
Aroclor 1268 [2C]	**0.8** (0.2)		8082A		1	10/08/18 17:00		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*126 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*155 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-10
Date Sampled: 10/01/18 11:40
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-10
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**5.49** (3.45)		6010C		1	KJK	10/10/18 20:17	0.29	100	CJ80961
Chromium	**10700** (34.5)		6010C		5	KJK	10/09/18 23:13	0.29	100	CJ80961
Lead	**62700** (172)		6010C		5	KJK	10/09/18 23:13	0.29	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-10
Date Sampled: 10/01/18 11:40
Percent Solids: N/A
Initial Volume: 0.75
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.7)		8082A		1	10/08/18 17:19		CJ80502
Aroclor 1221	ND (0.7)		8082A		1	10/08/18 17:19		CJ80502
Aroclor 1232	ND (0.7)		8082A		1	10/08/18 17:19		CJ80502
Aroclor 1242	ND (0.7)		8082A		1	10/08/18 17:19		CJ80502
Aroclor 1248	ND (0.7)		8082A		1	10/08/18 17:19		CJ80502
Aroclor 1254 [2C]	**4.1** (0.7)		8082A		1	10/08/18 17:19		CJ80502
Aroclor 1260 [2C]	**3.8** (0.7)		8082A		1	10/08/18 17:19		CJ80502
Aroclor 1262	ND (0.7)		8082A		1	10/08/18 17:19		CJ80502
Aroclor 1268	ND (0.7)		8082A		1	10/08/18 17:19		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-11
Date Sampled: 10/01/18 11:55
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-11
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**22.0** (3.85)		6010C		1	KJK	10/09/18 23:30	0.26	100	CJ80961
Chromium	**40.8** (7.69)		6010C		1	KJK	10/09/18 23:30	0.26	100	CJ80961
Lead	**572** (38.5)		6010C		1	KJK	10/09/18 23:30	0.26	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-11
Date Sampled: 10/01/18 11:55
Percent Solids: N/A
Initial Volume: 0.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-11
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	10/08/18 17:38		CJ80502
Aroclor 1221	ND (1.0)		8082A		1	10/08/18 17:38		CJ80502
Aroclor 1232	ND (1.0)		8082A		1	10/08/18 17:38		CJ80502
Aroclor 1242	ND (1.0)		8082A		1	10/08/18 17:38		CJ80502
Aroclor 1248	ND (1.0)		8082A		1	10/08/18 17:38		CJ80502
Aroclor 1254 [2C]	**2.4** (1.0)		8082A		1	10/08/18 17:38		CJ80502
Aroclor 1260 [2C]	**1.6** (1.0)		8082A		1	10/08/18 17:38		CJ80502
Aroclor 1262	ND (1.0)		8082A		1	10/08/18 17:38		CJ80502
Aroclor 1268	ND (1.0)		8082A		1	10/08/18 17:38		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-12
Date Sampled: 10/01/18 12:10
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-12
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**6.12** (5.00)		6010C		1	KJK	10/10/18 20:23	0.2	100	CJ80961
Chromium	**6910** (50.0)		6010C		5	KJK	10/09/18 23:36	0.2	100	CJ80961
Lead	**35800** (250)		6010C		5	KJK	10/09/18 23:36	0.2	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-12
Date Sampled: 10/01/18 12:10
Percent Solids: N/A
Initial Volume: 0.31
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-12
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.6)		8082A		1	10/08/18 17:57		CJ80502
Aroclor 1221	ND (1.6)		8082A		1	10/08/18 17:57		CJ80502
Aroclor 1232	ND (1.6)		8082A		1	10/08/18 17:57		CJ80502
Aroclor 1242	ND (1.6)		8082A		1	10/08/18 17:57		CJ80502
Aroclor 1248	ND (1.6)		8082A		1	10/08/18 17:57		CJ80502
Aroclor 1254 [2C]	**3.2** (1.6)		8082A		1	10/08/18 17:57		CJ80502
Aroclor 1260 [2C]	**3.6** (1.6)		8082A		1	10/08/18 17:57		CJ80502
Aroclor 1262	ND (1.6)		8082A		1	10/08/18 17:57		CJ80502
Aroclor 1268	ND (1.6)		8082A		1	10/08/18 17:57		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*114 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-13
Date Sampled: 10/01/18 12:25
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-13
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	ND (4.17)		6010C		1	KJK	10/09/18 23:40	0.24	100	CJ80961
Chromium	**178** (8.33)		6010C		1	KJK	10/09/18 23:40	0.24	100	CJ80961
Lead	**964** (41.7)		6010C		1	KJK	10/09/18 23:40	0.24	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-13
Date Sampled: 10/01/18 12:25
Percent Solids: N/A
Initial Volume: 2.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-13
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	10/08/18 18:16		CJ80502
Aroclor 1221	ND (0.2)		8082A		1	10/08/18 18:16		CJ80502
Aroclor 1232	ND (0.2)		8082A		1	10/08/18 18:16		CJ80502
Aroclor 1242	ND (0.2)		8082A		1	10/08/18 18:16		CJ80502
Aroclor 1248	ND (0.2)		8082A		1	10/08/18 18:16		CJ80502
Aroclor 1254 [2C]	**0.3** (0.2)		8082A		1	10/08/18 18:16		CJ80502
Aroclor 1260 [2C]	**0.4** (0.2)		8082A		1	10/08/18 18:16		CJ80502
Aroclor 1262	ND (0.2)		8082A		1	10/08/18 18:16		CJ80502
Aroclor 1268	ND (0.2)		8082A		1	10/08/18 18:16		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*112 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*113 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-14
Date Sampled: 10/01/18 12:40
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-14
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**23.0** (3.23)		6010C		1	KJK	10/09/18 23:44	0.31	100	CJ80961
Chromium	**3470** (6.45)		6010C		1	KJK	10/09/18 23:44	0.31	100	CJ80961
Lead	**24500** (161)		6010C		5	KJK	10/10/18 20:53	0.31	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-14
Date Sampled: 10/01/18 12:40
Percent Solids: N/A
Initial Volume: 1.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-14
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	10/08/18 18:35		CJ80502
Aroclor 1221	ND (0.5)		8082A		1	10/08/18 18:35		CJ80502
Aroclor 1232	ND (0.5)		8082A		1	10/08/18 18:35		CJ80502
Aroclor 1242	ND (0.5)		8082A		1	10/08/18 18:35		CJ80502
Aroclor 1248	ND (0.5)		8082A		1	10/08/18 18:35		CJ80502
Aroclor 1254 [2C]	**6.8** (0.5)		8082A		1	10/08/18 18:35		CJ80502
Aroclor 1260	**18.5** (0.5)		8082A		1	10/08/18 18:35		CJ80502
Aroclor 1262	ND (0.5)		8082A		1	10/08/18 18:35		CJ80502
Aroclor 1268	ND (0.5)		8082A		1	10/08/18 18:35		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*104 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-15
Date Sampled: 10/01/18 12:55
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-15
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**1.98** (1.96)		6010C		1	KJK	10/09/18 23:49	0.51	100	CJ80961
Chromium	**9250** (19.6)		6010C		5	KJK	10/10/18 21:14	0.51	100	CJ80961
Lead	**49800** (980)		6010C		50	KJK	10/10/18 20:31	0.51	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-15
Date Sampled: 10/01/18 12:55
Percent Solids: N/A
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-15
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		20	10/09/18 23:49		CJ80502
Aroclor 1221	ND (1.0)		8082A		20	10/09/18 23:49		CJ80502
Aroclor 1232	ND (1.0)		8082A		20	10/09/18 23:49		CJ80502
Aroclor 1242	ND (1.0)		8082A		20	10/09/18 23:49		CJ80502
Aroclor 1248	ND (1.0)		8082A		20	10/09/18 23:49		CJ80502
Aroclor 1254	ND (1.0)		8082A		20	10/09/18 23:49		CJ80502
Aroclor 1260 [2C]	**12.7** (1.0)		8082A		20	10/09/18 23:49		CJ80502
Aroclor 1262	ND (1.0)		8082A		20	10/09/18 23:49		CJ80502
Aroclor 1268	ND (1.0)		8082A		20	10/09/18 23:49		CJ80502

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-16
Date Sampled: 10/01/18 13:10
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-16
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**9.10** (1.89)		6010C		1	KJK	10/10/18 0:22	0.53	100	CJ80961
Chromium	**3840** (3.77)		6010C		1	KJK	10/10/18 0:22	0.53	100	CJ80961
Lead	**21800** (189)		6010C		10	KJK	10/10/18 21:35	0.53	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-16
Date Sampled: 10/01/18 13:10
Percent Solids: N/A
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-16
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/08/18 19:13		CJ80502
Aroclor 1221	ND (0.05)		8082A		1	10/08/18 19:13		CJ80502
Aroclor 1232	ND (0.05)		8082A		1	10/08/18 19:13		CJ80502
Aroclor 1242	ND (0.05)		8082A		1	10/08/18 19:13		CJ80502
Aroclor 1248	ND (0.05)		8082A		1	10/08/18 19:13		CJ80502
Aroclor 1254	ND (0.05)		8082A		1	10/08/18 19:13		CJ80502
Aroclor 1260 [2C]	**4.3** (0.2)		8082A		5	10/10/18 0:08		CJ80502
Aroclor 1262	ND (0.05)		8082A		1	10/08/18 19:13		CJ80502
Aroclor 1268	ND (0.05)		8082A		1	10/08/18 19:13		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-17
Date Sampled: 10/01/18 13:25
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-17
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**9.89** (2.04)		6010C		1	KJK	10/10/18 20:27	0.49	100	CJ80961
Chromium	**14100** (81.6)		6010C		20	KJK	10/10/18 1:03	0.49	100	CJ80961
Lead	**81200** (408)		6010C		20	KJK	10/10/18 1:03	0.49	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-17
Date Sampled: 10/01/18 13:25
Percent Solids: N/A
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-17
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.0)		8082A		20	10/10/18 0:27		CJ80502
Aroclor 1221	ND (2.0)		8082A		20	10/10/18 0:27		CJ80502
Aroclor 1232	ND (2.0)		8082A		20	10/10/18 0:27		CJ80502
Aroclor 1242	ND (2.0)		8082A		20	10/10/18 0:27		CJ80502
Aroclor 1248	ND (2.0)		8082A		20	10/10/18 0:27		CJ80502
Aroclor 1254	ND (2.0)		8082A		20	10/10/18 0:27		CJ80502
Aroclor 1260	**45.0** (2.0)		8082A		20	10/10/18 0:27		CJ80502
Aroclor 1262	ND (2.0)		8082A		20	10/10/18 0:27		CJ80502
Aroclor 1268	ND (2.0)		8082A		20	10/10/18 0:27		CJ80502

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-18
Date Sampled: 10/01/18 13:40
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-18
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**5.46** (1.89)		6010C		1	KJK	10/10/18 1:07	0.53	100	CJ80961
Chromium	**4010** (3.77)		6010C		1	KJK	10/10/18 1:07	0.53	100	CJ80961
Lead	**21800** (189)		6010C		10	KJK	10/10/18 22:15	0.53	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-18
Date Sampled: 10/01/18 13:40
Percent Solids: N/A
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-18
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/08/18 22:24		CJ80502
Aroclor 1221	ND (0.05)		8082A		1	10/08/18 22:24		CJ80502
Aroclor 1232	ND (0.05)		8082A		1	10/08/18 22:24		CJ80502
Aroclor 1242	ND (0.05)		8082A		1	10/08/18 22:24		CJ80502
Aroclor 1248	ND (0.05)		8082A		1	10/08/18 22:24		CJ80502
Aroclor 1254	**1.7** (0.05)		8082A		1	10/08/18 22:24		CJ80502
Aroclor 1260 [2C]	**3.1** (0.2)		8082A		5	10/10/18 0:46		CJ80502
Aroclor 1262	ND (0.05)		8082A		1	10/08/18 22:24		CJ80502
Aroclor 1268 [2C]	**0.6** (0.05)		8082A		1	10/08/18 22:24		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-19
Date Sampled: 10/01/18 13:55
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-19
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**9.18** (1.61)		6010C		1	KJK	10/10/18 1:13	0.62	100	CJ80961
Chromium	**B 11.0** (3.23)		6010C		1	KJK	10/10/18 1:13	0.62	100	CJ80961
Lead	**220** (16.1)		6010C		1	KJK	10/10/18 1:13	0.62	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-19
Date Sampled: 10/01/18 13:55
Percent Solids: N/A
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-19
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 15:28

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/08/18 22:43		CJ80502
Aroclor 1221	ND (0.05)		8082A		1	10/08/18 22:43		CJ80502
Aroclor 1232	ND (0.05)		8082A		1	10/08/18 22:43		CJ80502
Aroclor 1242	ND (0.05)		8082A		1	10/08/18 22:43		CJ80502
Aroclor 1248	ND (0.05)		8082A		1	10/08/18 22:43		CJ80502
Aroclor 1254	**1.2** (0.05)		8082A		1	10/08/18 22:43		CJ80502
Aroclor 1260 [2C]	**1.7** (0.05)		8082A		1	10/08/18 22:43		CJ80502
Aroclor 1262	ND (0.05)		8082A		1	10/08/18 22:43		CJ80502
Aroclor 1268 [2C]	**0.5** (0.05)		8082A		1	10/08/18 22:43		CJ80502

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-20
Date Sampled: 10/01/18 14:10
Percent Solids: N/A

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-20
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**22.3** (1.82)		6010C		1	KJK	10/10/18 1:19	0.55	100	CJ80961
Chromium	ND (3.64)		6010C		1	KJK	10/10/18 1:19	0.55	100	CJ80961
Lead	**32.3** (18.2)		6010C		1	KJK	10/10/18 1:19	0.55	100	CJ80961

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-20
Date Sampled: 10/01/18 14:10
Percent Solids: N/A
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810171
ESS Laboratory Sample ID: 1810171-20
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/11/18 11:13		CJ80913
Aroclor 1221	ND (0.05)		8082A		1	10/11/18 11:13		CJ80913
Aroclor 1232	ND (0.05)		8082A		1	10/11/18 11:13		CJ80913
Aroclor 1242	ND (0.05)		8082A		1	10/11/18 11:13		CJ80913
Aroclor 1248	ND (0.05)		8082A		1	10/11/18 11:13		CJ80913
Aroclor 1254 [2C]	**0.3** (0.05)		8082A		1	10/11/18 11:13		CJ80913
Aroclor 1260 [2C]	**0.3** (0.05)		8082A		1	10/11/18 11:13		CJ80913
Aroclor 1262	ND (0.05)		8082A		1	10/11/18 11:13		CJ80913
Aroclor 1268 [2C]	**0.1** (0.05)		8082A		1	10/11/18 11:13		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*49 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*36 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*39 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*42 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810171

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Total Metals										
Batch CJ80961 - 3050B										
Blank										
Cadmium	ND	0.50	mg/kg wet							
Chromium	1.24	1.00	mg/kg wet							
Lead	ND	5.00	mg/kg wet							
LCS										
Cadmium	82.8	1.75	mg/kg wet	98.70		84	84-116			
Chromium	226	3.51	mg/kg wet	240.0		94	85-115			
Lead	262	17.5	mg/kg wet	276.0		95	84-116			
LCS Dup										
Cadmium	84.4	1.96	mg/kg wet	98.70		85	84-116	2	20	
Chromium	229	3.92	mg/kg wet	240.0		96	85-115	2	20	
Lead	263	19.6	mg/kg wet	276.0		95	84-116	0.7	20	
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80502 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		95	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		100	40-140			
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		88	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		97	40-140			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810171

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80502 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0280*		mg/kg wet	*0.02500*		*112*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0271*		mg/kg wet	*0.02500*		*108*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		95	40-140	0.08	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		100	40-140	0.1	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		88	40-140	0.04	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		97	40-140	0.2	30	
Surrogate: Decachlorobiphenyl	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0276*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Batch CJ80913 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		102	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		103	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		92	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		103	40-140			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810171

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80913 - 3540C										
Surrogate: Decachlorobiphenyl	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		107	40-140	5	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		107	40-140	4	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		98	40-140	6	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		108	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0221*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0244*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0226*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810171

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.
B	Present in Method Blank (B).
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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810171

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1810171
Date Received: 10/4/2018
Project Due Date: 10/12/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	274419	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	274418	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	274417	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	274416	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	274415	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	274414	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	274413	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	274412	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	274411	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	274410	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	274409	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	274408	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	274407	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	274406	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	274405	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	274404	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	274403	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	274402	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
19	274401	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
20	274400	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? Yes / No

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 1810171

Date Received: 10/4/2018

Are all necessary stickers attached? (Yes) No

Completed By: [signature]

Date & Time: 10/4/18 2147

Reviewed By: [signature]

Date & Time: 10/4/18 2214

Delivered By: [signature]

10/4/18 2214

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 181071

Turn Time	5-Day **Rush**
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP (AC) MA MCP ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name Coneco Engineers and Scientists	**Project #** 5675.F	**Project Name** Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI	
Contact Person Mark Zoller	**Address** 4 First Street		
City Bridgewater	**State** MA	**Zip Code** 02324	**PO #** 5675.F
Telephone Number 508-697-3191	**FAX Number**	**Email Address** jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082	Total Lead	Total Cadmium	Total Chromium
01	10/1/2018	9:05 a.m.	Grab	Solid	PS-01	X	X	X	X
02	10/1/2018	9:20 a.m.	Grab	Solid	PS-02	X	X	X	X
03	10/1/2018	9:45 a.m.	Grab	Solid	PS-03	X	X	X	X
04	10/1/2018	10:05 a.m.	Grab	Solid	PS-04	X	X	X	X
05	10/1/2018	10:25 a.m.	Grab	Solid	PS-05	X	X	X	X
06	10/1/2018	10:40 a.m.	Grab	Solid	PS-06	X	X	X	X
07	10/1/2018	10:55 a.m.	Grab	Solid	PS-07	X	X	X	X
08	10/1/2018	11:10 a.m.	Grab	Solid	PS-08	X	X	X	X
09	10/1/2018	11:25 a.m.	Grab	Solid	PS-09	X	X	X	X
10	10/1/2018	11:40 a.m.	Grab	Solid	PS-10	X	X	X	X
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial					AG	AG	AG	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					9	9	9	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					1	1	1	1
					Number of Containers per Sample:	1	1	1	1

Laboratory Use Only

Cooler Present: ✓
Seals Intact: ____
Cooler Temperature: 1.8+3.2°C ICE RC

Sampled by : ACC/MJM/DCK

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
John C Campbell 10/4/18 12:23pm	R. Carlos 10/4/18 1330	R. Carlos 10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory

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www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 181071

Turn Time 5-Day **Rush**
Regulatory State Rhode Island
Is this project for any of the following?: ○CT RCP (AC) ●MA MCP ○RGP

Reporting Limits PCBs < 0.5 mg/kg

Electonic Deliverables ☐Limit Checker ☐Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave,

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	MA	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082	Total Lead	Total Cadmium	Total Chromium
11	10/1/2018	11:55 a.m.	Grab	Solid	PS-11	X	X	X	X
12	10/1/2018	12:10 p.m.	Grab	Solid	PS-12	X	X	X	X
13	10/1/2018	12:25 p.m.	Grab	Solid	PS-13	X	X	X	X
14	10/1/2018	12:40 p.m.	Grab	Solid	PS-14	X	X	X	X
15	10/1/2018	12:55 p.m.	Grab	Solid	PS-15	X	X	X	X
16	10/1/2018	1:10 p.m.	Grab	Solid	PS-16	X	X	X	X
17	10/1/2018	1:25 p.m.	Grab	Solid	PS-17	X	X	X	X
18	10/1/2018	1:40 p.m.	Grab	Solid	PS-18	X	X	X	X
19	10/1/2018	1:55 p.m.	Grab	Solid	PS-19	X	X	X	X
20	10/1/2018	2:10 p.m.	Grab	Solid	PS-20	X	X	X	X
Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial						AG	AG	AG	AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*						9	9	9	9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*						1	1	1	1
Number of Containers per Sample:						1	1	1	1

Laboratory Use Only
Cooler Present: ✓
Seals Intact:
Cooler Temperature: 1.8+3.2 °C ICE RC

Sampled by : ACC/MJM/DCK

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Anne C. Campbell 12/4/18 12:35pm	RCarlson 10/4/18 1330	RCarlson 10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1810172

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 1:43 pm, Oct 12, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810172

SAMPLE RECEIPT

The following samples were received on October 04, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1810172-01	PS-21	Solid	6010C, 8082A
1810172-02	PS-22	Solid	6010C, 8082A
1810172-03	PS-23	Solid	6010C, 8082A
1810172-04	PS-24	Solid	6010C, 8082A
1810172-05	PS-25	Solid	6010C, 8082A
1810172-06	PS-26	Solid	6010C, 8082A
1810172-07	PS-27	Solid	6010C, 8082A
1810172-08	PS-28	Solid	6010C, 8082A
1810172-09	PS-29	Solid	6010C, 8082A
1810172-10	PS-30	Solid	6010C, 8082A
1810172-11	PS-31	Solid	6010C, 8082A
1810172-12	PS-32	Solid	6010C, 8082A
1810172-13	PS-33	Solid	6010C, 8082A
1810172-14	PS-34	Solid	6010C, 8082A
1810172-15	PS-35	Solid	6010C, 8082A
1810172-16	PS-36	Solid	6010C, 8082A
1810172-17	PS-37	Solid	6010C, 8082A
1810172-18	PS-38	Solid	6010C, 8082A
1810172-19	PS-39	Solid	6010C, 8082A
1810172-20	PS-40	Solid	6010C, 8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810172

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1810172-01 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (973% @ 30-150%), Decachlorobiphenyl [2C] (909% @ 30-150%)

1810172-03 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (285% @ 30-150%), Decachlorobiphenyl [2C] (231% @ 30-150%)

1810172-13 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (305% @ 30-150%), Decachlorobiphenyl [2C] (257% @ 30-150%)

1810172-19 **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%)

Total Metals

CJ80964-BS1 **Blank Spike recovery is below lower control limit (B-).**
Cadmium (80% @ 84-116%)

CJ80964-BSD1 **Blank Spike recovery is below lower control limit (B-).**
Cadmium (80% @ 84-116%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810172

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-21
Date Sampled: 10/02/18 09:05
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-01
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**10.3** (1.96)		6010C		1	KJK	10/11/18 1:15	0.51	100	CJ80964
Chromium	**9400** (78.4)		6010C		20	KJK	10/11/18 0:45	0.51	100	CJ80964
Lead	**60400** (392)		6010C		20	KJK	10/11/18 0:45	0.51	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-21
Date Sampled: 10/02/18 09:05
Percent Solids: N/A
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/09/18 22:56		CJ80503
Aroclor 1221	ND (0.05)		8082A		1	10/09/18 22:56		CJ80503
Aroclor 1232	ND (0.05)		8082A		1	10/09/18 22:56		CJ80503
Aroclor 1242	ND (0.05)		8082A		1	10/09/18 22:56		CJ80503
Aroclor 1248	ND (0.05)		8082A		1	10/09/18 22:56		CJ80503
Aroclor 1254 [2C]	**3.2** (0.2)		8082A		5	10/09/18 23:16		CJ80503
Aroclor 1260 [2C]	**4.9** (0.2)		8082A		5	10/09/18 23:16		CJ80503
Aroclor 1262	ND (0.05)		8082A		1	10/09/18 22:56		CJ80503
Aroclor 1268 [2C]	**1.1** (0.05)		8082A		1	10/09/18 22:56		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*973 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*909 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*100 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-22
Date Sampled: 10/02/18 09:20
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-02
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**18.4** (2.00)		6010C		1	KJK	10/11/18 1:21	0.5	100	CJ80964
Chromium	**4880** (80.0)		6010C		20	KJK	10/11/18 0:49	0.5	100	CJ80964
Lead	**32100** (400)		6010C		20	KJK	10/11/18 0:49	0.5	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-22
Date Sampled: 10/02/18 09:20
Percent Solids: N/A
Initial Volume: 1.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	10/09/18 23:35		CJ80503
Aroclor 1221	ND (0.3)		8082A		1	10/09/18 23:35		CJ80503
Aroclor 1232	ND (0.3)		8082A		1	10/09/18 23:35		CJ80503
Aroclor 1242	ND (0.3)		8082A		1	10/09/18 23:35		CJ80503
Aroclor 1248	ND (0.3)		8082A		1	10/09/18 23:35		CJ80503
Aroclor 1254	**0.9** (0.3)		8082A		1	10/09/18 23:35		CJ80503
Aroclor 1260 [2C]	**1.1** (0.3)		8082A		1	10/09/18 23:35		CJ80503
Aroclor 1262	ND (0.3)		8082A		1	10/09/18 23:35		CJ80503
Aroclor 1268 [2C]	ND (0.3)		8082A		1	10/09/18 23:35		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*51 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*40 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*49 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-23
Date Sampled: 10/02/18 09:45
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-03
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**10.2** (1.69)		6010C		1	KJK	10/11/18 1:26	0.59	100	CJ80964
Chromium	**5890** (67.8)		6010C		20	KJK	10/11/18 0:54	0.59	100	CJ80964
Lead	**32900** (339)		6010C		20	KJK	10/11/18 0:54	0.59	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-23
Date Sampled: 10/02/18 09:45
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/09/18 23:54		CJ80503
Aroclor 1221	ND (0.1)		8082A		1	10/09/18 23:54		CJ80503
Aroclor 1232	ND (0.1)		8082A		1	10/09/18 23:54		CJ80503
Aroclor 1242	**0.4** (0.1)		8082A		1	10/09/18 23:54		CJ80503
Aroclor 1248	ND (0.1)		8082A		1	10/09/18 23:54		CJ80503
Aroclor 1254	**1.8** (0.1)		8082A		1	10/09/18 23:54		CJ80503
Aroclor 1260 [2C]	**2.4** (0.1)		8082A		1	10/09/18 23:54		CJ80503
Aroclor 1262	ND (0.1)		8082A		1	10/09/18 23:54		CJ80503
Aroclor 1268 [2C]	**0.5** (0.1)		8082A		1	10/09/18 23:54		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*285 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*231 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-24
Date Sampled: 10/02/18 10:05
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-04
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**140** (39.2)		6010C		20	KJK	10/11/18 0:58	0.51	100	CJ80964
Chromium	**8.48** (3.92)		6010C		1	KJK	10/11/18 1:32	0.51	100	CJ80964
Lead	**77900** (392)		6010C		20	KJK	10/11/18 0:58	0.51	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-24
Date Sampled: 10/02/18 10:05
Percent Solids: N/A
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/08/18 22:23		CJ80503
Aroclor 1221	ND (0.05)		8082A		1	10/08/18 22:23		CJ80503
Aroclor 1232	ND (0.05)		8082A		1	10/08/18 22:23		CJ80503
Aroclor 1242	ND (0.05)		8082A		1	10/08/18 22:23		CJ80503
Aroclor 1248	ND (0.05)		8082A		1	10/08/18 22:23		CJ80503
Aroclor 1254 [2C]	**1.1** (0.05)		8082A		1	10/08/18 22:23		CJ80503
Aroclor 1260 [2C]	**0.9** (0.05)		8082A		1	10/08/18 22:23		CJ80503
Aroclor 1262	ND (0.05)		8082A		1	10/08/18 22:23		CJ80503
Aroclor 1268	**0.3** (0.05)		8082A		1	10/08/18 22:23		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-25
Date Sampled: 10/02/18 10:25
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-05
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**10.3** (1.85)		6010C		1	KJK	10/11/18 1:38	0.54	100	CJ80964
Chromium	**8390** (74.1)		6010C		20	KJK	10/11/18 1:48	0.54	100	CJ80964
Lead	**62700** (370)		6010C		20	KJK	10/11/18 1:48	0.54	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-25
Date Sampled: 10/02/18 10:25
Percent Solids: N/A
Initial Volume: 7.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.07)		8082A		1	10/08/18 22:42		CJ80503
Aroclor 1221	ND (0.07)		8082A		1	10/08/18 22:42		CJ80503
Aroclor 1232	ND (0.07)		8082A		1	10/08/18 22:42		CJ80503
Aroclor 1242	ND (0.07)		8082A		1	10/08/18 22:42		CJ80503
Aroclor 1248	ND (0.07)		8082A		1	10/08/18 22:42		CJ80503
Aroclor 1254	**1.9** (0.07)		8082A		1	10/08/18 22:42		CJ80503
Aroclor 1260	**1.7** (0.07)		8082A		1	10/08/18 22:42		CJ80503
Aroclor 1262	ND (0.07)		8082A		1	10/08/18 22:42		CJ80503
Aroclor 1268	**0.5** (0.07)		8082A		1	10/08/18 22:42		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*121 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*100 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-26
Date Sampled: 10/02/18 10:40
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-06
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**9.84** (1.96)		6010C		1	KJK	10/11/18 1:42	0.51	100	CJ80964
Chromium	**9060** (78.4)		6010C		20	KJK	10/11/18 1:52	0.51	100	CJ80964
Lead	**44600** (392)		6010C		20	KJK	10/11/18 1:52	0.51	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-26
Date Sampled: 10/02/18 10:40
Percent Solids: N/A
Initial Volume: 1.53
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	10/08/18 23:01		CJ80503
Aroclor 1221	ND (0.3)		8082A		1	10/08/18 23:01		CJ80503
Aroclor 1232	ND (0.3)		8082A		1	10/08/18 23:01		CJ80503
Aroclor 1242	ND (0.3)		8082A		1	10/08/18 23:01		CJ80503
Aroclor 1248	ND (0.3)		8082A		1	10/08/18 23:01		CJ80503
Aroclor 1254 [2C]	**3.5** (0.3)		8082A		1	10/08/18 23:01		CJ80503
Aroclor 1260 [2C]	**4.3** (0.3)		8082A		1	10/08/18 23:01		CJ80503
Aroclor 1262	ND (0.3)		8082A		1	10/08/18 23:01		CJ80503
Aroclor 1268	**1.4** (0.3)		8082A		1	10/08/18 23:01		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*127 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*99 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-27
Date Sampled: 10/02/18 10:55
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-07
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**7.39** (3.33)		6010C		1	KJK	10/11/18 2:18	0.3	100	CJ80964
Chromium	**4150** (133)		6010C		20	KJK	10/11/18 1:56	0.3	100	CJ80964
Lead	**23600** (667)		6010C		20	KJK	10/11/18 1:56	0.3	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-27
Date Sampled: 10/02/18 10:55
Percent Solids: N/A
Initial Volume: 0.61
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.8)		8082A		1	10/08/18 23:21		CJ80503
Aroclor 1221	ND (0.8)		8082A		1	10/08/18 23:21		CJ80503
Aroclor 1232	ND (0.8)		8082A		1	10/08/18 23:21		CJ80503
Aroclor 1242	ND (0.8)		8082A		1	10/08/18 23:21		CJ80503
Aroclor 1248	ND (0.8)		8082A		1	10/08/18 23:21		CJ80503
Aroclor 1254	**3.5** (0.8)		8082A		1	10/08/18 23:21		CJ80503
Aroclor 1260 [2C]	**3.2** (0.8)		8082A		1	10/08/18 23:21		CJ80503
Aroclor 1262	ND (0.8)		8082A		1	10/08/18 23:21		CJ80503
Aroclor 1268 [2C]	**1.0** (0.8)		8082A		1	10/08/18 23:21		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*110 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*103 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-28
Date Sampled: 10/02/18 11:10
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-08
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	ND (45.5)		6010C		1	KJK	10/11/18 2:23	0.022	100	CJ80964
Chromium	**11400** (90.9)		6010C		1	KJK	10/11/18 2:23	0.022	100	CJ80964
Lead	**64100** (455)		6010C		1	KJK	10/11/18 2:23	0.022	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-28
Date Sampled: 10/02/18 11:10
Percent Solids: N/A
Initial Volume: 0.022
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (22.7)		8082A		1	10/10/18 12:02		CJ80912
Aroclor 1221	ND (22.7)		8082A		1	10/10/18 12:02		CJ80912
Aroclor 1232	ND (22.7)		8082A		1	10/10/18 12:02		CJ80912
Aroclor 1242	ND (22.7)		8082A		1	10/10/18 12:02		CJ80912
Aroclor 1248	ND (22.7)		8082A		1	10/10/18 12:02		CJ80912
Aroclor 1254	ND (22.7)		8082A		1	10/10/18 12:02		CJ80912
Aroclor 1260	ND (22.7)		8082A		1	10/10/18 12:02		CJ80912
Aroclor 1262	ND (22.7)		8082A		1	10/10/18 12:02		CJ80912
Aroclor 1268	ND (22.7)		8082A		1	10/10/18 12:02		CJ80912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*73 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-29
Date Sampled: 10/02/18 11:25
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-09
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**6.52** (5.26)		6010C		1	KJK	10/11/18 2:27	0.19	100	CJ80964
Chromium	**10400** (10.5)		6010C		1	KJK	10/11/18 2:27	0.19	100	CJ80964
Lead	**66100** (1050)		6010C		20	KJK	10/11/18 2:47	0.19	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-29
Date Sampled: 10/02/18 11:25
Percent Solids: N/A
Initial Volume: 0.19
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.6)		8082A		1	10/10/18 12:20		CJ80912
Aroclor 1221	ND (2.6)		8082A		1	10/10/18 12:20		CJ80912
Aroclor 1232	ND (2.6)		8082A		1	10/10/18 12:20		CJ80912
Aroclor 1242	ND (2.6)		8082A		1	10/10/18 12:20		CJ80912
Aroclor 1248	ND (2.6)		8082A		1	10/10/18 12:20		CJ80912
Aroclor 1254 [2C]	**4.8** (2.6)		8082A		1	10/10/18 12:20		CJ80912
Aroclor 1260 [2C]	ND (2.6)		8082A		1	10/10/18 12:20		CJ80912
Aroclor 1262	ND (2.6)		8082A		1	10/10/18 12:20		CJ80912
Aroclor 1268	ND (2.6)		8082A		1	10/10/18 12:20		CJ80912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-30
Date Sampled: 10/02/18 11:40
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-10
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**7.60** (4.35)		6010C		1	KJK	10/11/18 2:32	0.23	100	CJ80964
Chromium	**57.2** (8.70)		6010C		1	KJK	10/11/18 2:32	0.23	100	CJ80964
Lead	**615** (43.5)		6010C		1	KJK	10/11/18 2:32	0.23	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-30
Date Sampled: 10/02/18 11:40
Percent Solids: N/A
Initial Volume: 0.23
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.2)		8082A		1	10/10/18 12:39		CJ80912
Aroclor 1221	ND (2.2)		8082A		1	10/10/18 12:39		CJ80912
Aroclor 1232	ND (2.2)		8082A		1	10/10/18 12:39		CJ80912
Aroclor 1242	ND (2.2)		8082A		1	10/10/18 12:39		CJ80912
Aroclor 1248	ND (2.2)		8082A		1	10/10/18 12:39		CJ80912
Aroclor 1254 [2C]	**3.2** (2.2)		8082A		1	10/10/18 12:39		CJ80912
Aroclor 1260	ND (2.2)		8082A		1	10/10/18 12:39		CJ80912
Aroclor 1262	ND (2.2)		8082A		1	10/10/18 12:39		CJ80912
Aroclor 1268	ND (2.2)		8082A		1	10/10/18 12:39		CJ80912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-31
Date Sampled: 10/02/18 11:55
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-11
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	ND (2.30)		6010C		1	KJK	10/11/18 2:37	0.435	100	CJ80964
Chromium	**27.2** (4.60)		6010C		1	KJK	10/11/18 2:37	0.435	100	CJ80964
Lead	**69.6** (23.0)		6010C		1	KJK	10/11/18 2:37	0.435	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-31
Date Sampled: 10/02/18 11:55
Percent Solids: N/A
Initial Volume: 0.435
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-11
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.1)		8082A		1	10/10/18 12:58		CJ80912
Aroclor 1221	ND (1.1)		8082A		1	10/10/18 12:58		CJ80912
Aroclor 1232	ND (1.1)		8082A		1	10/10/18 12:58		CJ80912
Aroclor 1242	ND (1.1)		8082A		1	10/10/18 12:58		CJ80912
Aroclor 1248	ND (1.1)		8082A		1	10/10/18 12:58		CJ80912
Aroclor 1254 [2C]	**2.9** (1.1)		8082A		1	10/10/18 12:58		CJ80912
Aroclor 1260	**2.4** (1.1)		8082A		1	10/10/18 12:58		CJ80912
Aroclor 1262	ND (1.1)		8082A		1	10/10/18 12:58		CJ80912
Aroclor 1268	ND (1.1)		8082A		1	10/10/18 12:58		CJ80912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-32
Date Sampled: 10/02/18 12:10
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-12
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**133** (1.85)		6010C		1	KJK	10/11/18 2:41	0.54	100	CJ80964
Chromium	**2330** (3.70)		6010C		1	KJK	10/11/18 2:41	0.54	100	CJ80964
Lead	**30900** (370)		6010C		20	KJK	10/11/18 3:00	0.54	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-32
Date Sampled: 10/02/18 12:10
Percent Solids: N/A
Initial Volume: 10.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-12
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/08/18 23:39		CJ80503
Aroclor 1221	ND (0.05)		8082A		1	10/08/18 23:39		CJ80503
Aroclor 1232	ND (0.05)		8082A		1	10/08/18 23:39		CJ80503
Aroclor 1242	ND (0.05)		8082A		1	10/08/18 23:39		CJ80503
Aroclor 1248	ND (0.05)		8082A		1	10/08/18 23:39		CJ80503
Aroclor 1254	**1.2** (0.05)		8082A		1	10/08/18 23:39		CJ80503
Aroclor 1260 [2C]	**3.0** (0.2)		8082A		5	10/10/18 0:14		CJ80503
Aroclor 1262	ND (0.05)		8082A		1	10/08/18 23:39		CJ80503
Aroclor 1268	**0.9** (0.05)		8082A		1	10/08/18 23:39		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*115 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-33
Date Sampled: 10/02/18 12:25
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-13
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**139** (1.96)		6010C		1	KJK	10/11/18 3:17	0.51	100	CJ80964
Chromium	**4210** (3.92)		6010C		1	KJK	10/11/18 3:17	0.51	100	CJ80964
Lead	**44700** (392)		6010C		20	KJK	10/11/18 3:52	0.51	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-33
Date Sampled: 10/02/18 12:25
Percent Solids: N/A
Initial Volume: 10.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-13
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/08/18 23:59		CJ80503
Aroclor 1221	ND (0.05)		8082A		1	10/08/18 23:59		CJ80503
Aroclor 1232	ND (0.05)		8082A		1	10/08/18 23:59		CJ80503
Aroclor 1242	ND (0.05)		8082A		1	10/08/18 23:59		CJ80503
Aroclor 1248	ND (0.05)		8082A		1	10/08/18 23:59		CJ80503
Aroclor 1254	**1.7** (0.05)		8082A		1	10/08/18 23:59		CJ80503
Aroclor 1260 [2C]	**5.0** (0.2)		8082A		5	10/10/18 0:33		CJ80503
Aroclor 1262	ND (0.05)		8082A		1	10/08/18 23:59		CJ80503
Aroclor 1268	**2.2** (0.2)		8082A		5	10/10/18 0:33		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*305 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*257 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-34
Date Sampled: 10/02/18 12:40
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-14
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**9.44** (1.96)		6010C		1	KJK	10/11/18 3:23	0.51	100	CJ80964
Chromium	**10400** (78.4)		6010C		20	KJK	10/11/18 3:56	0.51	100	CJ80964
Lead	**47200** (392)		6010C		20	KJK	10/11/18 3:56	0.51	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-34
Date Sampled: 10/02/18 12:40
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-14
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/09/18 0:18		CJ80503
Aroclor 1221	ND (0.05)		8082A		1	10/09/18 0:18		CJ80503
Aroclor 1232	ND (0.05)		8082A		1	10/09/18 0:18		CJ80503
Aroclor 1242	ND (0.05)		8082A		1	10/09/18 0:18		CJ80503
Aroclor 1248	ND (0.05)		8082A		1	10/09/18 0:18		CJ80503
Aroclor 1254 [2C]	**3.1** (0.5)		8082A		10	10/10/18 0:52		CJ80503
Aroclor 1260 [2C]	**7.0** (0.5)		8082A		10	10/10/18 0:52		CJ80503
Aroclor 1262	ND (0.05)		8082A		1	10/09/18 0:18		CJ80503
Aroclor 1268 [2C]	**1.8** (0.05)		8082A		1	10/09/18 0:18		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*123 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-35
Date Sampled: 10/03/18 09:05
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-15
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**38.5** (1.85)		6010C		1	KJK	10/11/18 3:29	0.54	100	CJ80964
Chromium	**3460** (3.70)		6010C		1	KJK	10/11/18 3:29	0.54	100	CJ80964
Lead	**43500** (370)		6010C		20	KJK	10/11/18 4:01	0.54	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-35
Date Sampled: 10/03/18 09:05
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-15
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/09/18 0:37		CJ80503
Aroclor 1221	ND (0.05)		8082A		1	10/09/18 0:37		CJ80503
Aroclor 1232	ND (0.05)		8082A		1	10/09/18 0:37		CJ80503
Aroclor 1242	ND (0.05)		8082A		1	10/09/18 0:37		CJ80503
Aroclor 1248	ND (0.05)		8082A		1	10/09/18 0:37		CJ80503
Aroclor 1254	ND (0.05)		8082A		1	10/09/18 0:37		CJ80503
Aroclor 1260	**11.8** (0.5)		8082A		10	10/10/18 1:11		CJ80503
Aroclor 1262	ND (0.05)		8082A		1	10/09/18 0:37		CJ80503
Aroclor 1268	ND (0.05)		8082A		1	10/09/18 0:37		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-36
Date Sampled: 10/03/18 09:20
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-16
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**80.5** (1.96)		6010C		1	KJK	10/11/18 3:35	0.51	100	CJ80964
Chromium	**14.0** (3.92)		6010C		1	KJK	10/11/18 3:35	0.51	100	CJ80964
Lead	**7880** (19.6)		6010C		1	KJK	10/11/18 3:35	0.51	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-36
Date Sampled: 10/03/18 09:20
Percent Solids: N/A
Initial Volume: 5.99
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-16
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.08)		8082A		1	10/09/18 0:56		CJ80503
Aroclor 1221	ND (0.08)		8082A		1	10/09/18 0:56		CJ80503
Aroclor 1232	ND (0.08)		8082A		1	10/09/18 0:56		CJ80503
Aroclor 1242	ND (0.08)		8082A		1	10/09/18 0:56		CJ80503
Aroclor 1248	ND (0.08)		8082A		1	10/09/18 0:56		CJ80503
Aroclor 1254	ND (0.08)		8082A		1	10/09/18 0:56		CJ80503
Aroclor 1260 [2C]	**9.5** (0.4)		8082A		5	10/10/18 1:31		CJ80503
Aroclor 1262	ND (0.08)		8082A		1	10/09/18 0:56		CJ80503
Aroclor 1268	ND (0.08)		8082A		1	10/09/18 0:56		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*49 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-37
Date Sampled: 10/03/18 09:45
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-17
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	ND (3.23)		6010C		1	KJK	10/11/18 3:40	0.31	100	CJ80964
Chromium	**23600** (129)		6010C		20	KJK	10/11/18 4:44	0.31	100	CJ80964
Lead	**101000** (645)		6010C		20	KJK	10/11/18 4:44	0.31	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-37
Date Sampled: 10/03/18 09:45
Percent Solids: N/A
Initial Volume: 0.45
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-17
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.1)		8082A		1	10/09/18 1:15		CJ80503
Aroclor 1221	ND (1.1)		8082A		1	10/09/18 1:15		CJ80503
Aroclor 1232	ND (1.1)		8082A		1	10/09/18 1:15		CJ80503
Aroclor 1242	ND (1.1)		8082A		1	10/09/18 1:15		CJ80503
Aroclor 1248	ND (1.1)		8082A		1	10/09/18 1:15		CJ80503
Aroclor 1254	ND (1.1)		8082A		1	10/09/18 1:15		CJ80503
Aroclor 1260	ND (1.1)		8082A		1	10/09/18 1:15		CJ80503
Aroclor 1262	ND (1.1)		8082A		1	10/09/18 1:15		CJ80503
Aroclor 1268	ND (1.1)		8082A		1	10/09/18 1:15		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*56 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-38
Date Sampled: 10/03/18 10:05
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-18
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**11.9** (2.90)		6010C		1	KJK	10/11/18 3:46	0.345	100	CJ80964
Chromium	**2530** (5.80)		6010C		1	KJK	10/11/18 3:46	0.345	100	CJ80964
Lead	**9880** (29.0)		6010C		1	KJK	10/11/18 3:46	0.345	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-38
Date Sampled: 10/03/18 10:05
Percent Solids: N/A
Initial Volume: 0.345
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-18
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.4)		8082A		1	10/10/18 13:17		CJ80912
Aroclor 1221	ND (1.4)		8082A		1	10/10/18 13:17		CJ80912
Aroclor 1232	ND (1.4)		8082A		1	10/10/18 13:17		CJ80912
Aroclor 1242	ND (1.4)		8082A		1	10/10/18 13:17		CJ80912
Aroclor 1248	ND (1.4)		8082A		1	10/10/18 13:17		CJ80912
Aroclor 1254	ND (1.4)		8082A		1	10/10/18 13:17		CJ80912
Aroclor 1260	**5.4** (1.4)		8082A		1	10/10/18 13:17		CJ80912
Aroclor 1262	ND (1.4)		8082A		1	10/10/18 13:17		CJ80912
Aroclor 1268	ND (1.4)		8082A		1	10/10/18 13:17		CJ80912

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*47 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*49 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-39
Date Sampled: 10/03/18 10:25
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-19
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**9.27** (4.00)		6010C		1	KJK	10/11/18 4:24	0.25	100	CJ80964
Chromium	**3930** (8.00)		6010C		1	KJK	10/11/18 4:24	0.25	100	CJ80964
Lead	**98300** (800)		6010C		20	KJK	10/11/18 4:53	0.25	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-39
Date Sampled: 10/03/18 10:25
Percent Solids: N/A
Initial Volume: 2.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-19
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (4.8)		8082A		20	10/10/18 1:50		CJ80503
Aroclor 1221	ND (4.8)		8082A		20	10/10/18 1:50		CJ80503
Aroclor 1232	ND (4.8)		8082A		20	10/10/18 1:50		CJ80503
Aroclor 1242	ND (4.8)		8082A		20	10/10/18 1:50		CJ80503
Aroclor 1248	ND (4.8)		8082A		20	10/10/18 1:50		CJ80503
Aroclor 1254	ND (4.8)		8082A		20	10/10/18 1:50		CJ80503
Aroclor 1260	**84.0** (4.8)		8082A		20	10/10/18 1:50		CJ80503
Aroclor 1262	ND (4.8)		8082A		20	10/10/18 1:50		CJ80503
Aroclor 1268	ND (4.8)		8082A		20	10/10/18 1:50		CJ80503

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-40
Date Sampled: 10/03/18 10:40
Percent Solids: N/A

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-20
Sample Matrix: Solid
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	ND (7.69)		6010C		1	KJK	10/11/18 5:28	0.13	100	CJ80964
Chromium	**19900** (15.4)		6010C		1	KJK	10/11/18 5:28	0.13	100	CJ80964
Lead	**97200** (1540)		6010C		20	KJK	10/11/18 5:49	0.13	100	CJ80964

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-40
Date Sampled: 10/03/18 10:40
Percent Solids: N/A
Initial Volume: 1.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810172
ESS Laboratory Sample ID: 1810172-20
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/5/18 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	10/09/18 1:53		CJ80503
Aroclor 1221	ND (0.5)		8082A		1	10/09/18 1:53		CJ80503
Aroclor 1232	ND (0.5)		8082A		1	10/09/18 1:53		CJ80503
Aroclor 1242	ND (0.5)		8082A		1	10/09/18 1:53		CJ80503
Aroclor 1248	ND (0.5)		8082A		1	10/09/18 1:53		CJ80503
Aroclor 1254	ND (0.5)		8082A		1	10/09/18 1:53		CJ80503
Aroclor 1260	**49.8** (2.5)		8082A		5	10/10/18 2:09		CJ80503
Aroclor 1262	ND (0.5)		8082A		1	10/09/18 1:53		CJ80503
Aroclor 1268	ND (0.5)		8082A		1	10/09/18 1:53		CJ80503

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810172

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Total Metals										
Batch CJ80964 - 3050B										
Blank										
Cadmium	ND	0.50	mg/kg wet							
Chromium	ND	1.00	mg/kg wet							
Lead	ND	5.00	mg/kg wet							
LCS										
Cadmium	78.8	1.69	mg/kg wet	98.70		80	84-116			B-
Chromium	214	3.39	mg/kg wet	240.0		89	85-115			
Lead	237	16.9	mg/kg wet	276.0		86	84-116			
LCS Dup										
Cadmium	78.9	1.79	mg/kg wet	98.70		80	84-116	0.1	20	B-
Chromium	212	3.57	mg/kg wet	240.0		88	85-115	0.9	20	
Lead	235	17.9	mg/kg wet	276.0		85	84-116	0.6	20	
Reference										
Lead	3910	20.8	mg/kg wet	4490		87	83-113			
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80503 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0281*		mg/kg wet	*0.02500*		*112*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0209*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0231*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		92	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		93	40-140			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810172

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80503 - 3540C										
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		91	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		90	40-140			
Surrogate: Decachlorobiphenyl	*0.0288*		mg/kg wet	*0.02500*		*115*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0241*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0244*		mg/kg wet	*0.02500*		*98*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		93	40-140	0.8	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		94	40-140	1	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		92	40-140	1	30	
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		92	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0291*		mg/kg wet	*0.02500*		*116*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0241*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0244*		mg/kg wet	*0.02500*		*98*	*30-150*			
Batch CJ80912 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0199*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0184*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0180*		mg/kg wet	*0.02500*		*72*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		99	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		102	40-140			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810172

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80912 - 3540C										
Aroclor 1260	0.6	0.02	mg/kg wet	0.5000		110	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0204*		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	0.5	0.02	mg/kg wet	0.5000		95	40-140	4	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		97	40-140	5	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		106	40-140	4	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		95	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0191*		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]	*0.0198*		mg/kg wet	*0.02500*		*79*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810172

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.
B-	Blank Spike recovery is below lower control limit (B-).
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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810172

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1810172
Date Received: 10/4/2018
Project Due Date: 10/12/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	274439	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	274438	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	274437	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	274436	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	274435	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	274434	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	274433	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	274432	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	274431	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	274430	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	274429	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	274428	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	274427	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	274426	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	274425	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	274424	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	274423	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	274422	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
19	274421	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
20	274420	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? Yes / No

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 1810172

Date Received: 10/4/2018

Are all necessary stickers attached? (Yes) / No

Completed By: [signature] Date & Time: 10/4/18 2155

Reviewed By: [signature] Date & Time: 10/4/18 2210

Delivered By: [signature] 10/4/18 2210

ESS Laboratory

Division of Thielsch Engineering, Inc.
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www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 181072

Turn Time 5-Day **Rush**
Regulatory State Rhode Island
Is this project for any of the following?: ○CT RCP ○MA MCP ○RGP

Reporting Limits PCBs <0.5 mg/kg

Electonic Deliverables ☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	MA	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082	Total Lead	Total Cadmium	Total Chromium
01	10/2/2018	9:05 a.m.	Grab	Solid	PS-21	X	X	X	X
02	10/2/2018	9:20 a.m.	Grab	Solid	PS-22	X	X	X	X
03	10/2/2018	9:45 a.m.	Grab	Solid	PS-23	X	X	X	X
04	10/2/2018	10:05 a.m.	Grab	Solid	PS-24	X	X	X	X
05	10/2/2018	10:25 a.m.	Grab	Solid	PS-25	X	X	X	X
06	10/2/2018	10:40 a.m.	Grab	Solid	PS-26	X	X	X	X
07	10/2/2018	10:55 a.m.	Grab	Solid	PS-27	X	X	X	X
08	10/2/2018	11:10 a.m.	Grab	Solid	PS-28	X	X	X	X
09	10/2/2018	11:25 a.m.	Grab	Solid	PS-29	X	X	X	X
10	10/2/2018	11:40 a.m.	Grab	Solid	PS-30	X	X	X	X
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial					AG	AG	AG	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					9	9	9	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					1	1	1	1
					Number of Containers per Sample:	1	1	1	1

Laboratory Use Only
Cooler Present: ✓
Seals Intact:
Cooler Temperature: 1.8 +3.2 °C ICE RC

Sampled by : ACC/MJM/DCK

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:23pm	10/4/18 1330	10/4/18 1545	10/4/18 2017
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
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CHAIN OF CUSTODY

ESS Lab # 181072

Turn Time	5-Day **Rush**
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ◉MA MCP ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Excel ☑Other (Please Specify →) PDF

Company Name Coneco Engineers and Scientists	**Project #** 5675.F	**Project Name** Pawtucket 1 Control House, 6 Thornton Ave,	
Contact Person Mark Zoller		**Address** 4 First Street	
City Bridgewater	**State** MA	**Zip Code** 02324	**PO #** 5675.F
Telephone Number 508-697-3191	**FAX Number**	**Email Address** jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082	Total Lead	Total Cadmium	Total Chromium
11	10/2/2018	11:55 a.m.	Grab	Solid	PS-31	X	X	X	X
12	10/2/2019	12:10 p.m.	Grab	Solid	PS-32	X	X	X	X
13	10/2/2020	12:25 p.m.	Grab	Solid	PS-33	X	X	X	X
14	10/2/2021	12:40 p.m.	Grab	Solid	PS-34	X	X	X	X
15	10/3/2018	9:05 a.m.	Grab	Solid	PS-35	X	X	X	X
16	10/3/2019	9:20 a.m.	Grab	Solid	PS-36	X	X	X	X
17	10/3/2020	9:45 a.m.	Grab	Solid	PS-37	X	X	X	X
18	10/3/2021	10:05 a.m.	Grab	Solid	PS-38	X	X	X	X
19	10/3/2022	10:25 a.m.	Grab	Solid	PS-39	X	X	X	X
20	10/3/2023	10:40 a.m.	Grab	Solid	PS-40	X	X	X	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG | AG | AG | AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9 | 9 | 9 | 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1 | 1 | 1 | 1

Number of Containers per Sample: 1 | 1 | 1 | 1

Laboratory Use Only

Cooler Present: ✓

Seals Intact: ____

Cooler Temperature: 1.8+3.2 °C ICE RC

Sampled by : ACC/MJM/DCK

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:23pm	R. Carlson 10/4/18 1330	R. Carlson 10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1810173

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 2:13 pm, Oct 17, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810173

SAMPLE RECEIPT

The following samples were received on October 04, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1810173-01	PS-41	Soil	6010C, 8082A
1810173-02	PS-42	Soil	6010C, 8082A
1810173-03	PS-43	Soil	6010C, 8082A
1810173-04	PS-44	Soil	6010C, 8082A
1810173-05	PS-45	Soil	6010C, 8082A
1810173-06	PS-46	Soil	8082A
1810173-07	PS-47	Soil	8082A
1810173-08	PS-48	Soil	8082A
1810173-09	PS-49	Soil	6010C, 8082A
1810173-10	PS-50	Soil	6010C, 8082A
1810173-11	PS-51	Soil	6010C, 8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810173

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1810173-03 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (445% @ 30-150%), Decachlorobiphenyl [2C] (429% @ 30-150%)

1810173-07 **Surrogate recovery(ies) outside of criteria. Insufficient sample volume for re-extraction (SI).**
Decachlorobiphenyl (27% @ 30-150%), Decachlorobiphenyl [2C] (26% @ 30-150%)

1810173-10 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (176% @ 30-150%), Decachlorobiphenyl [2C] (171% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810173

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-41
Date Sampled: 10/03/18 10:55
Percent Solids: N/A

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-01
Sample Matrix: Soil
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**17.2** (1.69)		6010C		1	KJK	10/09/18 19:51	0.59	100	CJ80945
Chromium	**413** (3.39)		6010C		1	KJK	10/09/18 19:51	0.59	100	CJ80945
Lead	**2340** (16.9)		6010C		1	KJK	10/09/18 19:51	0.59	100	CJ80945

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-41
Date Sampled: 10/03/18 10:55
Percent Solids: N/A
Initial Volume: 11.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-01
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/10/18 0:49		CJ80604
Aroclor 1221	ND (0.05)		8082A		1	10/10/18 0:49		CJ80604
Aroclor 1232	ND (0.05)		8082A		1	10/10/18 0:49		CJ80604
Aroclor 1242	ND (0.05)		8082A		1	10/10/18 0:49		CJ80604
Aroclor 1248	ND (0.05)		8082A		1	10/10/18 0:49		CJ80604
Aroclor 1254	ND (0.05)		8082A		1	10/10/18 0:49		CJ80604
Aroclor 1260	**8.3** (0.5)		8082A		10	10/10/18 19:59		CJ80604
Aroclor 1262	ND (0.05)		8082A		1	10/10/18 0:49		CJ80604
Aroclor 1268	ND (0.05)		8082A		1	10/10/18 0:49		CJ80604

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*51 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*46 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-42
Date Sampled: 10/03/18 11:10
Percent Solids: N/A

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-02
Sample Matrix: Soil
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**289** (1.92)		6010C		1	KJK	10/09/18 19:57	0.52	100	CJ80945
Chromium	**4.52** (3.85)		6010C		1	KJK	10/09/18 19:57	0.52	100	CJ80945
Lead	**403** (19.2)		6010C		1	KJK	10/09/18 19:57	0.52	100	CJ80945

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-42
Date Sampled: 10/03/18 11:10
Percent Solids: N/A
Initial Volume: 10.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-02
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/10/18 1:09		CJ80604
Aroclor 1221	ND (0.05)		8082A		1	10/10/18 1:09		CJ80604
Aroclor 1232	ND (0.05)		8082A		1	10/10/18 1:09		CJ80604
Aroclor 1242	ND (0.05)		8082A		1	10/10/18 1:09		CJ80604
Aroclor 1248	ND (0.05)		8082A		1	10/10/18 1:09		CJ80604
Aroclor 1254	**1.6** (0.05)		8082A		1	10/10/18 1:09		CJ80604
Aroclor 1260	**3.5** (0.2)		8082A		5	10/10/18 20:18		CJ80604
Aroclor 1262	ND (0.05)		8082A		1	10/10/18 1:09		CJ80604
Aroclor 1268	ND (0.05)		8082A		1	10/10/18 1:09		CJ80604

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-43
Date Sampled: 10/03/18 11:25
Percent Solids: N/A

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-03
Sample Matrix: Soil
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**76.3** (1.59)		6010C		1	KJK	10/09/18 20:02	0.63	100	CJ80945
Chromium	**2870** (3.17)		6010C		1	KJK	10/09/18 20:02	0.63	100	CJ80945
Lead	**35900** (317)		6010C		20	KJK	10/10/18 1:30	0.63	100	CJ80945

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-43
Date Sampled: 10/03/18 11:25
Percent Solids: N/A
Initial Volume: 10.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-03
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/10/18 1:28		CJ80604
Aroclor 1221	ND (0.05)		8082A		1	10/10/18 1:28		CJ80604
Aroclor 1232	ND (0.05)		8082A		1	10/10/18 1:28		CJ80604
Aroclor 1242	ND (0.05)		8082A		1	10/10/18 1:28		CJ80604
Aroclor 1248	ND (0.05)		8082A		1	10/10/18 1:28		CJ80604
Aroclor 1254	**1.1** (0.05)		8082A		1	10/10/18 1:28		CJ80604
Aroclor 1260	**1.6** (0.05)		8082A		1	10/10/18 1:28		CJ80604
Aroclor 1262	ND (0.05)		8082A		1	10/10/18 1:28		CJ80604
Aroclor 1268	**0.3** (0.05)		8082A		1	10/10/18 1:28		CJ80604

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*445 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*429 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*56 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-44
Date Sampled: 10/03/18 11:40
Percent Solids: N/A

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-04
Sample Matrix: Soil
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**67.5** (1.79)		6010C		1	KJK	10/09/18 20:08	0.56	100	CJ80945
Chromium	**4750** (3.57)		6010C		1	KJK	10/09/18 20:08	0.56	100	CJ80945
Lead	**39500** (357)		6010C		20	KJK	10/10/18 1:49	0.56	100	CJ80945

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-44
Date Sampled: 10/03/18 11:40
Percent Solids: N/A
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-04
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/10/18 1:47		CJ80604
Aroclor 1221	ND (0.05)		8082A		1	10/10/18 1:47		CJ80604
Aroclor 1232	ND (0.05)		8082A		1	10/10/18 1:47		CJ80604
Aroclor 1242	ND (0.05)		8082A		1	10/10/18 1:47		CJ80604
Aroclor 1248	ND (0.05)		8082A		1	10/10/18 1:47		CJ80604
Aroclor 1254	ND (0.05)		8082A		1	10/10/18 1:47		CJ80604
Aroclor 1260	**6.5** (0.5)		8082A		10	10/10/18 20:37		CJ80604
Aroclor 1262	ND (0.05)		8082A		1	10/10/18 1:47		CJ80604
Aroclor 1268	ND (0.05)		8082A		1	10/10/18 1:47		CJ80604

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*61 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-45
Date Sampled: 10/03/18 10:55
Percent Solids: N/A

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-05
Sample Matrix: Soil
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**2.48** (1.61)		6010C		1	KJK	10/09/18 20:14	0.62	100	CJ80945
Chromium	**5560** (3.23)		6010C		1	KJK	10/09/18 20:14	0.62	100	CJ80945
Lead	**61500** (1610)		6010C		100	KJK	10/10/18 1:55	0.62	100	CJ80945

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-45
Date Sampled: 10/03/18 10:55
Percent Solids: N/A
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-05
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/10/18 2:06		CJ80604
Aroclor 1221	ND (0.05)		8082A		1	10/10/18 2:06		CJ80604
Aroclor 1232	ND (0.05)		8082A		1	10/10/18 2:06		CJ80604
Aroclor 1242	ND (0.05)		8082A		1	10/10/18 2:06		CJ80604
Aroclor 1248	ND (0.05)		8082A		1	10/10/18 2:06		CJ80604
Aroclor 1254	**1.6** (0.05)		8082A		1	10/10/18 2:06		CJ80604
Aroclor 1260	**3.3** (0.2)		8082A		5	10/10/18 20:56		CJ80604
Aroclor 1262	ND (0.05)		8082A		1	10/10/18 2:06		CJ80604
Aroclor 1268	ND (0.05)		8082A		1	10/10/18 2:06		CJ80604

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-46
Date Sampled: 10/03/18 11:10
Percent Solids: N/A
Initial Volume: 4.42
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-06
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/10/18 2:25		CJ80604
Aroclor 1221	ND (0.1)		8082A		1	10/10/18 2:25		CJ80604
Aroclor 1232	ND (0.1)		8082A		1	10/10/18 2:25		CJ80604
Aroclor 1242	ND (0.1)		8082A		1	10/10/18 2:25		CJ80604
Aroclor 1248	ND (0.1)		8082A		1	10/10/18 2:25		CJ80604
Aroclor 1254	ND (0.1)		8082A		1	10/10/18 2:25		CJ80604
Aroclor 1260	**3.4** (0.6)		8082A		5	10/10/18 21:15		CJ80604
Aroclor 1262	ND (0.1)		8082A		1	10/10/18 2:25		CJ80604
Aroclor 1268	ND (0.1)		8082A		1	10/10/18 2:25		CJ80604

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*82 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-47
Date Sampled: 10/03/18 11:25
Percent Solids: N/A
Initial Volume: 0.35
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-07
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.4)		8082A		1	10/10/18 2:44		CJ80604
Aroclor 1221	ND (1.4)		8082A		1	10/10/18 2:44		CJ80604
Aroclor 1232	ND (1.4)		8082A		1	10/10/18 2:44		CJ80604
Aroclor 1242	ND (1.4)		8082A		1	10/10/18 2:44		CJ80604
Aroclor 1248	ND (1.4)		8082A		1	10/10/18 2:44		CJ80604
Aroclor 1254	ND (1.4)		8082A		1	10/10/18 2:44		CJ80604
Aroclor 1260	**11.6** (1.4)		8082A		1	10/10/18 2:44		CJ80604
Aroclor 1262	ND (1.4)		8082A		1	10/10/18 2:44		CJ80604
Aroclor 1268	**5.6** (1.4)		8082A		1	10/10/18 2:44		CJ80604

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*27 %*	*SI*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*26 %*	*SI*	*30-150*
Surrogate: Tetrachloro-m-xylene	*35 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*39 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-48
Date Sampled: 10/03/18 11:40
Percent Solids: N/A
Initial Volume: 0.22
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-08
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.3)		8082A		1	10/10/18 3:03		CJ80604
Aroclor 1221	ND (2.3)		8082A		1	10/10/18 3:03		CJ80604
Aroclor 1232	ND (2.3)		8082A		1	10/10/18 3:03		CJ80604
Aroclor 1242	ND (2.3)		8082A		1	10/10/18 3:03		CJ80604
Aroclor 1248	ND (2.3)		8082A		1	10/10/18 3:03		CJ80604
Aroclor 1254	ND (2.3)		8082A		1	10/10/18 3:03		CJ80604
Aroclor 1260 [2C]	**2.9** (2.3)		8082A		1	10/10/18 3:03		CJ80604
Aroclor 1262	ND (2.3)		8082A		1	10/10/18 3:03		CJ80604
Aroclor 1268	ND (2.3)		8082A		1	10/10/18 3:03		CJ80604

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-49
Date Sampled: 10/03/18 11:55
Percent Solids: N/A

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-09
Sample Matrix: Soil
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**19.0** (1.85)		6010C		1	KJK	10/09/18 20:18	0.54	100	CJ80945
Chromium	**1050** (3.70)		6010C		1	KJK	10/09/18 20:18	0.54	100	CJ80945
Lead	**15700** (185)		6010C		10	KJK	10/10/18 1:59	0.54	100	CJ80945

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-49
Date Sampled: 10/03/18 11:55
Percent Solids: N/A
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-09
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/10/18 3:22		CJ80604
Aroclor 1221	ND (0.05)		8082A		1	10/10/18 3:22		CJ80604
Aroclor 1232	ND (0.05)		8082A		1	10/10/18 3:22		CJ80604
Aroclor 1242	ND (0.05)		8082A		1	10/10/18 3:22		CJ80604
Aroclor 1248	ND (0.05)		8082A		1	10/10/18 3:22		CJ80604
Aroclor 1254	**1.0** (0.05)		8082A		1	10/10/18 3:22		CJ80604
Aroclor 1260	**0.9** (0.05)		8082A		1	10/10/18 3:22		CJ80604
Aroclor 1262	ND (0.05)		8082A		1	10/10/18 3:22		CJ80604
Aroclor 1268 [2C]	**0.2** (0.05)		8082A		1	10/10/18 3:22		CJ80604

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*45 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*40 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*49 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-50
Date Sampled: 10/03/18 12:10
Percent Solids: N/A

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-10
Sample Matrix: Soil
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**18.4** (1.75)		6010C		1	KJK	10/09/18 20:24	0.57	100	CJ80945
Chromium	**4400** (3.51)		6010C		1	KJK	10/09/18 20:24	0.57	100	CJ80945
Lead	**111000** (1750)		6010C		100	KJK	10/10/18 2:05	0.57	100	CJ80945

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-50
Date Sampled: 10/03/18 12:10
Percent Solids: N/A
Initial Volume: 10.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-10
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/10/18 3:42		CJ80604
Aroclor 1221	ND (0.05)		8082A		1	10/10/18 3:42		CJ80604
Aroclor 1232	ND (0.05)		8082A		1	10/10/18 3:42		CJ80604
Aroclor 1242	ND (0.05)		8082A		1	10/10/18 3:42		CJ80604
Aroclor 1248	ND (0.05)		8082A		1	10/10/18 3:42		CJ80604
Aroclor 1254 [2C]	**1.8** (0.05)		8082A		1	10/10/18 3:42		CJ80604
Aroclor 1260 [2C]	**3.6** (0.5)		8082A		10	10/10/18 21:35		CJ80604
Aroclor 1262	ND (0.05)		8082A		1	10/10/18 3:42		CJ80604
Aroclor 1268 [2C]	**0.4** (0.05)		8082A		1	10/10/18 3:42		CJ80604

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*176 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*171 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-51
Date Sampled: 10/03/18 12:25
Percent Solids: N/A

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-11
Sample Matrix: Soil
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**6.82** (1.64)		6010C		1	KJK	10/09/18 20:29	0.61	100	CJ80945
Chromium	**2630** (3.28)		6010C		1	KJK	10/09/18 20:29	0.61	100	CJ80945
Lead	**97400** (1640)		6010C		100	KJK	10/10/18 2:10	0.61	100	CJ80945

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-51
Date Sampled: 10/03/18 12:25
Percent Solids: N/A
Initial Volume: 10.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810173
ESS Laboratory Sample ID: 1810173-11
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 10/6/18 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	10/10/18 4:01		CJ80604
Aroclor 1221	ND (0.05)		8082A		1	10/10/18 4:01		CJ80604
Aroclor 1232	ND (0.05)		8082A		1	10/10/18 4:01		CJ80604
Aroclor 1242	ND (0.05)		8082A		1	10/10/18 4:01		CJ80604
Aroclor 1248	ND (0.05)		8082A		1	10/10/18 4:01		CJ80604
Aroclor 1254	ND (0.05)		8082A		1	10/10/18 4:01		CJ80604
Aroclor 1260	**4.0** (0.2)		8082A		5	10/10/18 21:54		CJ80604
Aroclor 1262	ND (0.05)		8082A		1	10/10/18 4:01		CJ80604
Aroclor 1268	ND (0.05)		8082A		1	10/10/18 4:01		CJ80604

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*46 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810173

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Total Metals										
Batch CJ80945 - 3050B										
Blank										
Cadmium	ND	0.50	mg/kg wet							
Chromium	ND	1.00	mg/kg wet							
Lead	ND	5.00	mg/kg wet							
LCS										
Cadmium	89.3	1.67	mg/kg wet	98.70		90	84-116			
Chromium	243	3.33	mg/kg wet	240.0		101	85-115			
Lead	270	16.7	mg/kg wet	276.0		98	84-116			
LCS Dup										
Cadmium	85.5	1.96	mg/kg wet	98.70		87	84-116	4	20	
Chromium	230	3.92	mg/kg wet	240.0		96	85-115	5	20	
Lead	268	19.6	mg/kg wet	276.0		97	84-116	0.8	20	
Reference										
Lead	3950	17.9	mg/kg wet	4490		88	83-113			
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80604 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		97	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		100	40-140			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810173

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80604 - 3540C										
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		107	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		96	40-140			
Surrogate: Decachlorobiphenyl	*0.0266*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		95	40-140	2	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		97	40-140	2	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		106	40-140	1	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		95	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0266*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0241*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0244*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810173

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).
SI	Surrogate recovery(ies) outside of criteria. Insufficient sample volume for re-extraction (SI).
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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810173

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1810173
Date Received: 10/4/2018
Project Due Date: 10/12/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	274459	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	274458	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	274457	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	274456	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	274455	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	274454	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	274453	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	274452	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	274451	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	274450	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	274449	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review

Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

Completed By: Date & Time: 10/4/18 2202
Reviewed By: Date & Time: 10/4/18 2212
Delivered By: 10/4/18 2212

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 181073

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ○MA MCP ○RGP
Reporting Limits	PCBs <0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI

Contact Person	Address		
Mark Zoller	4 First Street		
City	**State**	**Zip Code**	**PO #**
Bridgewater	MA	02324	5675.F
Telephone Number	**FAX Number**	**Email Address**	
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082	Total Lead	Total Cadmium	Total Chromium
01	10/3/2018	10:55 a.m.	Grab	Solid	PS-41	X	X	X	X
02	10/3/2018	11:10 a.m.	Grab	Solid	PS-42	X	X	X	X
03	10/3/2018	11:25 a.m.	Grab	Solid	PS-43	X	X	X	X
04	10/3/2018	11:40 a.m.	Grab	Solid	PS-44	X	X	X	X
05	10/3/2018	10:55 a.m.	Grab	Solid	PS-45	X	X	X	X
06	10/3/2018	11:10 a.m.	Grab	Solid	PS-46	X	X	X	X
07	10/3/2018	11:25 a.m.	Grab	Solid	PS-47	X	X	X	X
08	10/3/2018	11:40 a.m.	Grab	Solid	PS-48	X	X	X	X
09	10/3/2018	11:55 a.m.	Grab	Solid	PS-49	X	X	X	X
10	10/3/2018	12:10 p.m.	Grab	Solid	PS-50	X	X	X	X
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial					AG	AG	AG	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					9	9	9	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					1	1	1	1
					Number of Containers per Sample:	1	1	1	1

Laboratory Use Only
Cooler Present: ✓
Seals Intact: ____
Cooler Temperature: 1.8 +3.2 °C ICE 2C

Sampled by : ACC/MJM/DCK

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 12:23pm	10/4/18 1330	10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
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www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 181073

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Reporting Limits	PCBs < 0.5 mg/kg
Is this project for any of the following?:	○CT RCP ◉MA MCP ○RGP
Electonic Deliverables	☐Limit Checker ☐Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave,

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	MA	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082	Total Lead	Total Cadmium	Total Chromium
11	10/3/2018	12:25 p.m.	Grab	Solid	PS-51	X	X	X	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG AG AG AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9 9 9 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1 1 1 1

Number of Containers per Sample: 1 1 1 1

Laboratory Use Only

Cooler Present: ✓

Seals Intact: ____

Cooler Temperature: 1.8+3.2 °C ICE RC

Sampled by : ACC/MJM/DCK

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
~~12/23/18~~ 10/4/18 12:23pm	10/4/18 1330	10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1811011

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 12:37 pm, Nov 08, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811011

SAMPLE RECEIPT

The following samples were received on November 01, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1811011-01	PS-52	Solid	8082A
1811011-02	PS-53	Solid	8082A
1811011-03	PS-54	Solid	8082A
1811011-04	PS-55	Solid	8082A
1811011-05	PS-56	Solid	8082A
1811011-06	PS-57	Solid	8082A
1811011-07	PS-58	Solid	8082A
1811011-08	PS-59	Solid	8082A
1811011-09	PS-60	Solid	8082A
1811011-10	PS-61	Solid	8082A
1811011-11	PS-62	Solid	8082A
1811011-12	PS-63	Solid	8082A
1811011-13	PS-64	Solid	8082A
1811011-14	PS-65	Solid	8082A
1811011-15	PS-66	Solid	8082A
1811011-16	PS-67	Solid	8082A
1811011-17	PS-68	Solid	8082A
1811011-18	PS-69	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811011

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1811011-01 **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%)

1811011-02 **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%)

1811011-05 **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%)

1811011-12 **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%)

1811011-13 **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%)

1811011-14 **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%)

1811011-15 **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

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811011

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-52
Date Sampled: 10/30/18 08:40
Percent Solids: N/A
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.5)		8082A		50	11/06/18 11:55		CK80209
Aroclor 1221	ND (2.5)		8082A		50	11/06/18 11:55		CK80209
Aroclor 1232	ND (2.5)		8082A		50	11/06/18 11:55		CK80209
Aroclor 1242	ND (2.5)		8082A		50	11/06/18 11:55		CK80209
Aroclor 1248	ND (2.5)		8082A		50	11/06/18 11:55		CK80209
Aroclor 1254	ND (2.5)		8082A		50	11/06/18 11:55		CK80209
Aroclor 1260 [2C]	**49.8** (2.5)		8082A		50	11/06/18 11:55		CK80209
Aroclor 1262	ND (2.5)		8082A		50	11/06/18 11:55		CK80209
Aroclor 1268	ND (2.5)		8082A		50	11/06/18 11:55		CK80209

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-53
Date Sampled: 10/30/18 09:10
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		20	11/06/18 12:14		CK80209
Aroclor 1221	ND (1.0)		8082A		20	11/06/18 12:14		CK80209
Aroclor 1232	ND (1.0)		8082A		20	11/06/18 12:14		CK80209
Aroclor 1242	ND (1.0)		8082A		20	11/06/18 12:14		CK80209
Aroclor 1248	ND (1.0)		8082A		20	11/06/18 12:14		CK80209
Aroclor 1254	ND (1.0)		8082A		20	11/06/18 12:14		CK80209
Aroclor 1260 [2C]	**23.0** (1.0)		8082A		20	11/06/18 12:14		CK80209
Aroclor 1262	ND (1.0)		8082A		20	11/06/18 12:14		CK80209
Aroclor 1268	ND (1.0)		8082A		20	11/06/18 12:14		CK80209

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-54
Date Sampled: 10/30/18 09:25
Percent Solids: N/A
Initial Volume: 10.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	11/05/18 16:29		CK80209
Aroclor 1221	ND (0.05)		8082A		1	11/05/18 16:29		CK80209
Aroclor 1232	ND (0.05)		8082A		1	11/05/18 16:29		CK80209
Aroclor 1242	ND (0.05)		8082A		1	11/05/18 16:29		CK80209
Aroclor 1248	ND (0.05)		8082A		1	11/05/18 16:29		CK80209
Aroclor 1254	ND (0.05)		8082A		1	11/05/18 16:29		CK80209
Aroclor 1260 [2C]	**3.8** (0.2)		8082A		5	11/06/18 12:33		CK80209
Aroclor 1262	ND (0.05)		8082A		1	11/05/18 16:29		CK80209
Aroclor 1268	ND (0.05)		8082A		1	11/05/18 16:29		CK80209

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-55
Date Sampled: 10/30/18 09:45
Percent Solids: N/A
Initial Volume: 6.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.08)		8082A		1	11/05/18 16:48		CK80209
Aroclor 1221	ND (0.08)		8082A		1	11/05/18 16:48		CK80209
Aroclor 1232	ND (0.08)		8082A		1	11/05/18 16:48		CK80209
Aroclor 1242	ND (0.08)		8082A		1	11/05/18 16:48		CK80209
Aroclor 1248	ND (0.08)		8082A		1	11/05/18 16:48		CK80209
Aroclor 1254	ND (0.08)		8082A		1	11/05/18 16:48		CK80209
Aroclor 1260 [2C]	**8.7** (0.4)		8082A		5	11/06/18 12:52		CK80209
Aroclor 1262	ND (0.08)		8082A		1	11/05/18 16:48		CK80209
Aroclor 1268	ND (0.08)		8082A		1	11/05/18 16:48		CK80209

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-56
Date Sampled: 10/30/18 10:00
Percent Solids: N/A
Initial Volume: 8.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (6.2)		8082A		100	11/06/18 13:11		CK80209
Aroclor 1221	ND (6.2)		8082A		100	11/06/18 13:11		CK80209
Aroclor 1232	ND (6.2)		8082A		100	11/06/18 13:11		CK80209
Aroclor 1242	ND (6.2)		8082A		100	11/06/18 13:11		CK80209
Aroclor 1248	ND (6.2)		8082A		100	11/06/18 13:11		CK80209
Aroclor 1254	ND (6.2)		8082A		100	11/06/18 13:11		CK80209
Aroclor 1260	**138** (6.2)		8082A		100	11/06/18 13:11		CK80209
Aroclor 1262	ND (6.2)		8082A		100	11/06/18 13:11		CK80209
Aroclor 1268	ND (6.2)		8082A		100	11/06/18 13:11		CK80209

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-57
Date Sampled: 10/30/18 10:30
Percent Solids: N/A
Initial Volume: 5.83
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	11/05/18 17:26		CK80209
Aroclor 1221	ND (0.09)		8082A		1	11/05/18 17:26		CK80209
Aroclor 1232	ND (0.09)		8082A		1	11/05/18 17:26		CK80209
Aroclor 1242	ND (0.09)		8082A		1	11/05/18 17:26		CK80209
Aroclor 1248	ND (0.09)		8082A		1	11/05/18 17:26		CK80209
Aroclor 1254	ND (0.09)		8082A		1	11/05/18 17:26		CK80209
Aroclor 1260	**0.8** (0.09)		8082A		1	11/05/18 17:26		CK80209
Aroclor 1262	ND (0.09)		8082A		1	11/05/18 17:26		CK80209
Aroclor 1268	ND (0.09)		8082A		1	11/05/18 17:26		CK80209

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-58
Date Sampled: 10/30/18 10:50
Percent Solids: N/A
Initial Volume: 7.98
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.06)		8082A		1	11/06/18 13:30		CK80209
Aroclor 1221	ND (0.06)		8082A		1	11/06/18 13:30		CK80209
Aroclor 1232	ND (0.06)		8082A		1	11/06/18 13:30		CK80209
Aroclor 1242	ND (0.06)		8082A		1	11/06/18 13:30		CK80209
Aroclor 1248	ND (0.06)		8082A		1	11/06/18 13:30		CK80209
Aroclor 1254 [2C]	**1.2** (0.06)		8082A		1	11/06/18 13:30		CK80209
Aroclor 1260 [2C]	**1.5** (0.06)		8082A		1	11/06/18 13:30		CK80209
Aroclor 1262	ND (0.06)		8082A		1	11/06/18 13:30		CK80209
Aroclor 1268 [2C]	**0.5** (0.06)		8082A		1	11/06/18 13:30		CK80209

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*127 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*136 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-59
Date Sampled: 10/30/18 11:00
Percent Solids: N/A
Initial Volume: 2.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/05/18 18:05		CK80209
Aroclor 1221	ND (0.2)		8082A		1	11/05/18 18:05		CK80209
Aroclor 1232	ND (0.2)		8082A		1	11/05/18 18:05		CK80209
Aroclor 1242	ND (0.2)		8082A		1	11/05/18 18:05		CK80209
Aroclor 1248	ND (0.2)		8082A		1	11/05/18 18:05		CK80209
Aroclor 1254 [2C]	**0.9** (0.2)		8082A		1	11/05/18 18:05		CK80209
Aroclor 1260 [2C]	**0.7** (0.2)		8082A		1	11/05/18 18:05		CK80209
Aroclor 1262	ND (0.2)		8082A		1	11/05/18 18:05		CK80209
Aroclor 1268	ND (0.2)		8082A		1	11/05/18 18:05		CK80209

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-60
Date Sampled: 10/30/18 11:20
Percent Solids: N/A
Initial Volume: 0.52
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	11/05/18 20:18		CK80209
Aroclor 1221	ND (1.0)		8082A		1	11/05/18 20:18		CK80209
Aroclor 1232	ND (1.0)		8082A		1	11/05/18 20:18		CK80209
Aroclor 1242	ND (1.0)		8082A		1	11/05/18 20:18		CK80209
Aroclor 1248	ND (1.0)		8082A		1	11/05/18 20:18		CK80209
Aroclor 1254	ND (1.0)		8082A		1	11/05/18 20:18		CK80209
Aroclor 1260 [2C]	ND (1.0)		8082A		1	11/05/18 20:18		CK80209
Aroclor 1262	ND (1.0)		8082A		1	11/05/18 20:18		CK80209
Aroclor 1268	ND (1.0)		8082A		1	11/05/18 20:18		CK80209

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-61
Date Sampled: 10/30/18 11:45
Percent Solids: N/A
Initial Volume: 1.68
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	11/05/18 20:37		CK80209
Aroclor 1221	ND (0.3)		8082A		1	11/05/18 20:37		CK80209
Aroclor 1232	ND (0.3)		8082A		1	11/05/18 20:37		CK80209
Aroclor 1242	ND (0.3)		8082A		1	11/05/18 20:37		CK80209
Aroclor 1248	ND (0.3)		8082A		1	11/05/18 20:37		CK80209
Aroclor 1254	ND (0.3)		8082A		1	11/05/18 20:37		CK80209
Aroclor 1260	**0.4** (0.3)		8082A		1	11/05/18 20:37		CK80209
Aroclor 1262	ND (0.3)		8082A		1	11/05/18 20:37		CK80209
Aroclor 1268	ND (0.3)		8082A		1	11/05/18 20:37		CK80209

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-62
Date Sampled: 10/30/18 11:55
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-11
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	11/05/18 20:56		CK80209
Aroclor 1221	ND (0.05)		8082A		1	11/05/18 20:56		CK80209
Aroclor 1232	ND (0.05)		8082A		1	11/05/18 20:56		CK80209
Aroclor 1242	ND (0.05)		8082A		1	11/05/18 20:56		CK80209
Aroclor 1248	ND (0.05)		8082A		1	11/05/18 20:56		CK80209
Aroclor 1254	**2.0** (0.05)		8082A		1	11/05/18 20:56		CK80209
Aroclor 1260	**2.0** (0.05)		8082A		1	11/05/18 20:56		CK80209
Aroclor 1262	ND (0.05)		8082A		1	11/05/18 20:56		CK80209
Aroclor 1268	ND (0.05)		8082A		1	11/05/18 20:56		CK80209

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-63
Date Sampled: 10/30/18 12:00
Percent Solids: N/A
Initial Volume: 9.29
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-12
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.7)		8082A		50	11/06/18 13:49		CK80209
Aroclor 1221	ND (2.7)		8082A		50	11/06/18 13:49		CK80209
Aroclor 1232	ND (2.7)		8082A		50	11/06/18 13:49		CK80209
Aroclor 1242	ND (2.7)		8082A		50	11/06/18 13:49		CK80209
Aroclor 1248	ND (2.7)		8082A		50	11/06/18 13:49		CK80209
Aroclor 1254	ND (2.7)		8082A		50	11/06/18 13:49		CK80209
Aroclor 1260 [2C]	**33.3** (2.7)		8082A		50	11/06/18 13:49		CK80209
Aroclor 1262	ND (2.7)		8082A		50	11/06/18 13:49		CK80209
Aroclor 1268	ND (2.7)		8082A		50	11/06/18 13:49		CK80209

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-64
Date Sampled: 10/30/18 12:15
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-13
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		20	11/06/18 14:08		CK80209
Aroclor 1221	ND (1.0)		8082A		20	11/06/18 14:08		CK80209
Aroclor 1232	ND (1.0)		8082A		20	11/06/18 14:08		CK80209
Aroclor 1242	ND (1.0)		8082A		20	11/06/18 14:08		CK80209
Aroclor 1248	ND (1.0)		8082A		20	11/06/18 14:08		CK80209
Aroclor 1254	ND (1.0)		8082A		20	11/06/18 14:08		CK80209
Aroclor 1260 [2C]	**10.4** (1.0)		8082A		20	11/06/18 14:08		CK80209
Aroclor 1262	ND (1.0)		8082A		20	11/06/18 14:08		CK80209
Aroclor 1268	ND (1.0)		8082A		20	11/06/18 14:08		CK80209

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-65
Date Sampled: 10/30/18 12:30
Percent Solids: N/A
Initial Volume: 4.74
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-14
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.1)		8082A		20	11/06/18 14:27		CK80209
Aroclor 1221	ND (2.1)		8082A		20	11/06/18 14:27		CK80209
Aroclor 1232	ND (2.1)		8082A		20	11/06/18 14:27		CK80209
Aroclor 1242	ND (2.1)		8082A		20	11/06/18 14:27		CK80209
Aroclor 1248	ND (2.1)		8082A		20	11/06/18 14:27		CK80209
Aroclor 1254	ND (2.1)		8082A		20	11/06/18 14:27		CK80209
Aroclor 1260	**44.6** (2.1)		8082A		20	11/06/18 14:27		CK80209
Aroclor 1262	ND (2.1)		8082A		20	11/06/18 14:27		CK80209
Aroclor 1268	ND (2.1)		8082A		20	11/06/18 14:27		CK80209

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-66
Date Sampled: 10/30/18 12:45
Percent Solids: N/A
Initial Volume: 2.67
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-15
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (3.7)		8082A		20	11/06/18 14:47		CK80209
Aroclor 1221	ND (3.7)		8082A		20	11/06/18 14:47		CK80209
Aroclor 1232	ND (3.7)		8082A		20	11/06/18 14:47		CK80209
Aroclor 1242	ND (3.7)		8082A		20	11/06/18 14:47		CK80209
Aroclor 1248	ND (3.7)		8082A		20	11/06/18 14:47		CK80209
Aroclor 1254	ND (3.7)		8082A		20	11/06/18 14:47		CK80209
Aroclor 1260	**97.9** (3.7)		8082A		20	11/06/18 14:47		CK80209
Aroclor 1262	ND (3.7)		8082A		20	11/06/18 14:47		CK80209
Aroclor 1268	ND (3.7)		8082A		20	11/06/18 14:47		CK80209

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-67
Date Sampled: 10/30/18 12:55
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-16
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	11/05/18 22:32		CK80209
Aroclor 1221	ND (0.05)		8082A		1	11/05/18 22:32		CK80209
Aroclor 1232	ND (0.05)		8082A		1	11/05/18 22:32		CK80209
Aroclor 1242	ND (0.05)		8082A		1	11/05/18 22:32		CK80209
Aroclor 1248	ND (0.05)		8082A		1	11/05/18 22:32		CK80209
Aroclor 1254	ND (0.05)		8082A		1	11/05/18 22:32		CK80209
Aroclor 1260 [2C]	**10.0** (0.5)		8082A		10	11/06/18 15:06		CK80209
Aroclor 1262	ND (0.05)		8082A		1	11/05/18 22:32		CK80209
Aroclor 1268	ND (0.05)		8082A		1	11/05/18 22:32		CK80209

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*131 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-68
Date Sampled: 10/31/18 14:00
Percent Solids: N/A
Initial Volume: 1.75
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-17
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	11/05/18 22:51		CK80209
Aroclor 1221	ND (0.3)		8082A		1	11/05/18 22:51		CK80209
Aroclor 1232	ND (0.3)		8082A		1	11/05/18 22:51		CK80209
Aroclor 1242	ND (0.3)		8082A		1	11/05/18 22:51		CK80209
Aroclor 1248	ND (0.3)		8082A		1	11/05/18 22:51		CK80209
Aroclor 1254	ND (0.3)		8082A		1	11/05/18 22:51		CK80209
Aroclor 1260 [2C]	**2.6** (0.3)		8082A		1	11/05/18 22:51		CK80209
Aroclor 1262	ND (0.3)		8082A		1	11/05/18 22:51		CK80209
Aroclor 1268	ND (0.3)		8082A		1	11/05/18 22:51		CK80209

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*128 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*121 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-69
Date Sampled: 10/31/18 14:30
Percent Solids: N/A
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811011
ESS Laboratory Sample ID: 1811011-18
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 11/2/18 16:51

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.05)		8082A		1	11/05/18 23:10		CK80209
Aroclor 1221	ND (0.05)		8082A		1	11/05/18 23:10		CK80209
Aroclor 1232	ND (0.05)		8082A		1	11/05/18 23:10		CK80209
Aroclor 1242	ND (0.05)		8082A		1	11/05/18 23:10		CK80209
Aroclor 1248	ND (0.05)		8082A		1	11/05/18 23:10		CK80209
Aroclor 1254	ND (0.05)		8082A		1	11/05/18 23:10		CK80209
Aroclor 1260 [2C]	**4.9** (0.2)		8082A		5	11/06/18 15:25		CK80209
Aroclor 1262	ND (0.05)		8082A		1	11/05/18 23:10		CK80209
Aroclor 1268	ND (0.05)		8082A		1	11/05/18 23:10		CK80209

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811011

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CK80209 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS										
Aroclor 1016	0.6	0.02	mg/kg wet	0.5000		112	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		101	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		101	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		110	40-140			
Surrogate: Decachlorobiphenyl	*0.0241*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS Dup										
Aroclor 1016	0.6	0.02	mg/kg wet	0.5000		116	40-140	4	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		106	40-140	5	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		107	40-140	7	30	
Aroclor 1260 [2C]	0.6	0.02	mg/kg wet	0.5000		120	40-140	9	30	
Surrogate: Decachlorobiphenyl	*0.0262*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0267*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0234*		mg/kg wet	*0.02500*		*93*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811011

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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811011

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1811011
Date Received: 11/1/2018
Project Due Date: 11/8/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 2.6 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	285256	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	285255	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	285254	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	285253	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	285252	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	285251	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	285250	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	285249	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	285248	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	285247	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	285246	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	285245	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	285244	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	285243	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	285242	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	285241	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	285240	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	285239	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 1811011

Date Received: 11/1/2018

Completed By: _____ Date & Time: 11/1/18 1818

Reviewed By: _____ Date & Time: 11/1/18 1839

Delivered By: _____ 11/1/18 1839

ESS Laboratory
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Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1811011

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ◉MA MCP ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	MA	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		jaevazalis, mzoller, kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082	Total Lead (QC)	Total Cadmium	Total Chromium	Total Lead
1	10/30/18	8:40am	Grab	paint	PS-52	X				
2	10/30/18	9:10am	Grab	paint	PS-53	X				
3	10/30/18	9:25am	Grab	Paint	PS-54	X				
4	10/30/18	9:45am	Grab	paint	PS-55	X				
85	10/30/18	10:00am	Grab	Paint	PS-56	X				
6	10/30/18	10:30am	Grab	paint	PS-57	X		X	X	X
7	10/30/18	10:50am	Grab	Paint	PS-58	X		X	X	X
8	10/30/18	11:00am	Grab	paint	PS-59	X		X	X	X
9	10/30/18	11:20am	Grab	paint	PS-60	X	X	X	X	X
10	10/30/18	11:45am	Grab	Paint	PS-61	X		X	X	X

Container Type:	AC-Air Cassette	AG-Amber Glass	B-BOD Bottle	C-Cubitainer	G - Glass	O-Other	P-Poly	S-Sterile	V-Vial	AG	AG	AG	AG	AG
Container Volume:	1-100 mL	2-2.5 gal	3-250 mL	4-300 mL	5-500 mL	6-1L	7-VOA	8-2 oz	9-4 oz	10-8 oz	11-Other*	9	9	9	9	9
Preservation Code:	1-Non Preserved	2-HCl	3-H2SO4	4-HNO3	5-NaOH	6-Methanol	7-Na2S2O3	8-ZnAce, NaOH	9-NH4Cl	10-DI H2O	11-Other*	1	1	1	1	1
										Number of Containers per Sample:		1	1	1	1	1

Laboratory Use Only

Cooler Present: ✓

Seals Intact: ____

Cooler Temperature: 2.6 °C ICE RC

Sampled by : ACC/MJM

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
[signature]	[signature] 11/1/18 1255	[signature] 11/1/18 1555	[signature] 11/1/18 1757
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory

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Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 181011

Turn Time 5-Day **Rush**
Regulatory State Rhode Island
Is this project for any of the following?: ○CT RCP ◉MA MCP ○RGP

Reporting Limits PCBs < 0.5 mg/kg

Electonic Deliverables ☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	MA	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		jaevazalis, mzoller, kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082	Total Lead	Total Cadmium	Total Chromium
11	10/30/18	11:55am	Grab	Paint	PS-62	X			
12	"	12:00pm	Grab	Paint	PS-63	X			
13		12:15pm	Grab	Paint	PS-64	X			
14		12:30pm	Grab	Paint	PS-65	X			
15		12:45pm	Grab	Paint	PS-66	X			
16	↓	12:55pm	Grab	Paint	PS-67	X			
17	10/31/18	2:00pm	Grab	Paint	PS-68	X	X	X	X
18	10/31/18	2:30pm	Grab	Paint	PS-69	X			

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG | AG | AG | AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9 | 9 | 9 | 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1 | 1 | 1 | 1

Number of Containers per Sample: 1 | 1 | 1 | 1

Laboratory Use Only
Cooler Present: ✓
Seals Intact:
Cooler Temperature: 2.6 °C ICE RC

Sampled by : ACC/MJM

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight
if insufficient volume, analyze for PCBs first

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Anna Campell	R. Carlson 11/1/18 1255	R. Carlson 11/1/18 1555	11/1/18 1557
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1903022

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 3:53 pm, Mar 08, 2019

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903022

SAMPLE RECEIPT

The following samples were received on March 01, 2019 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1903022-01	PS-70	Solid	8082A
1903022-02	PS-71	Solid	8082A
1903022-03	PS-72	Solid	8082A
1903022-04	PS-73	Solid	8082A
1903022-05	PS-74	Solid	8082A
1903022-06	PS-75	Solid	8082A
1903022-07	PS-76	Solid	8082A
1903022-08	PS-77	Solid	8082A
1903022-09	PS-78	Solid	8082A
1903022-10	PS-79	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903022

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1903022-01 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (170% @ 30-150%), Decachlorobiphenyl [2C] (183% @ 30-150%)

1903022-02 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1903022-03 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (155% @ 30-150%), Decachlorobiphenyl [2C] (177% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903022

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
MADEP 04-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-70
Date Sampled: 02/28/19 10:02
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903022
ESS Laboratory Sample ID: 1903022-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/07/19 0:01	C9C0095	CC90409
Aroclor 1221	ND (0.1)		8082A		1	03/07/19 0:01	C9C0095	CC90409
Aroclor 1232	ND (0.1)		8082A		1	03/07/19 0:01	C9C0095	CC90409
Aroclor 1242	ND (0.1)		8082A		1	03/07/19 0:01	C9C0095	CC90409
Aroclor 1248	ND (0.1)		8082A		1	03/07/19 0:01	C9C0095	CC90409
Aroclor 1254	ND (0.1)		8082A		1	03/07/19 0:01	C9C0095	CC90409
Aroclor 1260	**31.1** (1.0)		8082A		10	03/07/19 18:28	C9C0095	CC90409
Aroclor 1262	ND (0.1)		8082A		1	03/07/19 0:01	C9C0095	CC90409
Aroclor 1268	**3.0** (0.1)		8082A		1	03/07/19 0:01	C9C0095	CC90409

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*170 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*183 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*54 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-71
Date Sampled: 02/28/19 10:08
Percent Solids: N/A
Initial Volume: 4.82
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903022
ESS Laboratory Sample ID: 1903022-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.1)		8082A		20	03/08/19 11:00	C9C0124	CC90409
Aroclor 1221	ND (2.1)		8082A		20	03/08/19 11:00	C9C0124	CC90409
Aroclor 1232	ND (2.1)		8082A		20	03/08/19 11:00	C9C0124	CC90409
Aroclor 1242	ND (2.1)		8082A		20	03/08/19 11:00	C9C0124	CC90409
Aroclor 1248	ND (2.1)		8082A		20	03/08/19 11:00	C9C0124	CC90409
Aroclor 1254	ND (2.1)		8082A		20	03/08/19 11:00	C9C0124	CC90409
Aroclor 1260	**44.1** (2.1)		8082A		20	03/08/19 11:00	C9C0124	CC90409
Aroclor 1262	ND (2.1)		8082A		20	03/08/19 11:00	C9C0124	CC90409
Aroclor 1268	**6.9** (2.1)		8082A		20	03/08/19 11:00	C9C0124	CC90409

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

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-72
Date Sampled: 02/28/19 10:18
Percent Solids: N/A
Initial Volume: 3.84
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903022
ESS Laboratory Sample ID: 1903022-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/07/19 0:39	C9C0095	CC90409
Aroclor 1221	ND (0.1)		8082A		1	03/07/19 0:39	C9C0095	CC90409
Aroclor 1232	ND (0.1)		8082A		1	03/07/19 0:39	C9C0095	CC90409
Aroclor 1242	ND (0.1)		8082A		1	03/07/19 0:39	C9C0095	CC90409
Aroclor 1248	ND (0.1)		8082A		1	03/07/19 0:39	C9C0095	CC90409
Aroclor 1254	ND (0.1)		8082A		1	03/07/19 0:39	C9C0095	CC90409
Aroclor 1260	**13.0** (1.3)		8082A		10	03/07/19 19:06	C9C0095	CC90409
Aroclor 1262	ND (0.1)		8082A		1	03/07/19 0:39	C9C0095	CC90409
Aroclor 1268	**1.3** (0.1)		8082A		1	03/07/19 0:39	C9C0095	CC90409

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*155 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*177 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*49 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-73
Date Sampled: 02/28/19 10:25
Percent Solids: N/A
Initial Volume: 1.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903022
ESS Laboratory Sample ID: 1903022-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.4)		8082A		1	03/07/19 0:58	C9C0095	CC90409
Aroclor 1221	ND (0.4)		8082A		1	03/07/19 0:58	C9C0095	CC90409
Aroclor 1232	ND (0.4)		8082A		1	03/07/19 0:58	C9C0095	CC90409
Aroclor 1242	ND (0.4)		8082A		1	03/07/19 0:58	C9C0095	CC90409
Aroclor 1248	ND (0.4)		8082A		1	03/07/19 0:58	C9C0095	CC90409
Aroclor 1254	ND (0.4)		8082A		1	03/07/19 0:58	C9C0095	CC90409
Aroclor 1260 [2C]	**30.8** (4.4)		8082A		10	03/07/19 19:25	C9C0095	CC90409
Aroclor 1262	ND (0.4)		8082A		1	03/07/19 0:58	C9C0095	CC90409
Aroclor 1268	**2.8** (0.4)		8082A		1	03/07/19 0:58	C9C0095	CC90409

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*121 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*125 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-74
Date Sampled: 02/28/19 10:30
Percent Solids: N/A
Initial Volume: 1.76
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903022
ESS Laboratory Sample ID: 1903022-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	03/07/19 1:17	C9C0095	CC90409
Aroclor 1221	ND (0.3)		8082A		1	03/07/19 1:17	C9C0095	CC90409
Aroclor 1232	ND (0.3)		8082A		1	03/07/19 1:17	C9C0095	CC90409
Aroclor 1242	ND (0.3)		8082A		1	03/07/19 1:17	C9C0095	CC90409
Aroclor 1248	ND (0.3)		8082A		1	03/07/19 1:17	C9C0095	CC90409
Aroclor 1254	ND (0.3)		8082A		1	03/07/19 1:17	C9C0095	CC90409
Aroclor 1260	**29.9** (2.8)		8082A		10	03/07/19 19:44	C9C0095	CC90409
Aroclor 1262	ND (0.3)		8082A		1	03/07/19 1:17	C9C0095	CC90409
Aroclor 1268	ND (0.3)		8082A		1	03/07/19 1:17	C9C0095	CC90409

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*46 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*38 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*41 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-75
Date Sampled: 02/28/19 10:38
Percent Solids: N/A
Initial Volume: 1.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903022
ESS Laboratory Sample ID: 1903022-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	03/07/19 1:36	C9C0095	CC90409
Aroclor 1221	ND (0.5)		8082A		1	03/07/19 1:36	C9C0095	CC90409
Aroclor 1232	ND (0.5)		8082A		1	03/07/19 1:36	C9C0095	CC90409
Aroclor 1242	ND (0.5)		8082A		1	03/07/19 1:36	C9C0095	CC90409
Aroclor 1248	ND (0.5)		8082A		1	03/07/19 1:36	C9C0095	CC90409
Aroclor 1254	ND (0.5)		8082A		1	03/07/19 1:36	C9C0095	CC90409
Aroclor 1260	**38.5** (4.8)		8082A		10	03/07/19 20:03	C9C0095	CC90409
Aroclor 1262	ND (0.5)		8082A		1	03/07/19 1:36	C9C0095	CC90409
Aroclor 1268	**5.0** (0.5)		8082A		1	03/07/19 1:36	C9C0095	CC90409

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*145 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*147 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-76
Date Sampled: 02/28/19 10:50
Percent Solids: N/A
Initial Volume: 1.98
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903022
ESS Laboratory Sample ID: 1903022-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	03/07/19 1:55	C9C0095	CC90409
Aroclor 1221	ND (0.3)		8082A		1	03/07/19 1:55	C9C0095	CC90409
Aroclor 1232	ND (0.3)		8082A		1	03/07/19 1:55	C9C0095	CC90409
Aroclor 1242	ND (0.3)		8082A		1	03/07/19 1:55	C9C0095	CC90409
Aroclor 1248	ND (0.3)		8082A		1	03/07/19 1:55	C9C0095	CC90409
Aroclor 1254	ND (0.3)		8082A		1	03/07/19 1:55	C9C0095	CC90409
Aroclor 1260	**24.6** (2.5)		8082A		10	03/07/19 20:22	C9C0095	CC90409
Aroclor 1262	ND (0.3)		8082A		1	03/07/19 1:55	C9C0095	CC90409
Aroclor 1268	**2.8** (0.3)		8082A		1	03/07/19 1:55	C9C0095	CC90409

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*111 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*115 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*50 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-77
Date Sampled: 02/28/19 11:31
Percent Solids: N/A
Initial Volume: 0.946
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903022
ESS Laboratory Sample ID: 1903022-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	03/07/19 2:14	C9C0095	CC90409
Aroclor 1221	ND (0.5)		8082A		1	03/07/19 2:14	C9C0095	CC90409
Aroclor 1232	ND (0.5)		8082A		1	03/07/19 2:14	C9C0095	CC90409
Aroclor 1242	ND (0.5)		8082A		1	03/07/19 2:14	C9C0095	CC90409
Aroclor 1248	ND (0.5)		8082A		1	03/07/19 2:14	C9C0095	CC90409
Aroclor 1254	ND (0.5)		8082A		1	03/07/19 2:14	C9C0095	CC90409
Aroclor 1260	**29.7** (5.3)		8082A		10	03/07/19 20:41	C9C0095	CC90409
Aroclor 1262	ND (0.5)		8082A		1	03/07/19 2:14	C9C0095	CC90409
Aroclor 1268	ND (0.5)		8082A		1	03/07/19 2:14	C9C0095	CC90409

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*50 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*49 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-78
Date Sampled: 02/28/19 11:49
Percent Solids: N/A
Initial Volume: 1.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903022
ESS Laboratory Sample ID: 1903022-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	03/07/19 2:33	C9C0095	CC90409
Aroclor 1221	ND (0.5)		8082A		1	03/07/19 2:33	C9C0095	CC90409
Aroclor 1232	ND (0.5)		8082A		1	03/07/19 2:33	C9C0095	CC90409
Aroclor 1242	ND (0.5)		8082A		1	03/07/19 2:33	C9C0095	CC90409
Aroclor 1248	ND (0.5)		8082A		1	03/07/19 2:33	C9C0095	CC90409
Aroclor 1254	ND (0.5)		8082A		1	03/07/19 2:33	C9C0095	CC90409
Aroclor 1260	**29.5** (5.0)		8082A		10	03/07/19 21:00	C9C0095	CC90409
Aroclor 1262	ND (0.5)		8082A		1	03/07/19 2:33	C9C0095	CC90409
Aroclor 1268	ND (0.5)		8082A		1	03/07/19 2:33	C9C0095	CC90409

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*51 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*51 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-79
Date Sampled: 02/28/19 11:51
Percent Solids: N/A
Initial Volume: 1.23
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903022
ESS Laboratory Sample ID: 1903022-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 16:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.4)		8082A		1	03/07/19 2:52	C9C0095	CC90409
Aroclor 1221	ND (0.4)		8082A		1	03/07/19 2:52	C9C0095	CC90409
Aroclor 1232	ND (0.4)		8082A		1	03/07/19 2:52	C9C0095	CC90409
Aroclor 1242	ND (0.4)		8082A		1	03/07/19 2:52	C9C0095	CC90409
Aroclor 1248	ND (0.4)		8082A		1	03/07/19 2:52	C9C0095	CC90409
Aroclor 1254	ND (0.4)		8082A		1	03/07/19 2:52	C9C0095	CC90409
Aroclor 1260 [2C]	**27.5** (4.1)		8082A		10	03/07/19 21:19	C9C0095	CC90409
Aroclor 1262	ND (0.4)		8082A		1	03/07/19 2:52	C9C0095	CC90409
Aroclor 1268	**2.6** (0.4)		8082A		1	03/07/19 2:52	C9C0095	CC90409

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*111 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*109 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*54 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903022

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC90409 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0244*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0251*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		103	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		90	40-140			
Surrogate: Decachlorobiphenyl	*0.0248*		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	*0.0246*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		97	40-140	6	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140	6	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		85	40-140	6	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		84	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903022

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903022

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1903022
Date Received: 3/1/2019
Project Due Date: 3/8/2019
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608.3 Pesticides)
01	320508	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	320507	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	320506	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	320505	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	320504	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	320503	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	320502	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	320501	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	320500	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	320499	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
All containers scanned into storage/lab Initials:
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

Completed By: Date & Time: 3/1/19 1740
Reviewed By: Date & Time: 3/1/19 1840
Delivered By: 3/1/19 1840

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 190322

Turn Time: 5-Day **Rush:**
Regulatory State: Rhode Island
Is this project for any of the following?: ☐ MA-MCP ☐ CT-RCP ☐ RGP ☐ Remediation

Reporting Limits: PCBs <0.5 ppm
Electonic Deliverables: ☐ Limit Checker ☐ Excel ☑ Other (Please Specifiy) → PDF

Company Name Coneco Engineers and Scientists	**Project #** 5675.F	**Project Name** Pawtucket 1 Cottage House, 6 Thorton Ave Pawtucket, RI	
Contact Person Mark Zoller	**Address** 4 First Street		
City Bridgewater	**State** Massachusetts	**Zip Code** 02324	**PO #** 5675.F
Telephone Number 508-245-3967	**FAX Number**	**Email Address** jaevazelis,mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by Method 8082
1	2/28/19	10:02 a.m.	Grab	paint	PS-70	X
2	2/28/19	10:08 a.m.	Grab	paint	PS-71	X
3	2/28/19	10:18 a.m.	Grab	paint	PS-72	X
4	2/28/19	10:25 a.m.	Grab	paint	PS-73	X
5	2/28/19	10:30 a.m.	Grab	paint	PS-74	X
6	2/28/19	10:38 a.m.	Grab	paint	PS-75	X
7	2/28/19	10:50 a.m.	Grab	paint	PS-76	X
8	2/28/19	11:31 a.m.	Grab	paint	PS-77	X
9	2/28/19	11:49 a.m.	Grab	paint	PS-78	X
10	2/28/19	11:51 a.m.	Grab	paint	PS-79	X

Container Type: AG-Amber Glass B-BOD Bottle G-Glass P-Poly S-Sterile V-Vial O-Other — ag
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1
Number of Containers: 10

Laboratory Use Only
Cooler Present: _____
Seals Intact: _____
Cooler Temperature: 1.4 °C ICE RC

Sampled by : KML/MJM

Comments: **Please specify "Other" preservative and containers types in this space**
National Grid Project, Use Manual Soxhlet extraction per EPA Method 3540, Report Dry weight, homogenize sample, TSCA requirements, Provide RII data package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
		Fridge 3/1/19 1300	R Carlson 3/1/19 1300
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
R Carlson 3/1/19 1550	3/1/19 1625		

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1903014

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 3:29 pm, Mar 08, 2019

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903014

SAMPLE RECEIPT

The following samples were received on March 01, 2019 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1903014-01	PS-80	Solid	8082A
1903014-02	PS-81	Solid	8082A
1903014-03	PS-82	Solid	8082A
1903014-04	PS-83	Solid	8082A
1903014-05	PS-84	Solid	8082A
1903014-06	PS-85	Solid	8082A
1903014-07	PS-86	Solid	8082A
1903014-08	PS-87	Solid	8082A
1903014-09	PS-88	Solid	8082A
1903014-10	PS-89	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903014

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1903014-01	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1268 [2C]
1903014-01	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1268 [2C]
1903014-06	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1268 [2C]
1903014-06	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (174% @ 30-150%), Decachlorobiphenyl [2C] (183% @ 30-150%)
1903014-07	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl [2C] (155% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903014

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
MADEP 04-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-80
Date Sampled: 02/28/19 11:50
Percent Solids: N/A
Initial Volume: 0.959
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903014
ESS Laboratory Sample ID: 1903014-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	03/06/19 15:51	C9C0096	CC90407
Aroclor 1221	ND (0.5)		8082A		1	03/06/19 15:51	C9C0096	CC90407
Aroclor 1232	ND (0.5)		8082A		1	03/06/19 15:51	C9C0096	CC90407
Aroclor 1242	ND (0.5)		8082A		1	03/06/19 15:51	C9C0096	CC90407
Aroclor 1248	ND (0.5)		8082A		1	03/06/19 15:51	C9C0096	CC90407
Aroclor 1254	ND (0.5)		8082A		1	03/06/19 15:51	C9C0096	CC90407
Aroclor 1260	**53.3** (5.2)		8082A		10	03/07/19 0:12	C9C0096	CC90407
Aroclor 1262	ND (0.5)		8082A		1	03/06/19 15:51	C9C0096	CC90407
Aroclor 1268 [2C]	**LC, P 3.4** (0.5)		8082A		1	03/06/19 15:51	C9C0096	CC90407

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*135 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*141 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-81
Date Sampled: 02/28/19 11:52
Percent Solids: N/A
Initial Volume: 1.98
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903014
ESS Laboratory Sample ID: 1903014-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	03/06/19 16:11	C9C0096	CC90407
Aroclor 1221	ND (0.3)		8082A		1	03/06/19 16:11	C9C0096	CC90407
Aroclor 1232	ND (0.3)		8082A		1	03/06/19 16:11	C9C0096	CC90407
Aroclor 1242	ND (0.3)		8082A		1	03/06/19 16:11	C9C0096	CC90407
Aroclor 1248	ND (0.3)		8082A		1	03/06/19 16:11	C9C0096	CC90407
Aroclor 1254	ND (0.3)		8082A		1	03/06/19 16:11	C9C0096	CC90407
Aroclor 1260	**52.7** (2.5)		8082A		10	03/07/19 0:31	C9C0096	CC90407
Aroclor 1262	ND (0.3)		8082A		1	03/06/19 16:11	C9C0096	CC90407
Aroclor 1268	ND (0.3)		8082A		1	03/06/19 16:11	C9C0096	CC90407

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-82
Date Sampled: 02/28/19 11:55
Percent Solids: N/A
Initial Volume: 1.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903014
ESS Laboratory Sample ID: 1903014-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	03/06/19 16:30	C9C0096	CC90407
Aroclor 1221	ND (0.5)		8082A		1	03/06/19 16:30	C9C0096	CC90407
Aroclor 1232	ND (0.5)		8082A		1	03/06/19 16:30	C9C0096	CC90407
Aroclor 1242	ND (0.5)		8082A		1	03/06/19 16:30	C9C0096	CC90407
Aroclor 1248	ND (0.5)		8082A		1	03/06/19 16:30	C9C0096	CC90407
Aroclor 1254	ND (0.5)		8082A		1	03/06/19 16:30	C9C0096	CC90407
Aroclor 1260	**67.3** (4.6)		8082A		10	03/07/19 0:50	C9C0096	CC90407
Aroclor 1262	ND (0.5)		8082A		1	03/06/19 16:30	C9C0096	CC90407
Aroclor 1268	ND (0.5)		8082A		1	03/06/19 16:30	C9C0096	CC90407

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*82 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-83
Date Sampled: 02/28/19 11:56
Percent Solids: N/A
Initial Volume: 5.57
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903014
ESS Laboratory Sample ID: 1903014-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	03/06/19 16:49	C9C0096	CC90407
Aroclor 1221	ND (0.09)		8082A		1	03/06/19 16:49	C9C0096	CC90407
Aroclor 1232	ND (0.09)		8082A		1	03/06/19 16:49	C9C0096	CC90407
Aroclor 1242	ND (0.09)		8082A		1	03/06/19 16:49	C9C0096	CC90407
Aroclor 1248	ND (0.09)		8082A		1	03/06/19 16:49	C9C0096	CC90407
Aroclor 1254	ND (0.09)		8082A		1	03/06/19 16:49	C9C0096	CC90407
Aroclor 1260	**20.7** (0.9)		8082A		10	03/07/19 1:09	C9C0096	CC90407
Aroclor 1262	ND (0.09)		8082A		1	03/06/19 16:49	C9C0096	CC90407
Aroclor 1268	ND (0.09)		8082A		1	03/06/19 16:49	C9C0096	CC90407

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-84
Date Sampled: 02/28/19 12:02
Percent Solids: N/A
Initial Volume: 4.25
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903014
ESS Laboratory Sample ID: 1903014-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/06/19 17:08	C9C0096	CC90407
Aroclor 1221	ND (0.1)		8082A		1	03/06/19 17:08	C9C0096	CC90407
Aroclor 1232	ND (0.1)		8082A		1	03/06/19 17:08	C9C0096	CC90407
Aroclor 1242	ND (0.1)		8082A		1	03/06/19 17:08	C9C0096	CC90407
Aroclor 1248	ND (0.1)		8082A		1	03/06/19 17:08	C9C0096	CC90407
Aroclor 1254	ND (0.1)		8082A		1	03/06/19 17:08	C9C0096	CC90407
Aroclor 1260	**25.7** (1.2)		8082A		10	03/07/19 1:28	C9C0096	CC90407
Aroclor 1262	ND (0.1)		8082A		1	03/06/19 17:08	C9C0096	CC90407
Aroclor 1268	ND (0.1)		8082A		1	03/06/19 17:08	C9C0096	CC90407

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*82 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-85
Date Sampled: 02/28/19 12:03
Percent Solids: N/A
Initial Volume: 3.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903014
ESS Laboratory Sample ID: 1903014-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	03/06/19 17:28	C9C0096	CC90407
Aroclor 1221	ND (0.2)		8082A		1	03/06/19 17:28	C9C0096	CC90407
Aroclor 1232	ND (0.2)		8082A		1	03/06/19 17:28	C9C0096	CC90407
Aroclor 1242	ND (0.2)		8082A		1	03/06/19 17:28	C9C0096	CC90407
Aroclor 1248	ND (0.2)		8082A		1	03/06/19 17:28	C9C0096	CC90407
Aroclor 1254	ND (0.2)		8082A		1	03/06/19 17:28	C9C0096	CC90407
Aroclor 1260	**20.4** (1.6)		8082A		10	03/07/19 1:48	C9C0096	CC90407
Aroclor 1262	ND (0.2)		8082A		1	03/06/19 17:28	C9C0096	CC90407
Aroclor 1268 [2C]	**LC 1.2** (0.2)		8082A		1	03/06/19 17:28	C9C0096	CC90407

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*174 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*183 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-86
Date Sampled: 02/28/19 12:05
Percent Solids: N/A
Initial Volume: 4.41
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903014
ESS Laboratory Sample ID: 1903014-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/06/19 17:47	C9C0096	CC90407
Aroclor 1221	ND (0.1)		8082A		1	03/06/19 17:47	C9C0096	CC90407
Aroclor 1232	ND (0.1)		8082A		1	03/06/19 17:47	C9C0096	CC90407
Aroclor 1242	ND (0.1)		8082A		1	03/06/19 17:47	C9C0096	CC90407
Aroclor 1248	ND (0.1)		8082A		1	03/06/19 17:47	C9C0096	CC90407
Aroclor 1254	ND (0.1)		8082A		1	03/06/19 17:47	C9C0096	CC90407
Aroclor 1260	**20.3** (1.1)		8082A		10	03/07/19 2:07	C9C0096	CC90407
Aroclor 1262	ND (0.1)		8082A		1	03/06/19 17:47	C9C0096	CC90407
Aroclor 1268	**2.0** (0.1)		8082A		1	03/06/19 17:47	C9C0096	CC90407

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*149 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*155 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-87
Date Sampled: 02/28/19 12:06
Percent Solids: N/A
Initial Volume: 4.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903014
ESS Laboratory Sample ID: 1903014-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/06/19 18:06	C9C0096	CC90407
Aroclor 1221	ND (0.1)		8082A		1	03/06/19 18:06	C9C0096	CC90407
Aroclor 1232	ND (0.1)		8082A		1	03/06/19 18:06	C9C0096	CC90407
Aroclor 1242	ND (0.1)		8082A		1	03/06/19 18:06	C9C0096	CC90407
Aroclor 1248	ND (0.1)		8082A		1	03/06/19 18:06	C9C0096	CC90407
Aroclor 1254	ND (0.1)		8082A		1	03/06/19 18:06	C9C0096	CC90407
Aroclor 1260	**27.5** (1.2)		8082A		10	03/07/19 2:26	C9C0096	CC90407
Aroclor 1262	ND (0.1)		8082A		1	03/06/19 18:06	C9C0096	CC90407
Aroclor 1268	ND (0.1)		8082A		1	03/06/19 18:06	C9C0096	CC90407

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-88
Date Sampled: 02/28/19 12:08
Percent Solids: N/A
Initial Volume: 2.94
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903014
ESS Laboratory Sample ID: 1903014-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	03/06/19 18:26	C9C0096	CC90407
Aroclor 1221	ND (0.2)		8082A		1	03/06/19 18:26	C9C0096	CC90407
Aroclor 1232	ND (0.2)		8082A		1	03/06/19 18:26	C9C0096	CC90407
Aroclor 1242	ND (0.2)		8082A		1	03/06/19 18:26	C9C0096	CC90407
Aroclor 1248	ND (0.2)		8082A		1	03/06/19 18:26	C9C0096	CC90407
Aroclor 1254	ND (0.2)		8082A		1	03/06/19 18:26	C9C0096	CC90407
Aroclor 1260	**29.1** (1.7)		8082A		10	03/07/19 2:45	C9C0096	CC90407
Aroclor 1262	ND (0.2)		8082A		1	03/06/19 18:26	C9C0096	CC90407
Aroclor 1268	ND (0.2)		8082A		1	03/06/19 18:26	C9C0096	CC90407

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-89
Date Sampled: 02/28/19 12:09
Percent Solids: N/A
Initial Volume: 2.56
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903014
ESS Laboratory Sample ID: 1903014-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	03/06/19 18:45	C9C0096	CC90407
Aroclor 1221	ND (0.2)		8082A		1	03/06/19 18:45	C9C0096	CC90407
Aroclor 1232	ND (0.2)		8082A		1	03/06/19 18:45	C9C0096	CC90407
Aroclor 1242	ND (0.2)		8082A		1	03/06/19 18:45	C9C0096	CC90407
Aroclor 1248	ND (0.2)		8082A		1	03/06/19 18:45	C9C0096	CC90407
Aroclor 1254	ND (0.2)		8082A		1	03/06/19 18:45	C9C0096	CC90407
Aroclor 1260	**20.8** (2.0)		8082A		10	03/07/19 3:05	C9C0096	CC90407
Aroclor 1262	ND (0.2)		8082A		1	03/06/19 18:45	C9C0096	CC90407
Aroclor 1268	**2.4** (0.2)		8082A		1	03/06/19 18:45	C9C0096	CC90407

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*126 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*135 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*60 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903014

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC90407 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0259*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		97	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		92	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		102	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140			
Surrogate: Decachlorobiphenyl	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		98	40-140	2	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		97	40-140	5	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		105	40-140	3	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		93	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0259*		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	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903014

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).
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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903014

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1903014
Date Received: 3/1/2019
Project Due Date: 3/8/2019
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608.3 Pesticides)
01	320444	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	320443	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	320442	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	320441	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	320440	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	320439	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	320438	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	320437	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	320436	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	320435	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
All containers scanned into storage/lab
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No
Initials:

Completed By: Date & Time: 3/1/19 1750
Reviewed By: Date & Time: 3/1/19 1838
Delivered By: 3/1/19 1838

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1903014

Turn Time: 5-Day Rush:

Regulatory State: Rhode Island

Is this project for any of the following?: ☐ MA-MCP ☐ CT-RCP ☐ RGP ☐ Remediation

Reporting Limits: PCBs <0.5 ppm

Electonic Deliverables: ☐ Limit Checker ☐ Excel ☑ Other (Please Specifiy) → PDF

Company Name: Coneco Engineers and Scientists
Project #: 5675.F
Project Name: Pawtucket Central House, 6 Thurston Ave, Pawtucket RI
Contact Person: Mark Zoller
Address: 4 First Street
City: Bridgewater
State: Massachusetts
Zip Code: 02324
PO #: 5675.F
Telephone Number: 508-245-3967
FAX Number:
Email Address: jaevazelis,mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by Method 8082
1	2/28/19	11:50am	Grab	Paint	PS-80	X
2	2/28/19	11:52am	Grab	Paint	PS-81	X
3	2/28/19	11:55am	Grab	Paint	PS-82	X
4	2/28/19	11:56am	Grab	Paint	PS-83	X
5	2/28/19	12:02pm	Grab	Paint	PS-84	X
6	2/28/19	12:03pm	Grab	Paint	PS-85	X
7	2/28/19	12:05pm	Grab	Paint	PS-86	X
8	2/28/19	12:06pm	Grab	Paint	PS-87	X
9	2/28/19	12:08pm	Grab	Paint	PS-88	X
10	2/28/19	12:09pm	Grab	Paint	PS-89	X

Container Type: AG-Amber Glass B-BOD Bottle G-Glass P-Poly S-Sterile V-Vial O-Other — ag
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1
Number of Containers:

Laboratory Use Only
Cooler Present: _____
Seals Intact: _____
Cooler Temperature: 1.4 °C ICE RC

Sampled by : KML/MJM

Comments: Please specify "Other" preservative and containers types in this space
National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, Homogenize Sample, TSCA Requirements, Provide full data package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
		Fridge 3/1/19 1300	R. Carlson 3/1/19 1300
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
R Carlson 3/1/19 1550	3/1/19 1625		

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1903015

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 1:45 pm, Mar 08, 2019

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903015

SAMPLE RECEIPT

The following samples were received on March 01, 2019 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1903015-01	PS-90	Solid	8082A
1903015-02	PS-91	Solid	8082A
1903015-03	PS-92	Solid	8082A
1903015-04	PS-93	Solid	8082A
1903015-05	PS-94	Solid	8082A
1903015-06	PS-95	Solid	8082A
1903015-07	PS-96	Solid	8082A
1903015-08	PS-97	Solid	8082A
1903015-09	PS-98	Solid	8082A
1903015-10	PS-99	Solid	8082A
1903015-11	PS-100	Solid	8082A
1903015-12	DUP-01	Solid	8082A
1903015-13	DUP-02	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903015

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1903015-01 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (198% @ 30-150%), Decachlorobiphenyl [2C] (207% @ 30-150%)

1903015-06 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (261% @ 30-150%), Decachlorobiphenyl [2C] (261% @ 30-150%)

1903015-08 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (172% @ 30-150%), Decachlorobiphenyl [2C] (177% @ 30-150%)

1903015-11 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (179% @ 30-150%), Decachlorobiphenyl [2C] (187% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

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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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903015

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
MADEP 04-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-90
Date Sampled: 02/28/19 12:10
Percent Solids: N/A
Initial Volume: 3.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903015
ESS Laboratory Sample ID: 1903015-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	03/07/19 9:53	C9C0095	CC90408
Aroclor 1221	ND (0.2)		8082A		1	03/07/19 9:53	C9C0095	CC90408
Aroclor 1232	ND (0.2)		8082A		1	03/07/19 9:53	C9C0095	CC90408
Aroclor 1242	ND (0.2)		8082A		1	03/07/19 9:53	C9C0095	CC90408
Aroclor 1248	ND (0.2)		8082A		1	03/07/19 9:53	C9C0095	CC90408
Aroclor 1254	ND (0.2)		8082A		1	03/07/19 9:53	C9C0095	CC90408
Aroclor 1260	**20.2** (1.6)		8082A		10	03/06/19 16:03	C9C0095	CC90408
Aroclor 1262	ND (0.2)		8082A		1	03/07/19 9:53	C9C0095	CC90408
Aroclor 1268	**2.3** (0.2)		8082A		1	03/07/19 9:53	C9C0095	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*198 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*207 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*59 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-91
Date Sampled: 02/28/19 12:18
Percent Solids: N/A
Initial Volume: 1.23
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903015
ESS Laboratory Sample ID: 1903015-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.4)		8082A		1	03/05/19 16:45	C9C0059	CC90408
Aroclor 1221	ND (0.4)		8082A		1	03/05/19 16:45	C9C0059	CC90408
Aroclor 1232	ND (0.4)		8082A		1	03/05/19 16:45	C9C0059	CC90408
Aroclor 1242	ND (0.4)		8082A		1	03/05/19 16:45	C9C0059	CC90408
Aroclor 1248	ND (0.4)		8082A		1	03/05/19 16:45	C9C0059	CC90408
Aroclor 1254	ND (0.4)		8082A		1	03/05/19 16:45	C9C0059	CC90408
Aroclor 1260	**12.3** (0.4)		8082A		1	03/05/19 16:45	C9C0059	CC90408
Aroclor 1262	ND (0.4)		8082A		1	03/05/19 16:45	C9C0059	CC90408
Aroclor 1268	ND (0.4)		8082A		1	03/05/19 16:45	C9C0059	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-92
Date Sampled: 02/28/19 12:34
Percent Solids: N/A
Initial Volume: 1.36
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903015
ESS Laboratory Sample ID: 1903015-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.4)		8082A		1	03/05/19 17:04	C9C0059	CC90408
Aroclor 1221	ND (0.4)		8082A		1	03/05/19 17:04	C9C0059	CC90408
Aroclor 1232	ND (0.4)		8082A		1	03/05/19 17:04	C9C0059	CC90408
Aroclor 1242	ND (0.4)		8082A		1	03/05/19 17:04	C9C0059	CC90408
Aroclor 1248	ND (0.4)		8082A		1	03/05/19 17:04	C9C0059	CC90408
Aroclor 1254	ND (0.4)		8082A		1	03/05/19 17:04	C9C0059	CC90408
Aroclor 1260	**9.8** (0.4)		8082A		1	03/05/19 17:04	C9C0059	CC90408
Aroclor 1262	ND (0.4)		8082A		1	03/05/19 17:04	C9C0059	CC90408
Aroclor 1268	ND (0.4)		8082A		1	03/05/19 17:04	C9C0059	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-93
Date Sampled: 02/28/19 12:48
Percent Solids: N/A
Initial Volume: 1.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903015
ESS Laboratory Sample ID: 1903015-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.4)		8082A		1	03/05/19 17:23	C9C0059	CC90408
Aroclor 1221	ND (0.4)		8082A		1	03/05/19 17:23	C9C0059	CC90408
Aroclor 1232	ND (0.4)		8082A		1	03/05/19 17:23	C9C0059	CC90408
Aroclor 1242	ND (0.4)		8082A		1	03/05/19 17:23	C9C0059	CC90408
Aroclor 1248	ND (0.4)		8082A		1	03/05/19 17:23	C9C0059	CC90408
Aroclor 1254	ND (0.4)		8082A		1	03/05/19 17:23	C9C0059	CC90408
Aroclor 1260	**7.5** (0.4)		8082A		1	03/05/19 17:23	C9C0059	CC90408
Aroclor 1262	ND (0.4)		8082A		1	03/05/19 17:23	C9C0059	CC90408
Aroclor 1268	ND (0.4)		8082A		1	03/05/19 17:23	C9C0059	CC90408

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*120 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*126 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-94
Date Sampled: 02/28/19 13:02
Percent Solids: N/A
Initial Volume: 1.21
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903015
ESS Laboratory Sample ID: 1903015-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.4)		8082A		1	03/06/19 16:22	C9C0095	CC90408
Aroclor 1221	ND (0.4)		8082A		1	03/06/19 16:22	C9C0095	CC90408
Aroclor 1232	ND (0.4)		8082A		1	03/06/19 16:22	C9C0095	CC90408
Aroclor 1242	ND (0.4)		8082A		1	03/06/19 16:22	C9C0095	CC90408
Aroclor 1248	ND (0.4)		8082A		1	03/06/19 16:22	C9C0095	CC90408
Aroclor 1254	ND (0.4)		8082A		1	03/06/19 16:22	C9C0095	CC90408
Aroclor 1260	**9.3** (0.4)		8082A		1	03/06/19 16:22	C9C0095	CC90408
Aroclor 1262	ND (0.4)		8082A		1	03/06/19 16:22	C9C0095	CC90408
Aroclor 1268	**1.3** (0.4)		8082A		1	03/06/19 16:22	C9C0095	CC90408

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*149 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*152 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-95
Date Sampled: 02/28/19 13:12
Percent Solids: N/A
Initial Volume: 5.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903015
ESS Laboratory Sample ID: 1903015-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/07/19 10:12	C9C0095	CC90408
Aroclor 1221	ND (0.1)		8082A		1	03/07/19 10:12	C9C0095	CC90408
Aroclor 1232	ND (0.1)		8082A		1	03/07/19 10:12	C9C0095	CC90408
Aroclor 1242	ND (0.1)		8082A		1	03/07/19 10:12	C9C0095	CC90408
Aroclor 1248	ND (0.1)		8082A		1	03/07/19 10:12	C9C0095	CC90408
Aroclor 1254	ND (0.1)		8082A		1	03/07/19 10:12	C9C0095	CC90408
Aroclor 1260 [2C]	**8.3** (1.0)		8082A		10	03/06/19 16:41	C9C0095	CC90408
Aroclor 1262	ND (0.1)		8082A		1	03/07/19 10:12	C9C0095	CC90408
Aroclor 1268	**0.9** (0.1)		8082A		1	03/07/19 10:12	C9C0095	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*261 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*261 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-96
Date Sampled: 02/28/19 13:20
Percent Solids: N/A
Initial Volume: 5.24
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903015
ESS Laboratory Sample ID: 1903015-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/05/19 18:20	C9C0059	CC90408
Aroclor 1221	ND (0.1)		8082A		1	03/05/19 18:20	C9C0059	CC90408
Aroclor 1232	ND (0.1)		8082A		1	03/05/19 18:20	C9C0059	CC90408
Aroclor 1242	ND (0.1)		8082A		1	03/05/19 18:20	C9C0059	CC90408
Aroclor 1248	ND (0.1)		8082A		1	03/05/19 18:20	C9C0059	CC90408
Aroclor 1254	ND (0.1)		8082A		1	03/05/19 18:20	C9C0059	CC90408
Aroclor 1260 [2C]	**6.7** (1.0)		8082A		10	03/06/19 17:00	C9C0059	CC90408
Aroclor 1262	ND (0.1)		8082A		1	03/05/19 18:20	C9C0059	CC90408
Aroclor 1268	ND (0.1)		8082A		1	03/05/19 18:20	C9C0059	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-97
Date Sampled: 02/28/19 13:22
Percent Solids: N/A
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903015
ESS Laboratory Sample ID: 1903015-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	03/07/19 10:31	C9C0095	CC90408
Aroclor 1221	ND (0.1)		8082A		1	03/07/19 10:31	C9C0095	CC90408
Aroclor 1232	ND (0.1)		8082A		1	03/07/19 10:31	C9C0095	CC90408
Aroclor 1242	ND (0.1)		8082A		1	03/07/19 10:31	C9C0095	CC90408
Aroclor 1248	ND (0.1)		8082A		1	03/07/19 10:31	C9C0095	CC90408
Aroclor 1254	ND (0.1)		8082A		1	03/07/19 10:31	C9C0095	CC90408
Aroclor 1260 [2C]	**9.0** (1.0)		8082A		10	03/06/19 17:19	C9C0095	CC90408
Aroclor 1262	ND (0.1)		8082A		1	03/07/19 10:31	C9C0095	CC90408
Aroclor 1268	**0.7** (0.1)		8082A		1	03/07/19 10:31	C9C0095	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*172 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*177 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-98
Date Sampled: 02/28/19 13:30
Percent Solids: N/A
Initial Volume: 5.36
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903015
ESS Laboratory Sample ID: 1903015-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	03/05/19 18:59	C9C0059	CC90408
Aroclor 1221	ND (0.09)		8082A		1	03/05/19 18:59	C9C0059	CC90408
Aroclor 1232	ND (0.09)		8082A		1	03/05/19 18:59	C9C0059	CC90408
Aroclor 1242	ND (0.09)		8082A		1	03/05/19 18:59	C9C0059	CC90408
Aroclor 1248	ND (0.09)		8082A		1	03/05/19 18:59	C9C0059	CC90408
Aroclor 1254	ND (0.09)		8082A		1	03/05/19 18:59	C9C0059	CC90408
Aroclor 1260	**7.3** (0.9)		8082A		10	03/06/19 17:38	C9C0059	CC90408
Aroclor 1262	ND (0.09)		8082A		1	03/05/19 18:59	C9C0059	CC90408
Aroclor 1268	ND (0.09)		8082A		1	03/05/19 18:59	C9C0059	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*53 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*57 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-99
Date Sampled: 02/28/19 13:32
Percent Solids: N/A
Initial Volume: 0.456
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903015
ESS Laboratory Sample ID: 1903015-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.1)		8082A		1	03/05/19 19:18	C9C0059	CC90408
Aroclor 1221	ND (1.1)		8082A		1	03/05/19 19:18	C9C0059	CC90408
Aroclor 1232	ND (1.1)		8082A		1	03/05/19 19:18	C9C0059	CC90408
Aroclor 1242	ND (1.1)		8082A		1	03/05/19 19:18	C9C0059	CC90408
Aroclor 1248	ND (1.1)		8082A		1	03/05/19 19:18	C9C0059	CC90408
Aroclor 1254	ND (1.1)		8082A		1	03/05/19 19:18	C9C0059	CC90408
Aroclor 1260	**12.7** (1.1)		8082A		1	03/05/19 19:18	C9C0059	CC90408
Aroclor 1262	ND (1.1)		8082A		1	03/05/19 19:18	C9C0059	CC90408
Aroclor 1268	ND (1.1)		8082A		1	03/05/19 19:18	C9C0059	CC90408

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-100
Date Sampled: 02/28/19 13:40
Percent Solids: N/A
Initial Volume: 1.63
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903015
ESS Laboratory Sample ID: 1903015-11
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	03/07/19 10:50	C9C0095	CC90408
Aroclor 1221	ND (0.3)		8082A		1	03/07/19 10:50	C9C0095	CC90408
Aroclor 1232	ND (0.3)		8082A		1	03/07/19 10:50	C9C0095	CC90408
Aroclor 1242	ND (0.3)		8082A		1	03/07/19 10:50	C9C0095	CC90408
Aroclor 1248	ND (0.3)		8082A		1	03/07/19 10:50	C9C0095	CC90408
Aroclor 1254	ND (0.3)		8082A		1	03/07/19 10:50	C9C0095	CC90408
Aroclor 1260	**26.5** (3.1)		8082A		10	03/06/19 17:57	C9C0095	CC90408
Aroclor 1262	ND (0.3)		8082A		1	03/07/19 10:50	C9C0095	CC90408
Aroclor 1268	**2.9** (0.3)		8082A		1	03/07/19 10:50	C9C0095	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*179 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*187 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-01
Date Sampled: 02/28/19 13:45
Percent Solids: N/A
Initial Volume: 2.56
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903015
ESS Laboratory Sample ID: 1903015-12
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	03/07/19 11:09	C9C0095	CC90408
Aroclor 1221	ND (0.2)		8082A		1	03/07/19 11:09	C9C0095	CC90408
Aroclor 1232	ND (0.2)		8082A		1	03/07/19 11:09	C9C0095	CC90408
Aroclor 1242	ND (0.2)		8082A		1	03/07/19 11:09	C9C0095	CC90408
Aroclor 1248	ND (0.2)		8082A		1	03/07/19 11:09	C9C0095	CC90408
Aroclor 1254	ND (0.2)		8082A		1	03/07/19 11:09	C9C0095	CC90408
Aroclor 1260	**52.9** (2.0)		8082A		10	03/06/19 18:17	C9C0095	CC90408
Aroclor 1262	ND (0.2)		8082A		1	03/07/19 11:09	C9C0095	CC90408
Aroclor 1268	**6.4** (0.2)		8082A		1	03/07/19 11:09	C9C0095	CC90408

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*124 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*133 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-02
Date Sampled: 02/28/19 14:00
Percent Solids: N/A
Initial Volume: 1.86
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1903015
ESS Laboratory Sample ID: 1903015-13
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 3/4/19 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	03/05/19 20:15	C9C0059	CC90408
Aroclor 1221	ND (0.3)		8082A		1	03/05/19 20:15	C9C0059	CC90408
Aroclor 1232	ND (0.3)		8082A		1	03/05/19 20:15	C9C0059	CC90408
Aroclor 1242	ND (0.3)		8082A		1	03/05/19 20:15	C9C0059	CC90408
Aroclor 1248	ND (0.3)		8082A		1	03/05/19 20:15	C9C0059	CC90408
Aroclor 1254	ND (0.3)		8082A		1	03/05/19 20:15	C9C0059	CC90408
Aroclor 1260	**19.8** (2.7)		8082A		10	03/06/19 18:36	C9C0059	CC90408
Aroclor 1262	ND (0.3)		8082A		1	03/05/19 20:15	C9C0059	CC90408
Aroclor 1268	ND (0.3)		8082A		1	03/05/19 20:15	C9C0059	CC90408

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903015

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CC90408 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0242*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0246*		mg/kg wet	*0.02500*		*98*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		96	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		87	40-140			
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		84	40-140			
Surrogate: Decachlorobiphenyl	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0221*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0216*		mg/kg wet	*0.02500*		*87*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		99	40-140	3	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140	2	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		88	40-140	3	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		87	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903015

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1903015

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1903015
Date Received: 3/1/2019
Project Due Date: 3/8/2019
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608.3 Pesticides)
01	320457	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	320456	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	320455	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	320454	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	320453	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	320452	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	320451	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	320450	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	320449	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	320448	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	320447	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	320446	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	320445	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
All containers scanned into storage/lab
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No
Initials:

Completed By:
Date & Time: 3/1/19 1745
Reviewed By:
Date & Time: 3/1/19 1857

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 1903015

Date Received: 3/1/2019

Delivered By: _____ 3/1/19 1837

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1903015

Turn Time: 5-Day Rush:
Regulatory State: Rhode Island
Is this project for any of the following?: ☐ MA-MCP ☐ CT-RCP ☐ RGP ☐ Remediation

Reporting Limits: PCBs <0.5 ppm
Electonic Deliverables: ☐ Limit Checker ☐ Excel ☑ Other (Please Specifiy) → PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket1 Control House, 6 The Front Ave, Pawtucket RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	Massachusetts	02324	5675.F

Telephone Number	FAX Number	Email Address
508-245-3967		jaevazelis,mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by Method 8082
1	2/28/19	12:10pm	Grab	Paint	PS-90	X
2	2/28/19	12:18 pm	Grab	Paint	PS-91	X
3	2/28/19	12:34pm	Grab	Paint	PS-92	X
4	2/28/19	12:48pm	Grab	Paint	PS-93	X
5	2/28/19	1:02pm	Grab	Paint	PS-94	X
6	2/28/19	1:12 pm	Grab	Paint	PS-95	X
7	2/28/19	1:20 pm	Grab	Paint	PS-96	X
8	2/28/19	1:22pm	Grab	Paint	PS-97	X
9	2/28/19	1:30pm	Grab	Paint	PS-98	X
10	2/28/19	1:32pm	Grab	Paint	PS-99	X

Container Type: AG-Amber Glass B-BOD Bottle G-Glass P-Poly S-Sterile V-Vial O-Other — ag

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Number of Containers:

Laboratory Use Only
Cooler Present: _____
Seals Intact: _____
Cooler Temperature: 1.4 °C ICE RC

Sampled by : KML/MJM

Comments: Please specify "Other" preservative and containers types in this space
National Grid Project, Use Normal Soxhlet Extraction per EPA Method 3540, Report Dry Weight, Homogenize Sample, TSCA Requirements, Provide Full data package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
		Fridge 3/1/19 1300	RCarlson 3/1/19 1300
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
RCarlson 3/1/19 1550	3/1/19 1625		

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1903015

Turn Time: 5-Day **Rush:**
Regulatory State: Rhode Island
Is this project for any of the following?: ☐ MA-MCP ☐ CT-RCP ☐ RGP ☐ Remediation

Reporting Limits: PCBs <0.5 ppm

Electonic Deliverables: ☐ Limit Checker ☐ Excel ☑ Other (Please Specifiy) → PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket Locomotive, 6 Thorpe Ave, Pawtucket RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	Massachusetts	02324	5675.F

Telephone Number	FAX Number	Email Address
508-245-3967		jaevazelis,mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by Method 8082
11	2/28/19	11:40 pm	Grab	Paint	PS-100	X
12	2/28/19	1:45 pm	Grab	Paint	Dup-01	X
13	2/28/19	2:00 pm	Grab	Paint	Dup-02	X
	2/28/19	"	Grab "			X 4
	2/28/19		Grab			X
	2/28/19		Grab			X
	2/28/19		Grab			X
	2/28/19		Grab			X
	2/28/19		Grab			X
	2/28/19		Grab			X
	2/28/19		Grab			X

Container Type: AG-Amber Glass B-BOD Bottle G-Glass P-Poly S-Sterile V-Vial O-Other — ag

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Number of Containers:

Laboratory Use Only
Cooler Present: _____
Seals Intact: _____
Cooler Temperature: 1.4 °C ICE RC

Sampled by : KML/MJM

Comments: Please specify "Other" preservative and containers types in this space
National Grid Project, use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, Homogenize Sample, TSCA Requirements, Provide full datapackage

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
		Fridge 3/1/19 1300	R. Carlson 3/1/19 1300
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
R. Carlson 3/1/19 1550	3/1/19 1625		

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 19J0014

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 4:39 pm, Oct 08, 2019

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0014

SAMPLE RECEIPT

The following samples were received on October 01, 2019 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
19J0014-01	PS-101	Soil	8082A
19J0014-02	PS-102	Soil	8082A
19J0014-03	PS-103	Soil	8082A
19J0014-04	PS-104	Soil	8082A
19J0014-05	PS-105	Soil	8082A
19J0014-06	PS-106	Soil	8082A
19J0014-07	PS-107	Soil	8082A
19J0014-08	PS-108	Soil	8082A
19J0014-09	PS-109	Soil	8082A
19J0014-10	PS-110	Soil	8082A
19J0014-11	PS-111	Soil	8082A
19J0014-12	PS-112	Soil	8082A
19J0014-13	PS-113	Soil	8082A
19J0014-14	PS-114	Soil	8082A
19J0014-15	PS-115	Soil	8082A
19J0014-16	PS-116	Soil	8082A
19J0014-17	PS-117	Soil	8082A
19J0014-18	PS-118	Soil	8082A
19J0014-19	DUP-03	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0014

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

19J0014-03	**Surrogate recovery(ies) above upper control limit (S+).**
	Decachlorobiphenyl (170% @ 30-150%), Decachlorobiphenyl [2C] (178% @ 30-150%)
19J0014-07	**Surrogate recovery(ies) above upper control limit (S+).**
	Decachlorobiphenyl (157% @ 30-150%), Decachlorobiphenyl [2C] (171% @ 30-150%)
19J0014-08	**Surrogate recovery(ies) above upper control limit (S+).**
	Decachlorobiphenyl (181% @ 30-150%), Decachlorobiphenyl [2C] (194% @ 30-150%)
19J0014-13	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (345% @ 30-150%), Decachlorobiphenyl [2C] (351% @ 30-150%)
19J0014-15	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1268 [2C]
19J0014-15	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1268 [2C]
19J0014-15	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (942% @ 30-150%), Decachlorobiphenyl [2C] (975% @ 30-150%)
19J0014-19	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (969% @ 30-150%), Decachlorobiphenyl [2C] (977% @ 30-150%)
CJ90205-MS2	**Matrix Spike recovery is below lower control limit (M-).**
	Aroclor 1260 (-9% @ 40-140%), Aroclor 1260 [2C] (-2% @ 40-140%)
CJ90206-MS1	**Reported above the quantitation limit; Estimated value (E).**
	Aroclor 1260 [2C]
CJ90206-MS1	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (847% @ 30-150%), Decachlorobiphenyl [2C] (860% @ 30-150%)
CJ90206-MSD1	**Reported above the quantitation limit; Estimated value (E).**
	Aroclor 1260 , Aroclor 1260 [2C]
CJ90206-MSD1	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (783% @ 30-150%), Decachlorobiphenyl [2C] (772% @ 30-150%)

No other observations noted.

End of Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0014

DATA USABILITY LINKS

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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

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-101
Date Sampled: 09/26/19 09:30
Percent Solids: N/A
Initial Volume: 4.28
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-01
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 18:50	C9J0155	CJ90205
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 18:50	C9J0155	CJ90205
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 18:50	C9J0155	CJ90205
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 18:50	C9J0155	CJ90205
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 18:50	C9J0155	CJ90205
Aroclor 1254	ND (0.1)		8082A		1	10/03/19 18:50	C9J0155	CJ90205
Aroclor 1260	**35.2** (1.2)		8082A		10	10/07/19 14:37	C9J0155	CJ90205
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 18:50	C9J0155	CJ90205
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 18:50	C9J0155	CJ90205

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-102
Date Sampled: 09/26/19 09:45
Percent Solids: N/A
Initial Volume: 3.36
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-02
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 19:09	C9J0155	CJ90205
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 19:09	C9J0155	CJ90205
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 19:09	C9J0155	CJ90205
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 19:09	C9J0155	CJ90205
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 19:09	C9J0155	CJ90205
Aroclor 1254	ND (0.1)		8082A		1	10/03/19 19:09	C9J0155	CJ90205
Aroclor 1260	**39.2** (1.5)		8082A		10	10/07/19 14:54	C9J0155	CJ90205
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 19:09	C9J0155	CJ90205
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 19:09	C9J0155	CJ90205

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*102 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-103
Date Sampled: 09/26/19 09:55
Percent Solids: N/A
Initial Volume: 3.54
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-03
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 19:28	C9J0155	CJ90205
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 19:28	C9J0155	CJ90205
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 19:28	C9J0155	CJ90205
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 19:28	C9J0155	CJ90205
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 19:28	C9J0155	CJ90205
Aroclor 1254	ND (0.1)		8082A		1	10/03/19 19:28	C9J0155	CJ90205
Aroclor 1260	**31.6** (1.4)		8082A		10	10/07/19 15:13	C9J0155	CJ90205
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 19:28	C9J0155	CJ90205
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 19:28	C9J0155	CJ90205

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*170 %*	*S+*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*178 %*	*S+*	*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-104
Date Sampled: 09/26/19 10:30
Percent Solids: N/A
Initial Volume: 1.46
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-04
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	10/03/19 21:42	C9J0155	CJ90205
Aroclor 1221	ND (0.3)		8082A		1	10/03/19 21:42	C9J0155	CJ90205
Aroclor 1232	ND (0.3)		8082A		1	10/03/19 21:42	C9J0155	CJ90205
Aroclor 1242	ND (0.3)		8082A		1	10/03/19 21:42	C9J0155	CJ90205
Aroclor 1248	ND (0.3)		8082A		1	10/03/19 21:42	C9J0155	CJ90205
Aroclor 1254	ND (0.3)		8082A		1	10/03/19 21:42	C9J0155	CJ90205
Aroclor 1260	**64.2** (3.4)		8082A		10	10/07/19 15:32	C9J0155	CJ90205
Aroclor 1262	ND (0.3)		8082A		1	10/03/19 21:42	C9J0155	CJ90205
Aroclor 1268	ND (0.3)		8082A		1	10/03/19 21:42	C9J0155	CJ90205

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*128 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*136 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-105
Date Sampled: 09/26/19 11:15
Percent Solids: N/A
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-05
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 22:01	C9J0155	CJ90205
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 22:01	C9J0155	CJ90205
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 22:01	C9J0155	CJ90205
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 22:01	C9J0155	CJ90205
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 22:01	C9J0155	CJ90205
Aroclor 1254	ND (0.1)		8082A		1	10/03/19 22:01	C9J0155	CJ90205
Aroclor 1260	**13.2** (0.5)		8082A		5	10/07/19 15:52	C9J0155	CJ90205
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 22:01	C9J0155	CJ90205
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 22:01	C9J0155	CJ90205

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-106
Date Sampled: 09/26/19 11:35
Percent Solids: N/A
Initial Volume: 2.68
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-06
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	10/03/19 22:20	C9J0155	CJ90205
Aroclor 1221	ND (0.2)		8082A		1	10/03/19 22:20	C9J0155	CJ90205
Aroclor 1232	ND (0.2)		8082A		1	10/03/19 22:20	C9J0155	CJ90205
Aroclor 1242	ND (0.2)		8082A		1	10/03/19 22:20	C9J0155	CJ90205
Aroclor 1248	ND (0.2)		8082A		1	10/03/19 22:20	C9J0155	CJ90205
Aroclor 1254	ND (0.2)		8082A		1	10/03/19 22:20	C9J0155	CJ90205
Aroclor 1260	**21.2** (0.9)		8082A		5	10/07/19 16:11	C9J0155	CJ90205
Aroclor 1262	ND (0.2)		8082A		1	10/03/19 22:20	C9J0155	CJ90205
Aroclor 1268	ND (0.2)		8082A		1	10/03/19 22:20	C9J0155	CJ90205

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-107
Date Sampled: 09/26/19 11:50
Percent Solids: N/A
Initial Volume: 3.55
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-07
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 23:17	C9J0155	CJ90205
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 23:17	C9J0155	CJ90205
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 23:17	C9J0155	CJ90205
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 23:17	C9J0155	CJ90205
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 23:17	C9J0155	CJ90205
Aroclor 1254	ND (0.1)		8082A		1	10/03/19 23:17	C9J0155	CJ90205
Aroclor 1260	**24.7** (0.7)		8082A		5	10/07/19 17:08	C9J0155	CJ90205
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 23:17	C9J0155	CJ90205
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 23:17	C9J0155	CJ90205

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*157 %*	*S+*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*171 %*	*S+*	*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-108
Date Sampled: 09/26/19 12:00
Percent Solids: N/A
Initial Volume: 4.21
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-08
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 23:36	C9J0155	CJ90205
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 23:36	C9J0155	CJ90205
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 23:36	C9J0155	CJ90205
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 23:36	C9J0155	CJ90205
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 23:36	C9J0155	CJ90205
Aroclor 1254	ND (0.1)		8082A		1	10/03/19 23:36	C9J0155	CJ90205
Aroclor 1260	**21.6** (0.6)		8082A		5	10/07/19 17:28	C9J0155	CJ90205
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 23:36	C9J0155	CJ90205
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 23:36	C9J0155	CJ90205

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*181 %*	*S+*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*194 %*	*S+*	*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-109
Date Sampled: 09/26/19 12:40
Percent Solids: N/A
Initial Volume: 5.44
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-09
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 16:40	C9J0067	CJ90206
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 16:40	C9J0067	CJ90206
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 16:40	C9J0067	CJ90206
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 16:40	C9J0067	CJ90206
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 16:40	C9J0067	CJ90206
Aroclor 1254 [2C]	**3.0** (0.09)		8082A		1	10/03/19 16:40	C9J0067	CJ90206
Aroclor 1260 [2C]	**2.5** (0.09)		8082A		1	10/03/19 16:40	C9J0067	CJ90206
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 16:40	C9J0067	CJ90206
Aroclor 1268	ND (0.09)		8082A		1	10/03/19 16:40	C9J0067	CJ90206

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

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-110
Date Sampled: 09/26/19 12:45
Percent Solids: N/A
Initial Volume: 5.56
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-10
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 17:00	C9J0067	CJ90206
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 17:00	C9J0067	CJ90206
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 17:00	C9J0067	CJ90206
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 17:00	C9J0067	CJ90206
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 17:00	C9J0067	CJ90206
Aroclor 1254 [2C]	**1.9** (0.09)		8082A		1	10/03/19 17:00	C9J0067	CJ90206
Aroclor 1260 [2C]	**2.5** (0.09)		8082A		1	10/03/19 17:00	C9J0067	CJ90206
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 17:00	C9J0067	CJ90206
Aroclor 1268	ND (0.09)		8082A		1	10/03/19 17:00	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*63 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-111
Date Sampled: 09/26/19 12:50
Percent Solids: N/A
Initial Volume: 5.21
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-11
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 17:19	C9J0067	CJ90206
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 17:19	C9J0067	CJ90206
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 17:19	C9J0067	CJ90206
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 17:19	C9J0067	CJ90206
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 17:19	C9J0067	CJ90206
Aroclor 1254 [2C]	**2.4** (0.1)		8082A		1	10/03/19 17:19	C9J0067	CJ90206
Aroclor 1260 [2C]	**2.5** (0.1)		8082A		1	10/03/19 17:19	C9J0067	CJ90206
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 17:19	C9J0067	CJ90206
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 17:19	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*73 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*106 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-112
Date Sampled: 09/26/19 13:30
Percent Solids: N/A
Initial Volume: 1.46
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-12
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	10/03/19 17:38	C9J0067	CJ90206
Aroclor 1221	ND (0.3)		8082A		1	10/03/19 17:38	C9J0067	CJ90206
Aroclor 1232	ND (0.3)		8082A		1	10/03/19 17:38	C9J0067	CJ90206
Aroclor 1242	ND (0.3)		8082A		1	10/03/19 17:38	C9J0067	CJ90206
Aroclor 1248	ND (0.3)		8082A		1	10/03/19 17:38	C9J0067	CJ90206
Aroclor 1254 [2C]	**3.2** (0.3)		8082A		1	10/03/19 17:38	C9J0067	CJ90206
Aroclor 1260 [2C]	**4.0** (0.3)		8082A		1	10/03/19 17:38	C9J0067	CJ90206
Aroclor 1262	ND (0.3)		8082A		1	10/03/19 17:38	C9J0067	CJ90206
Aroclor 1268	ND (0.3)		8082A		1	10/03/19 17:38	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-113
Date Sampled: 09/27/19 10:00
Percent Solids: N/A
Initial Volume: 5.56
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-13
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 17:58	C9J0067	CJ90206
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 17:58	C9J0067	CJ90206
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 17:58	C9J0067	CJ90206
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 17:58	C9J0067	CJ90206
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 17:58	C9J0067	CJ90206
Aroclor 1254 [2C]	**2.7** (0.09)		8082A		1	10/03/19 17:58	C9J0067	CJ90206
Aroclor 1260 [2C]	**2.1** (0.09)		8082A		1	10/03/19 17:58	C9J0067	CJ90206
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 17:58	C9J0067	CJ90206
Aroclor 1268 [2C]	**0.3** (0.09)		8082A		1	10/03/19 17:58	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*345 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*351 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-114
Date Sampled: 09/27/19 10:05
Percent Solids: N/A
Initial Volume: 5.32
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-14
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 18:17	C9J0067	CJ90206
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 18:17	C9J0067	CJ90206
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 18:17	C9J0067	CJ90206
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 18:17	C9J0067	CJ90206
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 18:17	C9J0067	CJ90206
Aroclor 1254 [2C]	**3.4** (0.09)		8082A		1	10/03/19 18:17	C9J0067	CJ90206
Aroclor 1260 [2C]	**2.4** (0.09)		8082A		1	10/03/19 18:17	C9J0067	CJ90206
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 18:17	C9J0067	CJ90206
Aroclor 1268	ND (0.09)		8082A		1	10/03/19 18:17	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*49 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*46 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-115
Date Sampled: 09/27/19 10:10
Percent Solids: N/A
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-15
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 18:36	C9J0067	CJ90206
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 18:36	C9J0067	CJ90206
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 18:36	C9J0067	CJ90206
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 18:36	C9J0067	CJ90206
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 18:36	C9J0067	CJ90206
Aroclor 1254 [2C]	**2.2** (0.1)		8082A		1	10/03/19 18:36	C9J0067	CJ90206
Aroclor 1260 [2C]	**1.8** (0.1)		8082A		1	10/03/19 18:36	C9J0067	CJ90206
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 18:36	C9J0067	CJ90206
Aroclor 1268 [2C]	**P, LC 0.2** (0.1)		8082A		1	10/03/19 18:36	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*942 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*975 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-116
Date Sampled: 09/27/19 10:15
Percent Solids: N/A
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-16
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 18:56	C9J0067	CJ90206
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 18:56	C9J0067	CJ90206
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 18:56	C9J0067	CJ90206
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 18:56	C9J0067	CJ90206
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 18:56	C9J0067	CJ90206
Aroclor 1254 [2C]	**1.3** (0.1)		8082A		1	10/03/19 18:56	C9J0067	CJ90206
Aroclor 1260 [2C]	**0.7** (0.1)		8082A		1	10/03/19 18:56	C9J0067	CJ90206
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 18:56	C9J0067	CJ90206
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 18:56	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*47 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-117
Date Sampled: 09/27/19 10:20
Percent Solids: N/A
Initial Volume: 5.21
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-17
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 19:15	C9J0067	CJ90206
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 19:15	C9J0067	CJ90206
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 19:15	C9J0067	CJ90206
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 19:15	C9J0067	CJ90206
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 19:15	C9J0067	CJ90206
Aroclor 1254 [2C]	**3.7** (0.1)		8082A		1	10/03/19 19:15	C9J0067	CJ90206
Aroclor 1260 [2C]	**2.1** (0.1)		8082A		1	10/03/19 19:15	C9J0067	CJ90206
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 19:15	C9J0067	CJ90206
Aroclor 1268	ND (0.1)		8082A		1	10/03/19 19:15	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*108 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*108 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-118
Date Sampled: 09/27/19 10:25
Percent Solids: N/A
Initial Volume: 5.38
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-18
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/03/19 19:34	C9J0067	CJ90206
Aroclor 1221	ND (0.09)		8082A		1	10/03/19 19:34	C9J0067	CJ90206
Aroclor 1232	ND (0.09)		8082A		1	10/03/19 19:34	C9J0067	CJ90206
Aroclor 1242	ND (0.09)		8082A		1	10/03/19 19:34	C9J0067	CJ90206
Aroclor 1248	ND (0.09)		8082A		1	10/03/19 19:34	C9J0067	CJ90206
Aroclor 1254 [2C]	**1.3** (0.09)		8082A		1	10/03/19 19:34	C9J0067	CJ90206
Aroclor 1260 [2C]	**0.6** (0.09)		8082A		1	10/03/19 19:34	C9J0067	CJ90206
Aroclor 1262	ND (0.09)		8082A		1	10/03/19 19:34	C9J0067	CJ90206
Aroclor 1268	ND (0.09)		8082A		1	10/03/19 19:34	C9J0067	CJ90206

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*60 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-03
Date Sampled: 09/27/19 10:25
Percent Solids: N/A
Initial Volume: 5.14
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0014
ESS Laboratory Sample ID: 19J0014-19
Sample Matrix: Soil
Units: mg/kg wet
Analyst: MJV
Prepared: 10/2/19 15:55

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/03/19 19:54	C9J0067	CJ90206
Aroclor 1221	ND (0.1)		8082A		1	10/03/19 19:54	C9J0067	CJ90206
Aroclor 1232	ND (0.1)		8082A		1	10/03/19 19:54	C9J0067	CJ90206
Aroclor 1242	ND (0.1)		8082A		1	10/03/19 19:54	C9J0067	CJ90206
Aroclor 1248	ND (0.1)		8082A		1	10/03/19 19:54	C9J0067	CJ90206
Aroclor 1254 [2C]	**3.0** (0.1)		8082A		1	10/03/19 19:54	C9J0067	CJ90206
Aroclor 1260 [2C]	**2.4** (0.1)		8082A		1	10/03/19 19:54	C9J0067	CJ90206
Aroclor 1262	ND (0.1)		8082A		1	10/03/19 19:54	C9J0067	CJ90206
Aroclor 1268	**0.3** (0.1)		8082A		1	10/03/19 19:54	C9J0067	CJ90206

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*969 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*977 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0014

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ90205 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0169*		mg/kg wet	*0.02500*		*68*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0170*		mg/kg wet	*0.02500*		*68*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0162*		mg/kg wet	*0.02500*		*65*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0162*		mg/kg wet	*0.02500*		*65*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		100	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		103	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		96	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		102	40-140			
Surrogate: Decachlorobiphenyl	*0.0191*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0187*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0196*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0186*		mg/kg wet	*0.02500*		*75*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		102	40-140	1	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		103	40-140	0.3	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		100	40-140	4	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		104	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0199*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0184*		mg/kg wet	*0.02500*		*74*	*30-150*			
Matrix Spike **Source: 19J0014-06**										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0014

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ90205 - 3540C										
Aroclor 1016	3.6	0.2	mg/kg wet	3.663	ND	99	40-140			
Aroclor 1016 [2C]	3.4	0.2	mg/kg wet	3.663	ND	92	40-140			
Aroclor 1260	20.9	0.9	mg/kg wet	3.663	21.2	NR	40-140			M-
Aroclor 1260 [2C]	19.9	0.9	mg/kg wet	3.663	20.0	NR	40-140			M-
Surrogate: Decachlorobiphenyl	*0.147*		mg/kg wet	*0.1832*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.152*		mg/kg wet	*0.1832*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.147*		mg/kg wet	*0.1832*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.139*		mg/kg wet	*0.1832*		*76*	*30-150*			
Matrix Spike Dup Source: 19J0014-06										
Aroclor 1016	4.1	0.2	mg/kg wet	4.255	ND	97	40-140	13	30	
Aroclor 1016 [2C]	4.0	0.2	mg/kg wet	4.255	ND	93	40-140	15	30	
Aroclor 1260	27.1	1.1	mg/kg wet	4.255	21.2	138	40-140	26	30	
Aroclor 1260 [2C]	25.7	1.1	mg/kg wet	4.255	20.0	134	40-140	25	30	
Surrogate: Decachlorobiphenyl	*0.171*		mg/kg wet	*0.2128*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.178*		mg/kg wet	*0.2128*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.166*		mg/kg wet	*0.2128*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.156*		mg/kg wet	*0.2128*		*73*	*30-150*			
Batch CJ90206 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0181*		mg/kg wet	*0.02500*		*72*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0191*		mg/kg wet	*0.02500*		*77*	*30-150*			
LCS										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0014

Quality Control Data

8082A Polychlorinated Biphenyls (PCB)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch CJ90206 - 3540C										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		92	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		90	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		100	40-140			
Surrogate: Decachlorobiphenyl	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0197*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0188*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0191*		mg/kg wet	*0.02500*		*77*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		88	40-140	4	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		95	40-140	3	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		93	40-140	3	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		102	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0196*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Matrix Spike **Source: 19J0014-19**										
Aroclor 1016	1.7	0.1	mg/kg wet	1.992	ND	87	40-140			
Aroclor 1016 [2C]	1.9	0.1	mg/kg wet	1.992	ND	95	40-140			
Aroclor 1260	3.9	0.1	mg/kg wet	1.992	2.3	80	40-140			
Aroclor 1260 [2C]	4.1	0.1	mg/kg wet	1.992	2.4	84	40-140			E
Surrogate: Decachlorobiphenyl	*0.844*		mg/kg wet	*0.09960*		*847*	*30-150*			*SM*
Surrogate: Decachlorobiphenyl [2C]	*0.857*		mg/kg wet	*0.09960*		*860*	*30-150*			*SM*
Surrogate: Tetrachloro-m-xylene	*0.0627*		mg/kg wet	*0.09960*		*63*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0657*		mg/kg wet	*0.09960*		*66*	*30-150*			
Matrix Spike Dup **Source: 19J0014-19**										
Aroclor 1016	1.9	0.1	mg/kg wet	1.988	ND	96	40-140	10	30	
Aroclor 1016 [2C]	1.9	0.1	mg/kg wet	1.988	ND	97	40-140	2	30	
Aroclor 1260	4.2	0.1	mg/kg wet	1.988	2.3	95	40-140	8	30	E
Aroclor 1260 [2C]	4.2	0.1	mg/kg wet	1.988	2.4	90	40-140	3	30	E
Surrogate: Decachlorobiphenyl	*0.778*		mg/kg wet	*0.09940*		*783*	*30-150*			*SM*
Surrogate: Decachlorobiphenyl [2C]	*0.767*		mg/kg wet	*0.09940*		*772*	*30-150*			*SM*
Surrogate: Tetrachloro-m-xylene	*0.0665*		mg/kg wet	*0.09940*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0694*		mg/kg wet	*0.09940*		*70*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0014

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).
S+	Surrogate recovery(ies) above upper control limit (S+).
P	Percent difference between primary and confirmation results exceeds 40% (P).
M-	Matrix Spike recovery is below lower control limit (M-).
LC	Lower value is used due to matrix interferences (LC).
E	Reported above the quantitation limit; Estimated value (E).
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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0014

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 19J0014
Date Received: 10/1/2019
Project Due Date: 10/8/2019
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 0.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	393637	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	393636	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	393635	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	393634	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	393633	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	393632	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	393631	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	393630	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	393629	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	393628	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	393627	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	393626	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	393625	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	393624	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	393623	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	393622	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	393621	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	393620	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
19	393619	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Were all containers scanned into storage/lab? Initials

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 19J0014
Date Received: 10/1/2019

Are barcode labels on correct containers?	Yes / No
Are all Flashpoint stickers attached/container ID # circled?	Yes / No / NA
Are all Hex Chrome stickers attached?	Yes / No / NA
Are all QC stickers attached?	Yes / No / NA
Are VOA stickers attached if bubbles noted?	Yes / No / NA

Completed By: _____ Date & Time: 10/1/19 1908

Reviewed By: _____ Date & Time: 10/1/19 2052

Delivered By: _____ 10/1/19 2052

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 19J0014

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	PCBs <0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name Coneco Engineers and Scientists	**Project #** 5675.F	**Project Name** Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI	
Contact Person Mark Zoller		**Address** 4 First Street	
City Bridgewater	**State** MA	**Zip Code** 02324	**PO #** 5675.F
Telephone Number 508-697-3191	**FAX Number**	**Email Address** jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID (DDiFrancesco)	Analysis: PCBs 8082	MS/MSD
01	9/26/19	9:30 a.m.	Grab	Solid	PS-101	X	
02	9/26/19	9:45 a.m.	Grab	Solid	PS-102	X	
03	9/26/19	9:55 a.m.	Grab	Solid	PS-103	X	
04	9/26/19	10:30 a.m.	Grab	Solid	PS-104	X	
05	9/26/19	11:15 a.m.	Grab	Solid	PS-105	X	
06	9/26/19	11:35 a.m.	Grab	Solid	PS-106	X	X
07	9/26/19	11:50 a.m.	Grab	Solid	PS-107	X	
08	9/26/19	12:00 p.m.	Grab	Solid	PS-108	X	
09	9/26/19	12:40 p.m.	Grab	Solid	PS-109	X	
10	9/26/19	12:45 p.m.	Grab	Solid	PS-110	X	

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: ✓
Seals Intact: NA
Cooler Temperature: °C IR temp 0.4

Sampled by : DJD/LGG/MJM

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ICE

Homogenize Sample TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
9/30/19 1:40 pm.	10/1/19 12:30	10/1/19 16:37	10/1/19 637
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 19J0014

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Excel ☑ Other (Please Specify →)

Company Name: Coneco Engineers and Scientists	Project #: 5675.F	Project Name: Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket, RI	
Contact Person: Mark Zoller		Address: 4 First Street	
City: Bridgewater	State: MA	Zip Code: 02324	PO #: 5675.F
Telephone Number: 508-697-3191	FAX Number	Email Address: jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082	MS/MSD
11	9/26/9	12:50 p.m.	Grab	Solid	PS-111	X	
12	9/26/19	1:30 p.m.	Grab	Solid	PS-112	X	
13	9/27/19	10:00 a.m.	Grab	Solid	PS-113	X	
14	9/27/19	10:05 a.m.	Grab	Solid	PS-114	X	
15	9/27/19	10:10 a.m.	Grab	Solid	PS-115	X	
16	9/27/19	10:15 a.m.	Grab	Solid	PS-116	X	
17	9/27/19	10:20 a.m.	Grab	Solid	PS-117	X	
18	9/27/19	10:25 a.m.	Grab	Solid	PS-118	X	
19	9/27/19	10:25 a.m.	Grab	Solid	DUP-03	X	X

Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*	11
	Number of Containers per Sample:	1

Laboratory Use Only

Cooler Present: ✓
Seals Intact: n/a
Cooler Temperature: °C Iced temp - 0.4

Sampled by : ~~ACG/MJM/DCK~~ DD DJD/AG/MOM/KML

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ICE

Homogenize Sample TSCA Requirements, Provide Full Data F

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
	10/1/19 12:36	10/1/19 16:37	10/1/19 1637
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 20A0097

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 4:57 pm, Jan 14, 2020

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0097

SAMPLE RECEIPT

The following samples were received on January 07, 2020 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
20A0097-01	PS-119	Solid	8082A
20A0097-02	PS-120	Solid	8082A
20A0097-03	PS-121	Solid	8082A
20A0097-04	PS-122	Solid	8082A
20A0097-05	PS-123	Solid	8082A
20A0097-06	PS-124	Solid	8082A
20A0097-07	PS-125	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0097

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

20A0097-06 **Surrogate recovery(ies) below lower control limit (S-).**
Decachlorobiphenyl (29% @ 30-150%)

20A0097-07 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (288% @ 30-150%), Decachlorobiphenyl [2C] (335% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

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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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0097

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-119
Date Sampled: 01/03/20 10:00
Percent Solids: N/A
Initial Volume: 5.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0097
ESS Laboratory Sample ID: 20A0097-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 1/8/20 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/09/20 17:30	C0A0124	CA00826
Aroclor 1221	ND (0.1)		8082A		1	01/09/20 17:30	C0A0124	CA00826
Aroclor 1232	ND (0.1)		8082A		1	01/09/20 17:30	C0A0124	CA00826
Aroclor 1242	ND (0.1)		8082A		1	01/09/20 17:30	C0A0124	CA00826
Aroclor 1248	ND (0.1)		8082A		1	01/09/20 17:30	C0A0124	CA00826
Aroclor 1254	ND (0.1)		8082A		1	01/09/20 17:30	C0A0124	CA00826
Aroclor 1260	**11.1** (0.5)		8082A		5	01/13/20 23:00	C0A0124	CA00826
Aroclor 1262	ND (0.1)		8082A		1	01/09/20 17:30	C0A0124	CA00826
Aroclor 1268	ND (0.1)		8082A		1	01/09/20 17:30	C0A0124	CA00826

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*48 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-120
Date Sampled: 01/03/20 10:10
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0097
ESS Laboratory Sample ID: 20A0097-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 1/10/20 15:06

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 23:58	C0A0195	CA00909
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 23:58	C0A0195	CA00909
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 23:58	C0A0195	CA00909
Aroclor 1242	ND (0.1)		8082A		1	01/13/20 23:58	C0A0195	CA00909
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 23:58	C0A0195	CA00909
Aroclor 1254	ND (0.1)		8082A		1	01/13/20 23:58	C0A0195	CA00909
Aroclor 1260	**14.5** (0.5)		8082A		5	01/14/20 0:37	C0A0195	CA00909
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 23:58	C0A0195	CA00909
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 23:58	C0A0195	CA00909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-121
Date Sampled: 01/03/20 10:20
Percent Solids: N/A
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0097
ESS Laboratory Sample ID: 20A0097-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 1/8/20 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/09/20 18:08	C0A0124	CA00826
Aroclor 1221	ND (0.1)		8082A		1	01/09/20 18:08	C0A0124	CA00826
Aroclor 1232	ND (0.1)		8082A		1	01/09/20 18:08	C0A0124	CA00826
Aroclor 1242	ND (0.1)		8082A		1	01/09/20 18:08	C0A0124	CA00826
Aroclor 1248	ND (0.1)		8082A		1	01/09/20 18:08	C0A0124	CA00826
Aroclor 1254	ND (0.1)		8082A		1	01/09/20 18:08	C0A0124	CA00826
Aroclor 1260	**9.7** (0.5)		8082A		5	01/14/20 11:11	C0A0124	CA00826
Aroclor 1262	ND (0.1)		8082A		1	01/09/20 18:08	C0A0124	CA00826
Aroclor 1268	ND (0.1)		8082A		1	01/09/20 18:08	C0A0124	CA00826

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*45 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*82 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-122
Date Sampled: 01/03/20 11:00
Percent Solids: N/A
Initial Volume: 5.17
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0097
ESS Laboratory Sample ID: 20A0097-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 1/8/20 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/09/20 18:28	C0A0124	CA00826
Aroclor 1221	ND (0.1)		8082A		1	01/09/20 18:28	C0A0124	CA00826
Aroclor 1232	ND (0.1)		8082A		1	01/09/20 18:28	C0A0124	CA00826
Aroclor 1242	ND (0.1)		8082A		1	01/09/20 18:28	C0A0124	CA00826
Aroclor 1248	ND (0.1)		8082A		1	01/09/20 18:28	C0A0124	CA00826
Aroclor 1254	ND (0.1)		8082A		1	01/09/20 18:28	C0A0124	CA00826
Aroclor 1260	**5.8** (0.5)		8082A		5	01/14/20 11:30	C0A0124	CA00826
Aroclor 1262	ND (0.1)		8082A		1	01/09/20 18:28	C0A0124	CA00826
Aroclor 1268	ND (0.1)		8082A		1	01/09/20 18:28	C0A0124	CA00826

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*46 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-123
Date Sampled: 01/03/20 11:10
Percent Solids: N/A
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0097
ESS Laboratory Sample ID: 20A0097-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 1/8/20 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/09/20 18:47	C0A0124	CA00826
Aroclor 1221	ND (0.1)		8082A		1	01/09/20 18:47	C0A0124	CA00826
Aroclor 1232	ND (0.1)		8082A		1	01/09/20 18:47	C0A0124	CA00826
Aroclor 1242	ND (0.1)		8082A		1	01/09/20 18:47	C0A0124	CA00826
Aroclor 1248	ND (0.1)		8082A		1	01/09/20 18:47	C0A0124	CA00826
Aroclor 1254	ND (0.1)		8082A		1	01/09/20 18:47	C0A0124	CA00826
Aroclor 1260	**3.3** (0.1)		8082A		1	01/09/20 18:47	C0A0124	CA00826
Aroclor 1262	ND (0.1)		8082A		1	01/09/20 18:47	C0A0124	CA00826
Aroclor 1268	ND (0.1)		8082A		1	01/09/20 18:47	C0A0124	CA00826

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-124
Date Sampled: 01/03/20 11:15
Percent Solids: N/A
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0097
ESS Laboratory Sample ID: 20A0097-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 1/8/20 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/09/20 19:06	C0A0124	CA00826
Aroclor 1221	ND (0.1)		8082A		1	01/09/20 19:06	C0A0124	CA00826
Aroclor 1232	ND (0.1)		8082A		1	01/09/20 19:06	C0A0124	CA00826
Aroclor 1242	ND (0.1)		8082A		1	01/09/20 19:06	C0A0124	CA00826
Aroclor 1248	ND (0.1)		8082A		1	01/09/20 19:06	C0A0124	CA00826
Aroclor 1254	ND (0.1)		8082A		1	01/09/20 19:06	C0A0124	CA00826
Aroclor 1260	**3.4** (0.1)		8082A		1	01/09/20 19:06	C0A0124	CA00826
Aroclor 1262	ND (0.1)		8082A		1	01/09/20 19:06	C0A0124	CA00826
Aroclor 1268	ND (0.1)		8082A		1	01/09/20 19:06	C0A0124	CA00826

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*29 %*	*S-*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*30 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*32 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*43 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-125
Date Sampled: 01/03/20 11:20
Percent Solids: N/A
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0097
ESS Laboratory Sample ID: 20A0097-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 1/10/20 9:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	01/13/20 23:39	C0A0195	CA00909
Aroclor 1221	ND (0.1)		8082A		1	01/13/20 23:39	C0A0195	CA00909
Aroclor 1232	ND (0.1)		8082A		1	01/13/20 23:39	C0A0195	CA00909
Aroclor 1242	**0.2** (0.1)		8082A		1	01/13/20 23:39	C0A0195	CA00909
Aroclor 1248	ND (0.1)		8082A		1	01/13/20 23:39	C0A0195	CA00909
Aroclor 1254	ND (0.1)		8082A		1	01/13/20 23:39	C0A0195	CA00909
Aroclor 1260	**6.9** (0.5)		8082A		5	01/14/20 0:18	C0A0195	CA00909
Aroclor 1262	ND (0.1)		8082A		1	01/13/20 23:39	C0A0195	CA00909
Aroclor 1268	ND (0.1)		8082A		1	01/13/20 23:39	C0A0195	CA00909

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*288 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*335 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0097

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CA00826 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0162*		mg/kg wet	*0.02500*		*65*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0167*		mg/kg wet	*0.02500*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0196*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0209*		mg/kg wet	*0.02500*		*83*	*30-150*			
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0161*		mg/kg wet	*0.02500*		*65*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0172*		mg/kg wet	*0.02500*		*69*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0097

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CA00826 - 3540C										
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		98	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		90	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Surrogate: Decachlorobiphenyl	*0.0197*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0196*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		94	40-140			
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		87	40-140			
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		88	40-140			
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		86	40-140			
Surrogate: Decachlorobiphenyl	*0.0186*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0186*		mg/kg wet	*0.02500*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		96	40-140	2	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140	1	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		90	40-140	0.7	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140	0.8	30	
Surrogate: Decachlorobiphenyl	*0.0190*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		98	40-140	4	30	
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		89	40-140	2	30	
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		89	40-140	1	30	
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		88	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0190*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0188*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Batch CA00909 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0097

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CA00909 - 3540C										
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0278*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		93	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		95	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		92	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		98	40-140			
Surrogate: Decachlorobiphenyl	*0.0264*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0277*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0246*		mg/kg wet	*0.02500*		*98*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		97	40-140	4	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		96	40-140	1	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		94	40-140	2	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		100	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0277*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0242*		mg/kg wet	*0.02500*		*97*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0097

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).
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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0097

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

*Sample added per client 1/9/20 LLB

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
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www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20A0097

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	PCBs <0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name: Coneco Engineers and Scientists	Project #: 5675.F	Project Name: Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI	
Contact Person: Mark Zoller		Address: 4 First Street	
City: Bridgewater	State: MA	Zip Code: 02324	PO #: 5675.F
Telephone Number: 508-697-3191	FAX Number:	Email Address: jaevazalis, mzoller,kloftus, ddifrancesco@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	1/3/2020	10:00 a.m.	Grab	Solid	PS-119	X
02	1/3/2020	10:10 a.m.	Grab	Solid	PS-120	X
03	1/3/2020	10:20 a.m.	Grab	Solid	PS-121	X
04	1/3/2020	11:00 a.m.	Grab	Solid	PS-122	X
05	1/3/2020	11:10 a.m.	Grab	Solid	PS-123	X
06	1/3/2020	11:15 a.m.	Grab	Solid	PS-124	X
07	1/3/20	11:20	Grab	Solid	PS-125	X*

Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*	11
	Number of Containers per Sample:	1

Laboratory Use Only

Cooler Present: ✓
Seals Intact: ✓
Cooler Temperature: 3.5 °C

Sampled by : LGG/CKL

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ICE

Homogenize Sample TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Daniel D'Ammuso 1/6/2020	1/7 11:20	1/7 15:09	1/7/20 1509
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
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www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20A0097

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	PCBs <0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI
Contact Person	**Address**	
Mark Zoller	4 First Street	
City	**State**	**Zip Code** / **PO #**
Bridgewater	MA	02324 / 5675.F
Telephone Number	**FAX Number**	**Email Address**
508-697-3191		jaevazalis, mzoller,kloftus, ddifrancesco@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	1/3/2020	10:00 a.m.	Grab	Solid	PS-119	X
02	1/3/2020	10:10 a.m.	Grab	Solid	PS-120	X
03	1/3/2020	10:20 a.m.	Grab	Solid	PS-121	X
04	1/3/2020	11:00 a.m.	Grab	Solid	PS-122	X
05	1/3/2020	11:10 a.m.	Grab	Solid	PS-123	X
06	1/3/2020	11:15 a.m.	Grab	Solid	PS-124	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓
Seals Intact: ✓
Cooler Temperature: 3.5 °C

Sampled by : LGG/CKL

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ICE

Homogenize Sample TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Daniel D'Ammuso 1/6/2020	1/7 11:20	1/7 15:09	1/7/20 1509
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 20F0217

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 4:56 pm, Jun 12, 2020

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0217

SAMPLE RECEIPT

The following samples were received on June 04, 2020 for the analyses specified on the enclosed Chain of Custody Record.

PCB Aroclor

Limited sample volume provided for requested matrix spike/matrix spike duplicate samples.

Lab Number	Sample Name	Matrix	Analysis
20F0217-01	PS-126	Soil	8082A
20F0217-02	PS-127	Soil	8082A
20F0217-03	PS-128	Soil	8082A
20F0217-04	PS-129	Soil	8082A
20F0217-05	PS-130	Soil	8082A
20F0217-06	PS-131	Soil	8082A
20F0217-07	PS-132	Soil	8082A
20F0217-08	PS-133	Soil	8082A
20F0217-09	PS-134	Soil	8082A
20F0217-10	PS-135	Soil	8082A
20F0217-11	PS-136	Soil	8082A
20F0217-12	PS-137	Soil	8082A
20F0217-13	PS-138	Soil	8082A
20F0217-14	PS-139	Soil	8082A
20F0217-15	PS-140	Soil	6010C, 8082A
20F0217-16	PS-141	Soil	8082A
20F0217-17	DUP-04	Soil	8082A
20F0217-18	DUP-05	Soil	8082A
20F0217-19	DUP-06	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0217

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

20F0217-05 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (277% @ 30-150%), Decachlorobiphenyl [2C] (291% @ 30-150%)

20F0217-12 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (262% @ 30-150%), Decachlorobiphenyl [2C] (279% @ 30-150%)

20F0217-13 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (175% @ 30-150%), Decachlorobiphenyl [2C] (187% @ 30-150%)

20F0217-18 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (199% @ 30-150%), Decachlorobiphenyl [2C] (213% @ 30-150%)

DF00811-MSD1 **Reported above the quantitation limit; Estimated value (E).**
Aroclor 1260

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0217

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-126
Date Sampled: 05/28/20 13:00
Percent Solids: N/A
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-01
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 19:29	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 19:29	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 19:29	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 19:29	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 19:29	D0F0151	DF00811
Aroclor 1254 [2C]	**2.9** (0.1)		8082A		1	06/09/20 19:29	D0F0151	DF00811
Aroclor 1260 [2C]	**1.5** (0.1)		8082A		1	06/09/20 19:29	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 19:29	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 19:29	D0F0151	DF00811

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*98 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*106 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*59 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-127
Date Sampled: 05/28/20 13:05
Percent Solids: N/A
Initial Volume: 4.99
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-02
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 19:49	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 19:49	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 19:49	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 19:49	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 19:49	D0F0151	DF00811
Aroclor 1254 [2C]	**3.5** (0.1)		8082A		1	06/09/20 19:49	D0F0151	DF00811
Aroclor 1260	**2.0** (0.1)		8082A		1	06/09/20 19:49	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 19:49	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 19:49	D0F0151	DF00811

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-128
Date Sampled: 05/28/20 13:10
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-03
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 20:09	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 20:09	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 20:09	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 20:09	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 20:09	D0F0151	DF00811
Aroclor 1254 [2C]	**2.9** (0.1)		8082A		1	06/09/20 20:09	D0F0151	DF00811
Aroclor 1260	**1.3** (0.1)		8082A		1	06/09/20 20:09	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 20:09	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 20:09	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*99 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*107 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-129
Date Sampled: 05/28/20 13:15
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-04
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 20:28	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 20:28	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 20:28	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 20:28	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 20:28	D0F0151	DF00811
Aroclor 1254	**3.9** (0.1)		8082A		1	06/09/20 20:28	D0F0151	DF00811
Aroclor 1260 [2C]	**1.6** (0.1)		8082A		1	06/09/20 20:28	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 20:28	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 20:28	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-130
Date Sampled: 05/28/20 13:20
Percent Solids: N/A
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-05
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 20:48	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 20:48	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 20:48	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 20:48	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 20:48	D0F0151	DF00811
Aroclor 1254	**6.6** (0.5)		8082A		5	06/11/20 3:31	D0F0151	DF00811
Aroclor 1260	**10.1** (0.5)		8082A		5	06/11/20 3:31	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 20:48	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 20:48	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*277 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*291 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-131
Date Sampled: 05/29/20 12:00
Percent Solids: N/A
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-06
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 21:08	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 21:08	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 21:08	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 21:08	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 21:08	D0F0151	DF00811
Aroclor 1254	**6.8** (0.5)		8082A		5	06/11/20 3:51	D0F0151	DF00811
Aroclor 1260	**10.9** (0.5)		8082A		5	06/11/20 3:51	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 21:08	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 21:08	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-132
Date Sampled: 05/29/20 12:05
Percent Solids: N/A
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-07
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 21:28	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 21:28	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 21:28	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 21:28	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 21:28	D0F0151	DF00811
Aroclor 1254	**0.4** (0.1)		8082A		1	06/09/20 21:28	D0F0151	DF00811
Aroclor 1260 [2C]	**0.6** (0.1)		8082A		1	06/09/20 21:28	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 21:28	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 21:28	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-133
Date Sampled: 05/29/20 12:10
Percent Solids: N/A
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-08
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 21:47	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 21:47	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 21:47	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 21:47	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 21:47	D0F0151	DF00811
Aroclor 1254	**2.2** (0.1)		8082A		1	06/09/20 21:47	D0F0151	DF00811
Aroclor 1260	**2.2** (0.1)		8082A		1	06/09/20 21:47	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 21:47	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 21:47	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*115 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-134
Date Sampled: 05/29/20 12:15
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-09
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 22:07	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 22:07	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 22:07	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 22:07	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 22:07	D0F0151	DF00811
Aroclor 1254	**2.7** (0.1)		8082A		1	06/09/20 22:07	D0F0151	DF00811
Aroclor 1260 [2C]	**3.4** (0.1)		8082A		1	06/09/20 22:07	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 22:07	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 22:07	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-135
Date Sampled: 05/29/20 12:20
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-10
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 23:06	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 23:06	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 23:06	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 23:06	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 23:06	D0F0151	DF00811
Aroclor 1254	**2.5** (0.1)		8082A		1	06/09/20 23:06	D0F0151	DF00811
Aroclor 1260 [2C]	**3.3** (0.1)		8082A		1	06/09/20 23:06	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 23:06	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 23:06	D0F0151	DF00811

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*110 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*117 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-136
Date Sampled: 05/29/20 12:25
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-11
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/09/20 23:26	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/09/20 23:26	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/09/20 23:26	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/09/20 23:26	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/09/20 23:26	D0F0151	DF00811
Aroclor 1254	**2.2** (0.1)		8082A		1	06/09/20 23:26	D0F0151	DF00811
Aroclor 1260	**3.4** (0.1)		8082A		1	06/09/20 23:26	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/09/20 23:26	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/09/20 23:26	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-137
Date Sampled: 05/29/20 12:30
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-12
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 2:23	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 2:23	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 2:23	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 2:23	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 2:23	D0F0151	DF00811
Aroclor 1254	**2.1** (0.1)		8082A		1	06/10/20 2:23	D0F0151	DF00811
Aroclor 1260	**2.4** (0.1)		8082A		1	06/10/20 2:23	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 2:23	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 2:23	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*262 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*279 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-138
Date Sampled: 05/29/20 12:35
Percent Solids: N/A
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-13
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 3:22	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 3:22	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 3:22	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 3:22	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 3:22	D0F0151	DF00811
Aroclor 1254	**3.3** (0.1)		8082A		1	06/10/20 3:22	D0F0151	DF00811
Aroclor 1260	**10.0** (0.5)		8082A		5	06/11/20 5:10	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 3:22	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 3:22	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*175 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*187 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-139
Date Sampled: 05/29/20 12:40
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-14
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 3:41	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 3:41	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 3:41	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 3:41	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 3:41	D0F0151	DF00811
Aroclor 1254	**6.0** (0.5)		8082A		5	06/11/20 5:29	D0F0151	DF00811
Aroclor 1260	**10.3** (0.5)		8082A		5	06/11/20 5:29	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 3:41	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 3:41	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-140
Date Sampled: 05/29/20 12:45
Percent Solids: N/A

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-15
Sample Matrix: Soil
Units: mg/kg wet

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Cadmium	**14.2** (3.57)		6010C		1	KJK	06/09/20 16:41	0.28	100	DF00858
Chromium	**7200** (7.14)		6010C		1	KJK	06/09/20 16:41	0.28	100	DF00858
Lead	**53200** (3570)		6010C		100	KJK	06/11/20 0:03	0.28	100	DF00858

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-140
Date Sampled: 05/29/20 12:45
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-15
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 4:01	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 4:01	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 4:01	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 4:01	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 4:01	D0F0151	DF00811
Aroclor 1254	**5.6** (0.5)		8082A		5	06/11/20 5:49	D0F0151	DF00811
Aroclor 1260	**9.3** (0.5)		8082A		5	06/11/20 5:49	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 4:01	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 4:01	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-141
Date Sampled: 05/29/20 12:50
Percent Solids: N/A
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-16
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 4:21	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 4:21	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 4:21	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 4:21	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 4:21	D0F0151	DF00811
Aroclor 1254	**5.4** (0.5)		8082A		5	06/11/20 6:09	D0F0151	DF00811
Aroclor 1260	**7.5** (0.5)		8082A		5	06/11/20 6:09	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 4:21	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 4:21	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-04
Date Sampled: 05/29/20 12:16
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-17
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 4:40	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 4:40	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 4:40	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 4:40	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 4:40	D0F0151	DF00811
Aroclor 1254	**2.2** (0.1)		8082A		1	06/10/20 4:40	D0F0151	DF00811
Aroclor 1260 [2C]	**2.8** (0.1)		8082A		1	06/10/20 4:40	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 4:40	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 4:40	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-05
Date Sampled: 05/29/20 12:26
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-18
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 5:39	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 5:39	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 5:39	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 5:39	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 5:39	D0F0151	DF00811
Aroclor 1254	**1.6** (0.1)		8082A		1	06/10/20 5:39	D0F0151	DF00811
Aroclor 1260	**1.8** (0.1)		8082A		1	06/10/20 5:39	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 5:39	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 5:39	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*199 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*213 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-06
Date Sampled: 05/29/20 12:31
Percent Solids: N/A
Initial Volume: 4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0217
ESS Laboratory Sample ID: 20F0217-19
Sample Matrix: Soil
Units: mg/kg wet
Analyst: DMC
Prepared: 6/8/20 13:14

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	06/10/20 6:38	D0F0151	DF00811
Aroclor 1221	ND (0.1)		8082A		1	06/10/20 6:38	D0F0151	DF00811
Aroclor 1232	ND (0.1)		8082A		1	06/10/20 6:38	D0F0151	DF00811
Aroclor 1242	ND (0.1)		8082A		1	06/10/20 6:38	D0F0151	DF00811
Aroclor 1248	ND (0.1)		8082A		1	06/10/20 6:38	D0F0151	DF00811
Aroclor 1254	**2.0** (0.1)		8082A		1	06/10/20 6:38	D0F0151	DF00811
Aroclor 1260	**3.2** (0.1)		8082A		1	06/10/20 6:38	D0F0151	DF00811
Aroclor 1262	ND (0.1)		8082A		1	06/10/20 6:38	D0F0151	DF00811
Aroclor 1268	ND (0.1)		8082A		1	06/10/20 6:38	D0F0151	DF00811

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0217

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Total Metals										
Batch DF00858 - 3050B										
Blank										
Cadmium	ND	0.50	mg/kg wet							
Chromium	ND	1.00	mg/kg wet							
Lead	ND	5.00	mg/kg wet							
LCS										
Cadmium	107	1.59	mg/kg wet	118.0		90	80-120			
Chromium	288	3.17	mg/kg wet	299.0		96	80-120			
Lead	136	15.9	mg/kg wet	144.0		94	80-120			
LCS Dup										
Cadmium	107	1.33	mg/kg wet	118.0		91	80-120	0.4	20	
Chromium	289	2.67	mg/kg wet	299.0		97	80-120	0.2	20	
Lead	137	13.3	mg/kg wet	144.0		95	80-120	0.6	20	
Reference										
Lead	4200	33.3	mg/kg wet	4490		94	83-113			
8082A Polychlorinated Biphenyls (PCB)										
Batch DF00811 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0229*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0209*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0217

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DF00811 - 3540C										
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		89	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		87	40-140			
Surrogate: Decachlorobiphenyl	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		85	40-140	0.1	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		85	40-140	0.5	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		90	40-140	1	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		87	40-140	0.8	30	
Surrogate: Decachlorobiphenyl	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0219*		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]	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Matrix Spike Source: 20F0217-09										
Aroclor 1016	3.2	0.2	mg/kg wet	3.322	ND	95	40-140			
Aroclor 1016 [2C]	2.4	0.2	mg/kg wet	3.322	ND	72	40-140			
Aroclor 1260	6.4	0.2	mg/kg wet	3.322	2.8	109	40-140			
Aroclor 1260 [2C]	5.0	0.2	mg/kg wet	3.322	3.4	50	40-140			
Surrogate: Decachlorobiphenyl	*0.120*		mg/kg wet	*0.1661*		*72*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.128*		mg/kg wet	*0.1661*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.129*		mg/kg wet	*0.1661*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.133*		mg/kg wet	*0.1661*		*80*	*30-150*			
Matrix Spike Source: 20F0217-11										
Aroclor 1016	11.0	0.8	mg/kg wet	16.39	ND	67	40-140			
Aroclor 1016 [2C]	11.1	0.8	mg/kg wet	16.39	ND	68	40-140			
Aroclor 1260	13.3	0.8	mg/kg wet	16.39	3.4	60	40-140			
Aroclor 1260 [2C]	12.6	0.8	mg/kg wet	16.39	3.0	58	40-140			
Surrogate: Decachlorobiphenyl	*0.488*		mg/kg wet	*0.8197*		*60*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.520*		mg/kg wet	*0.8197*		*63*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.556*		mg/kg wet	*0.8197*		*68*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.600*		mg/kg wet	*0.8197*		*73*	*30-150*			
Matrix Spike Source: 20F0217-12										
Aroclor 1016	15.6	1.0	mg/kg wet	20.41	ND	76	40-140			
Aroclor 1016 [2C]	15.6	1.0	mg/kg wet	20.41	ND	76	40-140			
Aroclor 1260	17.0	1.0	mg/kg wet	20.41	2.4	72	40-140			
Aroclor 1260 [2C]	16.2	1.0	mg/kg wet	20.41	2.1	69	40-140			
Surrogate: Decachlorobiphenyl	*0.900*		mg/kg wet	*1.020*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.977*		mg/kg wet	*1.020*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.806*		mg/kg wet	*1.020*		*79*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0217

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DF00811 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.838*		mg/kg wet	*1.020*		*82*	*30-150*			
Matrix Spike Source: 20F0217-17										
Aroclor 1016	8.1	0.5	mg/kg wet	9.804	ND	82	40-140			
Aroclor 1016 [2C]	7.1	0.5	mg/kg wet	9.804	ND	73	40-140			
Aroclor 1260	11.0	0.5	mg/kg wet	9.804	2.3	88	40-140			
Aroclor 1260 [2C]	9.4	0.5	mg/kg wet	9.804	2.8	67	40-140			
Surrogate: Decachlorobiphenyl	*0.332*		mg/kg wet	*0.4902*		*68*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.344*		mg/kg wet	*0.4902*		*70*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.370*		mg/kg wet	*0.4902*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.380*		mg/kg wet	*0.4902*		*78*	*30-150*			
Matrix Spike Source: 20F0217-18										
Aroclor 1016	15.0	1.0	mg/kg wet	19.61	ND	76	40-140			
Aroclor 1016 [2C]	14.9	1.0	mg/kg wet	19.61	ND	76	40-140			
Aroclor 1260	16.9	1.0	mg/kg wet	19.61	1.8	77	40-140			
Aroclor 1260 [2C]	16.0	1.0	mg/kg wet	19.61	1.6	74	40-140			
Surrogate: Decachlorobiphenyl	*0.914*		mg/kg wet	*0.9804*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.993*		mg/kg wet	*0.9804*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.718*		mg/kg wet	*0.9804*		*73*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.761*		mg/kg wet	*0.9804*		*78*	*30-150*			
Matrix Spike Source: 20F0217-19										
Aroclor 1016	17.0	1.0	mg/kg wet	20.00	ND	85	40-140			
Aroclor 1016 [2C]	16.9	1.0	mg/kg wet	20.00	ND	84	40-140			
Aroclor 1260	20.6	1.0	mg/kg wet	20.00	3.2	87	40-140			
Aroclor 1260 [2C]	19.3	1.0	mg/kg wet	20.00	2.9	82	40-140			
Surrogate: Decachlorobiphenyl	*0.813*		mg/kg wet	*1.000*		*81*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.859*		mg/kg wet	*1.000*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.815*		mg/kg wet	*1.000*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.863*		mg/kg wet	*1.000*		*86*	*30-150*			
Matrix Spike Dup Source: 20F0217-09										
Aroclor 1016	3.4	0.2	mg/kg wet	3.322	ND	101	40-140	6	30	
Aroclor 1016 [2C]	2.6	0.2	mg/kg wet	3.322	ND	79	40-140	8	30	
Aroclor 1260	6.9	0.2	mg/kg wet	3.322	2.8	123	40-140	7	30	E
Aroclor 1260 [2C]	5.3	0.2	mg/kg wet	3.322	3.4	58	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.130*		mg/kg wet	*0.1661*		*78*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.143*		mg/kg wet	*0.1661*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.142*		mg/kg wet	*0.1661*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.146*		mg/kg wet	*0.1661*		*88*	*30-150*			
Matrix Spike Dup Source: 20F0217-11										
Aroclor 1016	13.5	0.8	mg/kg wet	16.67	ND	81	40-140	20	30	
Aroclor 1016 [2C]	13.2	0.8	mg/kg wet	16.67	ND	79	40-140	17	30	
Aroclor 1260	16.5	0.8	mg/kg wet	16.67	3.4	79	40-140	22	30	

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0217

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DF00811 - 3540C										
Aroclor 1260 [2C]	15.5	0.8	mg/kg wet	16.67	3.0	75	40-140	21	30	
Surrogate: Decachlorobiphenyl	*0.622*		mg/kg wet	*0.8333*		*75*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.662*		mg/kg wet	*0.8333*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.687*		mg/kg wet	*0.8333*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.707*		mg/kg wet	*0.8333*		*85*	*30-150*			
Matrix Spike Dup Source: 20F0217-12										
Aroclor 1016	14.5	1.0	mg/kg wet	20.00	ND	72	40-140	7	30	
Aroclor 1016 [2C]	14.5	1.0	mg/kg wet	20.00	ND	72	40-140	7	30	
Aroclor 1260	16.4	1.0	mg/kg wet	20.00	2.4	70	40-140	4	30	
Aroclor 1260 [2C]	15.7	1.0	mg/kg wet	20.00	2.1	68	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.852*		mg/kg wet	*1.000*		*85*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.915*		mg/kg wet	*1.000*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.711*		mg/kg wet	*1.000*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.757*		mg/kg wet	*1.000*		*76*	*30-150*			
Matrix Spike Dup Source: 20F0217-17										
Aroclor 1016	7.9	0.5	mg/kg wet	10.00	ND	79	40-140	2	30	
Aroclor 1016 [2C]	7.0	0.5	mg/kg wet	10.00	ND	70	40-140	2	30	
Aroclor 1260	10.8	0.5	mg/kg wet	10.00	2.3	85	40-140	2	30	
Aroclor 1260 [2C]	9.4	0.5	mg/kg wet	10.00	2.8	66	40-140	0.3	30	
Surrogate: Decachlorobiphenyl	*0.336*		mg/kg wet	*0.5000*		*67*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.353*		mg/kg wet	*0.5000*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.358*		mg/kg wet	*0.5000*		*72*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.366*		mg/kg wet	*0.5000*		*73*	*30-150*			
Matrix Spike Dup Source: 20F0217-18										
Aroclor 1016	13.8	0.9	mg/kg wet	17.86	ND	77	40-140	8	30	
Aroclor 1016 [2C]	13.7	0.9	mg/kg wet	17.86	ND	77	40-140	8	30	
Aroclor 1260	15.4	0.9	mg/kg wet	17.86	1.8	76	40-140	9	30	
Aroclor 1260 [2C]	14.6	0.9	mg/kg wet	17.86	1.6	73	40-140	9	30	
Surrogate: Decachlorobiphenyl	*0.799*		mg/kg wet	*0.8929*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.869*		mg/kg wet	*0.8929*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.703*		mg/kg wet	*0.8929*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.738*		mg/kg wet	*0.8929*		*83*	*30-150*			
Matrix Spike Dup Source: 20F0217-19										
Aroclor 1016	13.7	0.9	mg/kg wet	17.86	ND	77	40-140	22	30	
Aroclor 1016 [2C]	13.5	0.9	mg/kg wet	17.86	ND	76	40-140	22	30	
Aroclor 1260	16.4	0.9	mg/kg wet	17.86	3.2	74	40-140	22	30	
Aroclor 1260 [2C]	15.5	0.9	mg/kg wet	17.86	2.9	71	40-140	21	30	
Surrogate: Decachlorobiphenyl	*0.630*		mg/kg wet	*0.8929*		*71*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.690*		mg/kg wet	*0.8929*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.657*		mg/kg wet	*0.8929*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.678*		mg/kg wet	*0.8929*		*76*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0217

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).
E	Reported above the quantitation limit; Estimated value (E).
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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0217

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 20F0217
Date Received: 6/4/2020
Project Due Date: 6/11/2020
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / (NA)

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	49806	Yes	N/A	Yes	4 oz. Jar	NP	
2	49807	Yes	N/A	Yes	4 oz. Jar	NP	
3	49808	Yes	N/A	Yes	4 oz. Jar	NP	
4	49809	Yes	N/A	Yes	4 oz. Jar	NP	
5	49810	Yes	N/A	Yes	4 oz. Jar	NP	
6	49811	Yes	N/A	Yes	4 oz. Jar	NP	
7	49812	Yes	N/A	Yes	4 oz. Jar	NP	
8	49813	Yes	N/A	Yes	4 oz. Jar	NP	
9	49814	Yes	N/A	Yes	4 oz. Jar	NP	
10	49815	Yes	N/A	Yes	4 oz. Jar	NP	
11	49816	Yes	N/A	Yes	4 oz. Jar	NP	
12	49817	Yes	N/A	Yes	4 oz. Jar	NP	
13	49818	Yes	N/A	Yes	4 oz. Jar	NP	
14	49819	Yes	N/A	Yes	4 oz. Jar	NP	
15	49820	Yes	N/A	Yes	4 oz. Jar	NP	
16	49821	Yes	N/A	Yes	4 oz. Jar	NP	
17	49822	Yes	N/A	Yes	4 oz. Jar	NP	

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Turn Time	(5-Day) Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	O CT RCP O MA MCP O RGP
ESS Lab #	20F0217
Reporting Limits	<0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	Coneco Engineers and scientists
Project #	5675.F
Project Name	Pawtucket Control House, @ Thornton Ave
Contact Person	katie loftus
Address	4 First Street Pawtucket, RI
City	Bridgewater
State	Massachusetts
Zip Code	02324
PO #	5675.F
Telephone Number	508-697-3191
FAX Number	
Email Address	Jacuazelis, Mzoller, Pladen, klofts, DDiFrancesco @coneco.com

Analysis: PCBs by 8082; MS/MSD

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	MS/MSD
1	5/28/20	1:00 pm	Grab	Paint	PS-126	X	
2	↓	1:05 pm	↓	↓	PS-127	X	
3	↓	1:10 pm	↓	↓	PS-128	X	
4	↓	1:15 pm	↓	↓	PS-129	X	
5	↓	1:20 pm	↓	↓	PS-130	X	
6	5/29/20	12:00 pm	↓	↓	PS-131	X	
7	↓	12:05 pm	↓	↓	PS-132	X	
8	↓	12:10 pm	↓	↓	PS-133	X	
9	↓	12:15 pm	↓	↓	PS-134	X	X
10	↓	12:20 pm	↓	↓	PS-135	X	
Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G-Glass O-Other P-Poly S-Sterile V-Vial						AG	
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*						9	
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*						11	
Number of Containers per Sample:						1	

Laboratory Use Only
Cooler Present: ______
Seals Intact: ______
Cooler Temperature: -0.1/1.2 °C

Sampled by: DJD/LGG

Comments: Please specify "Other" preservative and containers types in this space
National Grid Project, Use Manual Soxhlet extraction per EPA Method 3540. Report dry weight, homogenize sample, TSCA Requirements, Full Data Package "ice"

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
[signature] 6/4/20 1410	[signature] 6/4/20 1440	[signature] 6/4/20 1541	[signature] 6/4/20 1541
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
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www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20F0217
Turn Time (5-Day) Rush
Regulatory State Rhode Island
Is this project for any of the following?: ○ CT RCP ○ MA MCP ○ RGP
Reporting Limits 2.5 mg/kg
Electonic Deliverables ☐ Limit Checker ☑ Other (Please Specify →) PDF ☐ Standard Excel

Company Name: Conecto Engineers and Scientists
Contact Person: Katie Loftus
City: Bridgewater
State: Massachusetts
Telephone Number: 508-697-3191
FAX Number:
Project #: 5675.F
Project Name: Pawtucket Control House, 1 Thornton Ave
Address: 4 First Street Pawtucket, RI
Zip Code: 02324
PO #: 5675.F
Email Address: Jaracazelis, MZoller, Hyden, Kloftus, DDifrancesco@conecto.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by 8082	Cadmium	Chromium	Lead	MS/MSD
11	5/29/20	12:25 pm	Grab	paint	PS-136	X				X
~~12~~		12:30 pm			PS-137	X				X
13		12:35 pm			PS-138	X				
14		12:40 pm			PS-139	X				
15		12:45 pm			PS-140	X	X	X	X	
16		12:50 pm			PS-141	X				*DD
17		12:16 pm			DUP-04	X				X
18		12:21 pm			DUP-05	X				X
19		12:31 pm			DUP-06	X				X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G-Glass O-Other P-Poly S-Sterile V-Vial — A6
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: _____
Seals Intact: _____
Cooler Temperature: -0.1/1.2 °C

Sampled by: DJD/LGG

Comments: Please specify "Other" preservative and containers types in this space
National Grid Project, Use Manual Soxhlet extraction per EPA Method 3540. Report dry weight, homogenize sample, TSCA Requirements, Full Data Package 11 1C1

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Donald Dimmer 6/4/20 1440	6/4/20 1440	6/4/20 1541	6/4/20 1541
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 21E0016

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 12:53 pm, May 11, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0016

SAMPLE RECEIPT

The following samples were received on May 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21E0016-01	PS-142	Solid	8082A
21E0016-02	PS-143	Solid	8082A
21E0016-03	PS-144	Solid	8082A
21E0016-04	PS-145	Solid	8082A
21E0016-05	PS-146	Solid	8082A
21E0016-06	PS-147	Solid	8082A
21E0016-07	PS-148	Solid	8082A
21E0016-08	PS-149	Solid	8082A
21E0016-09	PS-150	Solid	8082A
21E0016-10	PS-151	Solid	8082A
21E0016-11	PS-152	Solid	8082A
21E0016-12	PS-153	Solid	8082A
21E0016-13	PS-154	Solid	8082A
21E0016-14	PS-155	Solid	8082A
21E0016-15	PS-156	Solid	8082A
21E0016-16	PS-157	Solid	8082A
21E0016-17	PS-158	Solid	8082A
21E0016-18	PS-159	Solid	8082A
21E0016-19	PS-160	Solid	8082A
21E0016-20	PS-161	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0016

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

21E0016-05	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).** Decachlorobiphenyl (152% @ 30-150%)
21E0016-12	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).** Decachlorobiphenyl (155% @ 30-150%)
21E0016-13	**Lower value is used due to matrix interferences (LC).** Aroclor 1260 [2C]
21E0016-13	**Percent difference between primary and confirmation results exceeds 40% (P).** Aroclor 1260 [2C]
21E0016-17	**Lower value is used due to matrix interferences (LC).** Aroclor 1260 [2C]
21E0016-17	**Percent difference between primary and confirmation results exceeds 40% (P).** Aroclor 1260 [2C]
D1E0123-CCV4	**Continuing Calibration %Diff/Drift is above control limit (CD+).** Aroclor 1232 (21% @ 20%), Aroclor 1232 [2C] (22% @ 20%)
DE10322-MS1	**Matrix Spike recovery is below lower control limit (M-).** Aroclor 1016 [2C] (38% @ 40-140%), Aroclor 1260 (25% @ 40-140%), Aroclor 1260 [2C] (21% @ 40-140%)
DE10322-MSD1	**Relative percent difference for duplicate is outside of criteria (D+).** Aroclor 1016 [2C] (31% @ 30%), Aroclor 1260 (36% @ 30%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0016

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-142
Date Sampled: 04/27/21 08:00
Percent Solids: N/A
Initial Volume: 5.12
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 14:28	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 14:28	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 14:28	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 14:28	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 14:28	D1E0040	DE10322
Aroclor 1254	**1.3** (0.1)		8082A		1	05/04/21 14:28	D1E0040	DE10322
Aroclor 1260 [2C]	**1.0** (0.1)		8082A		1	05/04/21 14:28	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 14:28	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 14:28	D1E0040	DE10322

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

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-143
Date Sampled: 04/27/21 08:05
Percent Solids: N/A
Initial Volume: 5.21
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 14:48	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 14:48	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 14:48	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 14:48	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 14:48	D1E0040	DE10322
Aroclor 1254	**2.3** (0.1)		8082A		1	05/04/21 14:48	D1E0040	DE10322
Aroclor 1260	**1.8** (0.1)		8082A		1	05/04/21 14:48	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 14:48	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 14:48	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*105 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-144
Date Sampled: 04/27/21 08:10
Percent Solids: N/A
Initial Volume: 5.23
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 15:08	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 15:08	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 15:08	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 15:08	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 15:08	D1E0040	DE10322
Aroclor 1254	**1.5** (0.1)		8082A		1	05/04/21 15:08	D1E0040	DE10322
Aroclor 1260	**1.1** (0.1)		8082A		1	05/04/21 15:08	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 15:08	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 15:08	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*55 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-145
Date Sampled: 04/27/21 08:15
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 15:28	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 15:28	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 15:28	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 15:28	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 15:28	D1E0040	DE10322
Aroclor 1254	**2.4** (0.1)		8082A		1	05/04/21 15:28	D1E0040	DE10322
Aroclor 1260	**1.8** (0.1)		8082A		1	05/04/21 15:28	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 15:28	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 15:28	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*113 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*105 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-146
Date Sampled: 04/27/21 08:20
Percent Solids: N/A
Initial Volume: 5.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 15:48	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 15:48	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 15:48	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 15:48	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 15:48	D1E0040	DE10322
Aroclor 1254	**2.2** (0.1)		8082A		1	05/04/21 15:48	D1E0040	DE10322
Aroclor 1260	**1.6** (0.1)		8082A		1	05/04/21 15:48	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 15:48	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 15:48	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*152 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*137 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*64 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-147
Date Sampled: 04/27/21 08:25
Percent Solids: N/A
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 16:08	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 16:08	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 16:08	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 16:08	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 16:08	D1E0040	DE10322
Aroclor 1254	**0.6** (0.1)		8082A		1	05/04/21 16:08	D1E0040	DE10322
Aroclor 1260	**0.3** (0.1)		8082A		1	05/04/21 16:08	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 16:08	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 16:08	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*45 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*45 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-148
Date Sampled: 04/27/21 08:30
Percent Solids: N/A
Initial Volume: 3.61
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 16:27	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 16:27	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 16:27	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 16:27	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 16:27	D1E0040	DE10322
Aroclor 1254	**1.8** (0.1)		8082A		1	05/04/21 16:27	D1E0040	DE10322
Aroclor 1260	**1.3** (0.1)		8082A		1	05/04/21 16:27	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 16:27	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 16:27	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-149
Date Sampled: 04/27/21 08:35
Percent Solids: N/A
Initial Volume: 5.25
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 17:27	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 17:27	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 17:27	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 17:27	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 17:27	D1E0040	DE10322
Aroclor 1254	**0.8** (0.1)		8082A		1	05/04/21 17:27	D1E0040	DE10322
Aroclor 1260	**0.4** (0.1)		8082A		1	05/04/21 17:27	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 17:27	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 17:27	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*51 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*46 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*50 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-150
Date Sampled: 04/27/21 08:40
Percent Solids: N/A
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 17:47	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 17:47	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 17:47	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 17:47	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 17:47	D1E0040	DE10322
Aroclor 1254	**10.7** (0.5)		8082A		5	05/06/21 1:41	D1E0040	DE10322
Aroclor 1260 [2C]	**3.0** (0.1)		8082A		1	05/04/21 17:47	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 17:47	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 17:47	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-151
Date Sampled: 04/27/21 08:45
Percent Solids: N/A
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: DMC
Prepared: 5/6/21 16:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/08/21 1:39	D1E0123	DE10609
Aroclor 1221	ND (0.1)		8082A		1	05/08/21 1:39	D1E0123	DE10609
Aroclor 1232	ND (0.1)		8082A		1	05/08/21 1:39	D1E0123	DE10609
Aroclor 1242	ND (0.1)		8082A		1	05/08/21 1:39	D1E0123	DE10609
Aroclor 1248	ND (0.1)		8082A		1	05/08/21 1:39	D1E0123	DE10609
Aroclor 1254 [2C]	**0.6** (0.1)		8082A		1	05/08/21 1:39	D1E0123	DE10609
Aroclor 1260 [2C]	**0.2** (0.1)		8082A		1	05/08/21 1:39	D1E0123	DE10609
Aroclor 1262	ND (0.1)		8082A		1	05/08/21 1:39	D1E0123	DE10609
Aroclor 1268	ND (0.1)		8082A		1	05/08/21 1:39	D1E0123	DE10609

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*31 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*36 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*35 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*42 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-152
Date Sampled: 04/27/21 08:50
Percent Solids: N/A
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-11
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 18:27	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 18:27	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 18:27	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 18:27	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 18:27	D1E0040	DE10322
Aroclor 1254	**1.2** (0.1)		8082A		1	05/04/21 18:27	D1E0040	DE10322
Aroclor 1260	**0.4** (0.1)		8082A		1	05/04/21 18:27	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 18:27	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 18:27	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*59 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-153
Date Sampled: 04/27/21 08:55
Percent Solids: N/A
Initial Volume: 5.31
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-12
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/04/21 18:47	D1E0040	DE10322
Aroclor 1221	ND (0.09)		8082A		1	05/04/21 18:47	D1E0040	DE10322
Aroclor 1232	ND (0.09)		8082A		1	05/04/21 18:47	D1E0040	DE10322
Aroclor 1242	ND (0.09)		8082A		1	05/04/21 18:47	D1E0040	DE10322
Aroclor 1248	ND (0.09)		8082A		1	05/04/21 18:47	D1E0040	DE10322
Aroclor 1254	**3.1** (0.09)		8082A		1	05/04/21 18:47	D1E0040	DE10322
Aroclor 1260	**1.6** (0.09)		8082A		1	05/04/21 18:47	D1E0040	DE10322
Aroclor 1262	ND (0.09)		8082A		1	05/04/21 18:47	D1E0040	DE10322
Aroclor 1268	**0.4** (0.09)		8082A		1	05/04/21 18:47	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*155 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*141 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-154
Date Sampled: 04/27/21 09:00
Percent Solids: N/A
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-13
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 19:07	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 19:07	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 19:07	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 19:07	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 19:07	D1E0040	DE10322
Aroclor 1254	**2.7** (0.1)		8082A		1	05/04/21 19:07	D1E0040	DE10322
Aroclor 1260 [2C]	**P, LC 1.0** (0.1)		8082A		1	05/04/21 19:07	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 19:07	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 19:07	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*123 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*113 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-155
Date Sampled: 04/27/21 09:05
Percent Solids: N/A
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-14
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 19:27	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 19:27	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 19:27	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 19:27	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 19:27	D1E0040	DE10322
Aroclor 1254	**1.7** (0.1)		8082A		1	05/04/21 19:27	D1E0040	DE10322
Aroclor 1260	**0.5** (0.1)		8082A		1	05/04/21 19:27	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 19:27	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 19:27	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*41 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*38 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*48 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-156
Date Sampled: 04/27/21 09:10
Percent Solids: N/A
Initial Volume: 5.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-15
Sample Matrix: Solid
Units: mg/kg wet
Analyst: DMC
Prepared: 5/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/10/21 12:35	D1E0142	DE10705
Aroclor 1221	ND (0.1)		8082A		1	05/10/21 12:35	D1E0142	DE10705
Aroclor 1232	ND (0.1)		8082A		1	05/10/21 12:35	D1E0142	DE10705
Aroclor 1242	ND (0.1)		8082A		1	05/10/21 12:35	D1E0142	DE10705
Aroclor 1248	ND (0.1)		8082A		1	05/10/21 12:35	D1E0142	DE10705
Aroclor 1254 [2C]	**1.4** (0.1)		8082A		1	05/10/21 12:35	D1E0142	DE10705
Aroclor 1260 [2C]	**0.4** (0.1)		8082A		1	05/10/21 12:35	D1E0142	DE10705
Aroclor 1262	ND (0.1)		8082A		1	05/10/21 12:35	D1E0142	DE10705
Aroclor 1268	ND (0.1)		8082A		1	05/10/21 12:35	D1E0142	DE10705

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*53 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-157
Date Sampled: 04/27/21 09:15
Percent Solids: N/A
Initial Volume: 4.23
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-16
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 22:45	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 22:45	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 22:45	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 22:45	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 22:45	D1E0040	DE10322
Aroclor 1254	**3.8** (0.1)		8082A		1	05/04/21 22:45	D1E0040	DE10322
Aroclor 1260	**1.3** (0.1)		8082A		1	05/04/21 22:45	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 22:45	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 22:45	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-158
Date Sampled: 04/27/21 09:20
Percent Solids: N/A
Initial Volume: 4.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-17
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 23:05	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 23:05	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 23:05	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 23:05	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 23:05	D1E0040	DE10322
Aroclor 1254	**4.6** (0.1)		8082A		1	05/04/21 23:05	D1E0040	DE10322
Aroclor 1260 [2C]	**P, LC 1.2** (0.1)		8082A		1	05/04/21 23:05	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 23:05	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 23:05	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*114 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*103 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-159
Date Sampled: 04/27/21 09:25
Percent Solids: N/A
Initial Volume: 3.71
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-18
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 23:24	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 23:24	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 23:24	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 23:24	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 23:24	D1E0040	DE10322
Aroclor 1254 [2C]	**3.6** (0.1)		8082A		1	05/04/21 23:24	D1E0040	DE10322
Aroclor 1260 [2C]	**8.0** (0.7)		8082A		5	05/06/21 2:01	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 23:24	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 23:24	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*44 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*51 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-160
Date Sampled: 04/27/21 09:30
Percent Solids: N/A
Initial Volume: 5.21
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-19
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 23:44	D1E0040	DE10322
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 23:44	D1E0040	DE10322
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 23:44	D1E0040	DE10322
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 23:44	D1E0040	DE10322
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 23:44	D1E0040	DE10322
Aroclor 1254	**2.9** (0.1)		8082A		1	05/04/21 23:44	D1E0040	DE10322
Aroclor 1260	**8.1** (0.5)		8082A		5	05/06/21 2:21	D1E0040	DE10322
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 23:44	D1E0040	DE10322
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 23:44	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-161
Date Sampled: 04/27/21 09:35
Percent Solids: N/A
Initial Volume: 5.38
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0016
ESS Laboratory Sample ID: 21E0016-20
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 0:04	D1E0040	DE10322
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 0:04	D1E0040	DE10322
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 0:04	D1E0040	DE10322
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 0:04	D1E0040	DE10322
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 0:04	D1E0040	DE10322
Aroclor 1254	**2.9** (0.09)		8082A		1	05/05/21 0:04	D1E0040	DE10322
Aroclor 1260	**7.6** (0.5)		8082A		5	05/06/21 2:41	D1E0040	DE10322
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 0:04	D1E0040	DE10322
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 0:04	D1E0040	DE10322

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0016

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10322 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0221*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0190*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		102	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		104	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		102	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		104	40-140			
Surrogate: Decachlorobiphenyl	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0241*		mg/kg wet	*0.02500*		*96*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		101	40-140	1	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		101	40-140	3	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		101	40-140	1	30	
Aroclor 1260 [2C]	0.6	0.02	mg/kg wet	0.5000		110	40-140	6	30	
Surrogate: Decachlorobiphenyl	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
Matrix Spike **Source: 21E0016-07**										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0016

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10322 - 3540C										
Aroclor 1016	1.4	0.1	mg/kg wet	2.899	ND	49	40-140			
Aroclor 1016 [2C]	1.1	0.1	mg/kg wet	2.899	ND	38	40-140			M-
Aroclor 1260	2.0	0.1	mg/kg wet	2.899	1.3	25	40-140			M-
Aroclor 1260 [2C]	1.7	0.1	mg/kg wet	2.899	1.1	21	40-140			M-
Surrogate: Decachlorobiphenyl	*0.0825*		mg/kg wet	*0.1449*		*57*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0795*		mg/kg wet	*0.1449*		*55*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0721*		mg/kg wet	*0.1449*		*50*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0685*		mg/kg wet	*0.1449*		*47*	*30-150*			
Matrix Spike Dup Source: 21E0016-07										
Aroclor 1016	1.8	0.1	mg/kg wet	2.717	ND	68	40-140	25	30	
Aroclor 1016 [2C]	1.5	0.1	mg/kg wet	2.717	ND	56	40-140	31	30	D+
Aroclor 1260	2.9	0.1	mg/kg wet	2.717	1.3	58	40-140	36	30	D+
Aroclor 1260 [2C]	2.2	0.1	mg/kg wet	2.717	1.1	40	40-140	25	30	
Surrogate: Decachlorobiphenyl	*0.117*		mg/kg wet	*0.1359*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.111*		mg/kg wet	*0.1359*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0956*		mg/kg wet	*0.1359*		*70*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0845*		mg/kg wet	*0.1359*		*62*	*30-150*			
Batch DE10609 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
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	*0.0226*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
LCS										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0016

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10609 - 3540C										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		93	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		94	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		95	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Surrogate: Decachlorobiphenyl	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		95	40-140	2	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		96	40-140	2	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		97	40-140	2	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		93	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0259*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0241*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Batch DE10705 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0192*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0204*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
LCS										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0016

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10705 - 3540C										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		88	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		86	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		87	40-140			
Surrogate: Decachlorobiphenyl	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0209*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		93	40-140	5	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		92	40-140	0.9	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		89	40-140	3	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		87	40-140	0.6	30	
Surrogate: Decachlorobiphenyl	*0.0199*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0016

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).
M-	Matrix Spike recovery is below lower control limit (M-).
LC	Lower value is used due to matrix interferences (LC).
D+	Relative percent difference for duplicate is outside of criteria (D+).
D	Diluted.
CD+	Continuing Calibration %Diff/Drift is above control limit (CD+).
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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0016

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21E0016
Date Received: 5/3/2021
Project Due Date: 5/10/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.9 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	160868	Yes	N/A	Yes	4 oz. Jar	NP	
2	160869	Yes	N/A	Yes	4 oz. Jar	NP	
3	160870	Yes	N/A	Yes	4 oz. Jar	NP	
4	160871	Yes	N/A	Yes	4 oz. Jar	NP	
5	160872	Yes	N/A	Yes	4 oz. Jar	NP	
6	160873	Yes	N/A	Yes	4 oz. Jar	NP	
7	160874	Yes	N/A	Yes	4 oz. Jar	NP	
8	160875	Yes	N/A	Yes	4 oz. Jar	NP	
9	160876	Yes	N/A	Yes	4 oz. Jar	NP	
10	160877	Yes	N/A	Yes	4 oz. Jar	NP	
11	160878	Yes	N/A	Yes	4 oz. Jar	NP	
12	160879	Yes	N/A	Yes	4 oz. Jar	NP	
13	160880	Yes	N/A	Yes	4 oz. Jar	NP	
14	160881	Yes	N/A	Yes	4 oz. Jar	NP	
15	160882	Yes	N/A	Yes	4 oz. Jar	NP	
16	160883	Yes	N/A	Yes	4 oz. Jar	NP	

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 21E0016
Date Received: 5/3/2021

17	160884	Yes	N/A	Yes	4 oz. Jar	NP
18	160885	Yes	N/A	Yes	4 oz. Jar	NP
19	160886	Yes	N/A	Yes	4 oz. Jar	NP
20	160887	Yes	N/A	Yes	4 oz. Jar	NP

2nd Review

Were all containers scanned into storage/lab? Initials TD

Are barcode labels on correct containers? Yes / No

Are all Flashpoint stickers attached/container ID # circled? Yes / No (NA)

Are all Hex Chrome stickers attached? Yes / No / NA

Are all QC stickers attached? (Yes) / No / NA

Are VOA stickers attached if bubbles noted? Yes / No / (NA)

Completed By: [signature] Date & Time: 1815 5/3/21

Reviewed By: [signature] Date & Time: 5/3/21 1854

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21E00116

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island **Criteria:** <0.5 mg/kg

Is this project for any of the following?:

☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	MS/MSD	Total Number of Bottles
1	4/27/21	8:00 am	Grab	Solid	PS-142	X		
2		8:05 am			PS-143	X		
3		8:10 am			PS-144	X		
4		8:15 am			PS-145	X		
5		8:20 am			PS-146	X		
6		8:25 am			PS-147	X		
7		8:30 am			PS-148	X	X	
8		8:35 am			PS-149	X		
9		8:40 am			PS-150	X		
10		8:45 am			PS-151	X		
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial					AG		
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					9		
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					11		

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only

Cooler Temperature (°C): 3.9
Ice

Comments: * Please specify "Other" preservative and containers types in this space

National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration

☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Dana Thomann	4/30/21	1:01 pm	5/3/21 12:11		5/3/21	16:44	Taylor Davis 5/3/21 16:44

ESS LABORATORY
185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21E0016 | Page 2 of 10

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island **Criteria:** <0.5 mg/kg

Is this project for any of the following?:
☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	Total Number of Bottles
11	4/27/21	8:50 am	Grab	Solid	PS-152	X	
12		8:55 am			PS-153	X	
13		9:00 am			PS-154	X	
14		9:05 am			PS-155	X	
15		9:10 am			PS-156	X	
16		9:15 am			PS-157	X	
17		9:20 am			PS-158	X	
18		9:25 am			PS-159	X	
19		9:30 am			PS-160	X	
20	↓	9:35 am	↓	↓	PS-161	X	
						AG	
						9	
						11	

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.9
Ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Dan Shannon	4/30/21	1:01 pm	5/3/21 12:11		5/3/21	16:44	Taylor Davis 5/3/21 16:44

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 21E0017

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 3:27 pm, May 10, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0017

SAMPLE RECEIPT

The following samples were received on May 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21E0017-01	PS-162	Solid	8082A
21E0017-02	PS-163	Solid	8082A
21E0017-03	PS-164	Solid	8082A
21E0017-04	PS-165	Solid	8082A
21E0017-05	PS-166	Solid	8082A
21E0017-06	PS-167	Solid	8082A
21E0017-07	PS-168	Solid	8082A
21E0017-08	PS-169	Solid	8082A
21E0017-09	PS-170	Solid	8082A
21E0017-10	PS-171	Solid	8082A
21E0017-11	PS-172	Solid	8082A
21E0017-12	PS-173	Solid	8082A
21E0017-13	PS-174	Solid	8082A
21E0017-14	PS-175	Solid	8082A
21E0017-15	PS-176	Solid	8082A
21E0017-16	PS-177	Solid	8082A
21E0017-17	PS-178	Solid	8082A
21E0017-18	PS-179	Solid	8082A
21E0017-19	PS-180	Solid	8082A
21E0017-20	PS-181	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0017

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

21E0017-05	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl [2C] (155% @ 30-150%)
21E0017-07	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1262 [2C]
21E0017-07	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1262 [2C]
21E0017-08	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (216% @ 30-150%), Decachlorobiphenyl [2C] (247% @ 30-150%)
21E0017-09	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1262 [2C]
21E0017-09	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1262 [2C]
21E0017-12	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (740% @ 30-150%), Decachlorobiphenyl [2C] (827% @ 30-150%)
21E0017-13	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (1130% @ 30-150%), Decachlorobiphenyl [2C] (1240% @ 30-150%)
21E0017-16	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (161% @ 30-150%), Decachlorobiphenyl [2C] (182% @ 30-150%)
21E0017-17	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (153% @ 30-150%), Decachlorobiphenyl [2C] (167% @ 30-150%)
21E0017-19	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1262 [2C]
21E0017-19	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1262 [2C]
21E0017-20	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1262 [2C]
21E0017-20	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1262 [2C]
D1E0123-CCV4	**Continuing Calibration %Diff/Drift is above control limit (CD+).**
	Aroclor 1232 (21% @ 20%), Aroclor 1232 [2C] (22% @ 20%)
DE10323-MS2	**Reported above the quantitation limit; Estimated value (E).**
	Aroclor 1260 , Aroclor 1260 [2C]
DE10323-MS2	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (174% @ 30-150%), Decachlorobiphenyl [2C] (198% @ 30-150%)
DE10323-MSD2	**Reported above the quantitation limit; Estimated value (E).**
	Aroclor 1260 , Aroclor 1260 [2C]
DE10323-MSD2	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (164% @ 30-150%), Decachlorobiphenyl [2C] (182% @ 30-150%)

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0017

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

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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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0017

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-162
Date Sampled: 04/27/21 09:40
Percent Solids: N/A
Initial Volume: 5.28
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/04/21 14:23	D1E0039	DE10323
Aroclor 1221	ND (0.09)		8082A		1	05/04/21 14:23	D1E0039	DE10323
Aroclor 1232	ND (0.09)		8082A		1	05/04/21 14:23	D1E0039	DE10323
Aroclor 1242	ND (0.09)		8082A		1	05/04/21 14:23	D1E0039	DE10323
Aroclor 1248	ND (0.09)		8082A		1	05/04/21 14:23	D1E0039	DE10323
Aroclor 1254	**2.0** (0.09)		8082A		1	05/04/21 14:23	D1E0039	DE10323
Aroclor 1260 [2C]	**4.6** (0.2)		8082A		2	05/06/21 3:17	D1E0039	DE10323
Aroclor 1262	ND (0.09)		8082A		1	05/04/21 14:23	D1E0039	DE10323
Aroclor 1268	ND (0.09)		8082A		1	05/04/21 14:23	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*108 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-163
Date Sampled: 04/27/21 09:45
Percent Solids: N/A
Initial Volume: 5.38
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/04/21 14:42	D1E0039	DE10323
Aroclor 1221	ND (0.09)		8082A		1	05/04/21 14:42	D1E0039	DE10323
Aroclor 1232	ND (0.09)		8082A		1	05/04/21 14:42	D1E0039	DE10323
Aroclor 1242	ND (0.09)		8082A		1	05/04/21 14:42	D1E0039	DE10323
Aroclor 1248	ND (0.09)		8082A		1	05/04/21 14:42	D1E0039	DE10323
Aroclor 1254	**1.2** (0.09)		8082A		1	05/04/21 14:42	D1E0039	DE10323
Aroclor 1260	ND (0.09)		8082A		1	05/04/21 14:42	D1E0039	DE10323
Aroclor 1262	**1.2** (0.09)		8082A		1	05/04/21 14:42	D1E0039	DE10323
Aroclor 1268	ND (0.09)		8082A		1	05/04/21 14:42	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*36 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*39 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*32 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*38 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-164
Date Sampled: 04/27/21 09:50
Percent Solids: N/A
Initial Volume: 5.19
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 15:02	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 15:02	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 15:02	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 15:02	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 15:02	D1E0039	DE10323
Aroclor 1254	**4.5** (0.2)		8082A		2	05/06/21 3:37	D1E0039	DE10323
Aroclor 1260	ND (0.1)		8082A		1	05/04/21 15:02	D1E0039	DE10323
Aroclor 1262	**4.7** (0.2)		8082A		2	05/06/21 3:37	D1E0039	DE10323
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 15:02	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-165
Date Sampled: 04/27/21 09:55
Percent Solids: N/A
Initial Volume: 5.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 15:21	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 15:21	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 15:21	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 15:21	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 15:21	D1E0039	DE10323
Aroclor 1254	**2.3** (0.1)		8082A		1	05/04/21 15:21	D1E0039	DE10323
Aroclor 1260	ND (0.1)		8082A		1	05/04/21 15:21	D1E0039	DE10323
Aroclor 1262	**2.7** (0.1)		8082A		1	05/04/21 15:21	D1E0039	DE10323
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 15:21	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*128 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*143 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-166
Date Sampled: 04/27/21 10:00
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 15:41	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 15:41	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 15:41	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 15:41	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 15:41	D1E0039	DE10323
Aroclor 1254	**2.2** (0.1)		8082A		1	05/04/21 15:41	D1E0039	DE10323
Aroclor 1260	ND (0.1)		8082A		1	05/04/21 15:41	D1E0039	DE10323
Aroclor 1262	**2.8** (0.1)		8082A		1	05/04/21 15:41	D1E0039	DE10323
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 15:41	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*141 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*155 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-167
Date Sampled: 04/28/21 08:00
Percent Solids: N/A
Initial Volume: 0.88
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: DMC
Prepared: 5/6/21 16:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.6)		8082A		1	05/08/21 1:59	D1E0123	DE10609
Aroclor 1221	ND (0.6)		8082A		1	05/08/21 1:59	D1E0123	DE10609
Aroclor 1232	ND (0.6)		8082A		1	05/08/21 1:59	D1E0123	DE10609
Aroclor 1242	ND (0.6)		8082A		1	05/08/21 1:59	D1E0123	DE10609
Aroclor 1248	ND (0.6)		8082A		1	05/08/21 1:59	D1E0123	DE10609
Aroclor 1254 [2C]	**4.4** (0.6)		8082A		1	05/08/21 1:59	D1E0123	DE10609
Aroclor 1260 [2C]	**5.8** (0.6)		8082A		1	05/08/21 1:59	D1E0123	DE10609
Aroclor 1262	ND (0.6)		8082A		1	05/08/21 1:59	D1E0123	DE10609
Aroclor 1268	ND (0.6)		8082A		1	05/08/21 1:59	D1E0123	DE10609

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*64 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-168
Date Sampled: 04/28/21 08:05
Percent Solids: N/A
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 16:19	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 16:19	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 16:19	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 16:19	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 16:19	D1E0039	DE10323
Aroclor 1254	**3.2** (0.1)		8082A		1	05/04/21 16:19	D1E0039	DE10323
Aroclor 1260	ND (0.1)		8082A		1	05/04/21 16:19	D1E0039	DE10323
Aroclor 1262 [2C]	**P, LC 6.5** (0.4)		8082A		4	05/07/21 17:39	D1E0039	DE10323
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 16:19	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*64 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-169
Date Sampled: 04/28/21 08:10
Percent Solids: N/A
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 16:39	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 16:39	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 16:39	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 16:39	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 16:39	D1E0039	DE10323
Aroclor 1254	**3.5** (0.1)		8082A		1	05/04/21 16:39	D1E0039	DE10323
Aroclor 1260 [2C]	**4.1** (0.2)		8082A		2	05/06/21 4:17	D1E0039	DE10323
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 16:39	D1E0039	DE10323
Aroclor 1268 [2C]	**1.3** (0.1)		8082A		1	05/04/21 16:39	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*216 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*247 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-170
Date Sampled: 04/28/21 08:15
Percent Solids: N/A
Initial Volume: 1.65
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	05/04/21 17:37	D1E0039	DE10323
Aroclor 1221	ND (0.3)		8082A		1	05/04/21 17:37	D1E0039	DE10323
Aroclor 1232	ND (0.3)		8082A		1	05/04/21 17:37	D1E0039	DE10323
Aroclor 1242	ND (0.3)		8082A		1	05/04/21 17:37	D1E0039	DE10323
Aroclor 1248	ND (0.3)		8082A		1	05/04/21 17:37	D1E0039	DE10323
Aroclor 1254	**2.2** (0.3)		8082A		1	05/04/21 17:37	D1E0039	DE10323
Aroclor 1260	ND (0.3)		8082A		1	05/04/21 17:37	D1E0039	DE10323
Aroclor 1262 [2C]	**P, LC 1.8** (0.3)		8082A		1	05/04/21 17:37	D1E0039	DE10323
Aroclor 1268	ND (0.3)		8082A		1	05/04/21 17:37	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*109 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*101 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-171
Date Sampled: 04/28/21 08:20
Percent Solids: N/A
Initial Volume: 5.25
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 17:56	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 17:56	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 17:56	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 17:56	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 17:56	D1E0039	DE10323
Aroclor 1254	**1.7** (0.1)		8082A		1	05/04/21 17:56	D1E0039	DE10323
Aroclor 1260	ND (0.1)		8082A		1	05/04/21 17:56	D1E0039	DE10323
Aroclor 1262 [2C]	**0.9** (0.1)		8082A		1	05/04/21 17:56	D1E0039	DE10323
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 17:56	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-172
Date Sampled: 04/28/21 08:25
Percent Solids: N/A
Initial Volume: 5.19
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-11
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 18:15	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 18:15	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 18:15	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 18:15	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 18:15	D1E0039	DE10323
Aroclor 1254	**2.9** (0.1)		8082A		1	05/04/21 18:15	D1E0039	DE10323
Aroclor 1260	ND (0.1)		8082A		1	05/04/21 18:15	D1E0039	DE10323
Aroclor 1262	**1.6** (0.1)		8082A		1	05/04/21 18:15	D1E0039	DE10323
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 18:15	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*120 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*128 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-173
Date Sampled: 04/28/21 08:30
Percent Solids: N/A
Initial Volume: 4.58
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-12
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 18:35	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 18:35	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 18:35	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 18:35	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 18:35	D1E0039	DE10323
Aroclor 1254	**1.7** (0.1)		8082A		1	05/04/21 18:35	D1E0039	DE10323
Aroclor 1260 [2C]	**1.4** (0.1)		8082A		1	05/04/21 18:35	D1E0039	DE10323
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 18:35	D1E0039	DE10323
Aroclor 1268 [2C]	**1.7** (0.1)		8082A		1	05/04/21 18:35	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*740 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*827 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*64 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-174
Date Sampled: 04/28/21 08:35
Percent Solids: N/A
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-13
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 18:55	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 18:55	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 18:55	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 18:55	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 18:55	D1E0039	DE10323
Aroclor 1254	**2.3** (0.1)		8082A		1	05/04/21 18:55	D1E0039	DE10323
Aroclor 1260 [2C]	**2.1** (0.1)		8082A		1	05/04/21 18:55	D1E0039	DE10323
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 18:55	D1E0039	DE10323
Aroclor 1268 [2C]	**2.4** (0.1)		8082A		1	05/04/21 18:55	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*1130 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*1240 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-175
Date Sampled: 04/28/21 08:40
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-14
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 19:14	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 19:14	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 19:14	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 19:14	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 19:14	D1E0039	DE10323
Aroclor 1254	**7.8** (0.5)		8082A		5	05/06/21 4:57	D1E0039	DE10323
Aroclor 1260 [2C]	**6.6** (0.5)		8082A		5	05/06/21 4:57	D1E0039	DE10323
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 19:14	D1E0039	DE10323
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 19:14	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*83 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-176
Date Sampled: 04/28/21 08:45
Percent Solids: N/A
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-15
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 19:34	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 19:34	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 19:34	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 19:34	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 19:34	D1E0039	DE10323
Aroclor 1254	**3.2** (0.1)		8082A		1	05/04/21 19:34	D1E0039	DE10323
Aroclor 1260	ND (0.1)		8082A		1	05/04/21 19:34	D1E0039	DE10323
Aroclor 1262	**2.6** (0.1)		8082A		1	05/04/21 19:34	D1E0039	DE10323
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 19:34	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-177
Date Sampled: 04/28/21 08:50
Percent Solids: N/A
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-16
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 22:32	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 22:32	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 22:32	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 22:32	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 22:32	D1E0039	DE10323
Aroclor 1254	**2.7** (0.1)		8082A		1	05/04/21 22:32	D1E0039	DE10323
Aroclor 1260	**5.7** (0.5)		8082A		5	05/06/21 4:37	D1E0039	DE10323
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 22:32	D1E0039	DE10323
Aroclor 1268 [2C]	**2.8** (0.1)		8082A		1	05/04/21 22:32	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*161 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*182 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-178
Date Sampled: 04/28/21 08:55
Percent Solids: N/A
Initial Volume: 5.28
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-17
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/04/21 23:30	D1E0039	DE10323
Aroclor 1221	ND (0.09)		8082A		1	05/04/21 23:30	D1E0039	DE10323
Aroclor 1232	ND (0.09)		8082A		1	05/04/21 23:30	D1E0039	DE10323
Aroclor 1242	ND (0.09)		8082A		1	05/04/21 23:30	D1E0039	DE10323
Aroclor 1248	ND (0.09)		8082A		1	05/04/21 23:30	D1E0039	DE10323
Aroclor 1254	**2.8** (0.09)		8082A		1	05/04/21 23:30	D1E0039	DE10323
Aroclor 1260	**7.9** (0.5)		8082A		5	05/06/21 5:17	D1E0039	DE10323
Aroclor 1262	ND (0.09)		8082A		1	05/04/21 23:30	D1E0039	DE10323
Aroclor 1268	**2.4** (0.09)		8082A		1	05/04/21 23:30	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*153 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*167 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-179
Date Sampled: 04/28/21 09:00
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-18
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 23:49	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 23:49	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 23:49	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 23:49	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 23:49	D1E0039	DE10323
Aroclor 1254	**2.5** (0.1)		8082A		1	05/04/21 23:49	D1E0039	DE10323
Aroclor 1260	**8.1** (0.5)		8082A		5	05/06/21 5:36	D1E0039	DE10323
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 23:49	D1E0039	DE10323
Aroclor 1268 [2C]	**1.9** (0.1)		8082A		1	05/04/21 23:49	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-180
Date Sampled: 04/28/21 09:05
Percent Solids: N/A
Initial Volume: 5.19
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-19
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 0:09	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 0:09	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 0:09	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 0:09	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 0:09	D1E0039	DE10323
Aroclor 1254	**2.4** (0.1)		8082A		1	05/05/21 0:09	D1E0039	DE10323
Aroclor 1260	ND (0.1)		8082A		1	05/05/21 0:09	D1E0039	DE10323
Aroclor 1262 [2C]	**P, LC 5.4** (0.5)		8082A		5	05/06/21 5:56	D1E0039	DE10323
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 0:09	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-181
Date Sampled: 04/28/21 09:10
Percent Solids: N/A
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0017
ESS Laboratory Sample ID: 21E0017-20
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 0:29	D1E0039	DE10323
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 0:29	D1E0039	DE10323
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 0:29	D1E0039	DE10323
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 0:29	D1E0039	DE10323
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 0:29	D1E0039	DE10323
Aroclor 1254	**3.8** (0.1)		8082A		1	05/05/21 0:29	D1E0039	DE10323
Aroclor 1260	ND (0.1)		8082A		1	05/05/21 0:29	D1E0039	DE10323
Aroclor 1262 [2C]	**P, LC 3.7** (0.5)		8082A		5	05/06/21 6:16	D1E0039	DE10323
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 0:29	D1E0039	DE10323

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0017

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10323 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0246*		mg/kg wet	*0.02500*		*99*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		87	40-140			
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Surrogate: Decachlorobiphenyl	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0205*		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	0.4	0.02	mg/kg wet	0.5000		88	40-140	4	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		90	40-140	2	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		86	40-140	0.4	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		85	40-140	0.05	30	
Surrogate: Decachlorobiphenyl	*0.0204*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
Matrix Spike **Source: 21E0017-09**										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0017

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10323 - 3540C										
Aroclor 1016	4.9	0.3	mg/kg wet	6.061	ND	81	40-140			
Aroclor 1016 [2C]	4.7	0.3	mg/kg wet	6.061	ND	77	40-140			
Aroclor 1260	6.0	0.3	mg/kg wet	6.061	ND	100	40-140			
Aroclor 1260 [2C]	5.9	0.3	mg/kg wet	6.061	ND	98	40-140			
Surrogate: Decachlorobiphenyl	*0.284*		mg/kg wet	*0.3030*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.309*		mg/kg wet	*0.3030*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.241*		mg/kg wet	*0.3030*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.271*		mg/kg wet	*0.3030*		*89*	*30-150*			
Matrix Spike Source: 21E0017-16										
Aroclor 1016	2.8	0.1	mg/kg wet	1.992	ND	138	40-140			
Aroclor 1016 [2C]	2.1	0.1	mg/kg wet	1.992	ND	105	40-140			
Aroclor 1260	7.6	0.1	mg/kg wet	1.992	5.7	97	40-140			E
Aroclor 1260 [2C]	6.9	0.1	mg/kg wet	1.992	5.3	84	40-140			E
Surrogate: Decachlorobiphenyl	*0.173*		mg/kg wet	*0.09960*		*174*	*30-150*			*SM*
Surrogate: Decachlorobiphenyl [2C]	*0.198*		mg/kg wet	*0.09960*		*198*	*30-150*			*SM*
Surrogate: Tetrachloro-m-xylene	*0.0876*		mg/kg wet	*0.09960*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0970*		mg/kg wet	*0.09960*		*97*	*30-150*			
Matrix Spike Dup Source: 21E0017-09										
Aroclor 1016	5.2	0.3	mg/kg wet	5.814	ND	90	40-140	7	30	
Aroclor 1016 [2C]	4.7	0.3	mg/kg wet	5.814	ND	82	40-140	2	30	
Aroclor 1260	7.9	0.3	mg/kg wet	5.814	ND	135	40-140	27	30	
Aroclor 1260 [2C]	7.2	0.3	mg/kg wet	5.814	ND	123	40-140	19	30	
Surrogate: Decachlorobiphenyl	*0.324*		mg/kg wet	*0.2907*		*112*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.354*		mg/kg wet	*0.2907*		*122*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.240*		mg/kg wet	*0.2907*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.271*		mg/kg wet	*0.2907*		*93*	*30-150*			
Matrix Spike Dup Source: 21E0017-16										
Aroclor 1016	2.6	0.1	mg/kg wet	1.946	ND	134	40-140	5	30	
Aroclor 1016 [2C]	1.9	0.1	mg/kg wet	1.946	ND	99	40-140	8	30	
Aroclor 1260	7.0	0.1	mg/kg wet	1.946	5.7	68	40-140	8	30	E
Aroclor 1260 [2C]	6.4	0.1	mg/kg wet	1.946	5.3	58	40-140	8	30	E
Surrogate: Decachlorobiphenyl	*0.160*		mg/kg wet	*0.09728*		*164*	*30-150*			*SM*
Surrogate: Decachlorobiphenyl [2C]	*0.177*		mg/kg wet	*0.09728*		*182*	*30-150*			*SM*
Surrogate: Tetrachloro-m-xylene	*0.0825*		mg/kg wet	*0.09728*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0919*		mg/kg wet	*0.09728*		*94*	*30-150*			
Batch DE10609 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0017

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10609 - 3540C										
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
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	*0.0226*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		93	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		94	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		95	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Surrogate: Decachlorobiphenyl	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		95	40-140	2	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		96	40-140	2	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		97	40-140	2	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		93	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0259*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0241*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0017

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).
LC	Lower value is used due to matrix interferences (LC).
E	Reported above the quantitation limit; Estimated value (E).
D	Diluted.
CD+	Continuing Calibration %Diff/Drift is above control limit (CD+).
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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0017

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21E0017
Date Received: 5/3/2021
Project Due Date: 5/10/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.9 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	160888	Yes	N/A	Yes	4 oz. Jar	NP	
2	160889	Yes	N/A	Yes	4 oz. Jar	NP	
3	160890	Yes	N/A	Yes	4 oz. Jar	NP	
4	160891	Yes	N/A	Yes	4 oz. Jar	NP	
5	160892	Yes	N/A	Yes	4 oz. Jar	NP	
6	160893	Yes	N/A	Yes	4 oz. Jar	NP	
7	160894	Yes	N/A	Yes	4 oz. Jar	NP	
8	160895	Yes	N/A	Yes	4 oz. Jar	NP	
9	160896	Yes	N/A	Yes	4 oz. Jar	NP	
10	160897	Yes	N/A	Yes	4 oz. Jar	NP	
11	160898	Yes	N/A	Yes	4 oz. Jar	NP	
12	160899	Yes	N/A	Yes	4 oz. Jar	NP	
13	160900	Yes	N/A	Yes	4 oz. Jar	NP	
14	160901	Yes	N/A	Yes	4 oz. Jar	NP	
15	160902	Yes	N/A	Yes	4 oz. Jar	NP	
16	160903	Yes	N/A	Yes	4 oz. Jar	NP	

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 21E0017
Date Received: 5/3/2021

17	160904	Yes	N/A	Yes	4 oz. Jar	NP
18	160905	Yes	N/A	Yes	4 oz. Jar	NP
19	160906	Yes	N/A	Yes	4 oz. Jar	NP
20	160907	Yes	N/A	Yes	4 oz. Jar	NP

2nd Review

Initials

Were all containers scanned into storage/lab? Yes / No
Are barcode labels on correct containers? Yes / No / NA
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted?

Completed By: Taylor Powers Date & Time: 1811 5/3/21

Reviewed By: Date & Time: 5/3/21 1856

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 216017 | Page 3X of XX

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island **Criteria:** <0.5 mg/kg

Is this project for any of the following?: ☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	MS	MSD	Total Number of Bottles
1	4/27/21	9:40 am	Grab	Solid	PS-162	X			
2		9:45 am			PS-163	X			
3		9:50 am			PS-164	X			
4		9:55 am			PS-165	X			
5		~~9:55~~ 10:00 am			PS-166	X			
6	4/28/21	8:00 am			PS-167	X			
7		8:05 am			PS-168	X			
8		8:10 am			PS-169	X			
9		8:15 am			PS-170	X	X		
10		8:20 am			PS-171	X			
Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial						AG			
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*						9			
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*						11			

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.9
1 Ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Dan DiFrancesco	4/30/21	1:01 pm	5/3/21 12:11		5/3/21	16:44	Taylor Davis 5/3/21 16:44

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21E0017 | Page 4 of 19

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island Criteria: <0.5 mg/kg

Is this project for any of the following?: ☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	MS/MSD	Total Number of Bottles
11	4/28/21	8:25 am	Grab	Solid	PS-172	X		
12		8:30 am			PS-173	X		
13		8:35 am			PS-174	X		
14		8:40 am			PS-175	X		
15		8:45 am			PS-176	X		
16		8:50 am			PS-177	X	X	
17		8:55 am			PS-178	X		
18		9:00 am			PS-179	X		
19		9:05 am			PS-180	X		
20		9:10 am			PS-181	X		
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial					AG		
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					9		
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					11		

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only

Cooler Temperature (°C): 3.9 1 Ice

Comments: * Please specify "Other" preservative and containers types in this space

National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration: ☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Daniel D'Ammura	4/30/21	1:01 PM	5/3/21 12:11		5/3/21	16:44	5/3/21 16:44
Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 21E0018

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 3:29 pm, May 10, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0018

SAMPLE RECEIPT

The following samples were received on May 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21E0018-01	PS-182	Solid	8082A
21E0018-02	PS-183	Solid	8082A
21E0018-03	PS-184	Solid	8082A
21E0018-04	PS-185	Solid	8082A
21E0018-05	PS-186	Solid	8082A
21E0018-06	PS-187	Solid	8082A
21E0018-07	PS-188	Solid	8082A
21E0018-08	PS-189	Solid	8082A
21E0018-09	PS-190	Solid	8082A
21E0018-10	PS-191	Solid	8082A
21E0018-11	PS-192	Solid	8082A
21E0018-12	PS-193	Solid	8082A
21E0018-13	PS-194	Solid	8082A
21E0018-14	PS-195	Solid	8082A
21E0018-15	PS-196	Solid	8082A
21E0018-16	PS-197	Solid	8082A
21E0018-17	PS-198	Solid	8082A
21E0018-18	PS-199	Solid	8082A
21E0018-19	PS-200	Solid	8082A
21E0018-20	PS-201	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0018

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

21E0018-01	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1262 [2C]
21E0018-01	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1262 [2C]
21E0018-14	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1254 [2C]
21E0018-14	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1254 [2C]
21E0018-14	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (205% @ 30-150%), Decachlorobiphenyl [2C] (242% @ 30-150%)
21E0018-15	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1254 [2C]
21E0018-15	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1254 [2C]
21E0018-15	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (1180% @ 30-150%), Decachlorobiphenyl [2C] (833% @ 30-150%)
21E0018-16	**Surrogate recovery(ies) below lower control limit (S-).**
	Tetrachloro-m-xylene (29% @ 30-150%)
D1E0123-CCV4	**Continuing Calibration %Diff/Drift is above control limit (CD+).**
	Aroclor 1232 (21% @ 20%), Aroclor 1232 [2C] (22% @ 20%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0018

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-182
Date Sampled: 04/28/21 09:15
Percent Solids: N/A
Initial Volume: 5.54
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 15:00	D1E0067	DE10404
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 15:00	D1E0067	DE10404
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 15:00	D1E0067	DE10404
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 15:00	D1E0067	DE10404
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 15:00	D1E0067	DE10404
Aroclor 1254	**2.0** (0.09)		8082A		1	05/05/21 15:00	D1E0067	DE10404
Aroclor 1260	ND (0.09)		8082A		1	05/05/21 15:00	D1E0067	DE10404
Aroclor 1262 [2C]	**P, LC 3.2** (0.2)		8082A		2	05/07/21 15:20	D1E0067	DE10404
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 15:00	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-183
Date Sampled: 04/28/21 09:20
Percent Solids: N/A
Initial Volume: 5.22
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 15:20	D1E0067	DE10404
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 15:20	D1E0067	DE10404
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 15:20	D1E0067	DE10404
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 15:20	D1E0067	DE10404
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 15:20	D1E0067	DE10404
Aroclor 1254	**1.4** (0.1)		8082A		1	05/05/21 15:20	D1E0067	DE10404
Aroclor 1260 [2C]	**2.7** (0.1)		8082A		1	05/05/21 15:20	D1E0067	DE10404
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 15:20	D1E0067	DE10404
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 15:20	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-184
Date Sampled: 04/28/21 09:25
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 15:40	D1E0067	DE10404
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 15:40	D1E0067	DE10404
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 15:40	D1E0067	DE10404
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 15:40	D1E0067	DE10404
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 15:40	D1E0067	DE10404
Aroclor 1254	**0.9** (0.1)		8082A		1	05/05/21 15:40	D1E0067	DE10404
Aroclor 1260 [2C]	**1.5** (0.1)		8082A		1	05/05/21 15:40	D1E0067	DE10404
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 15:40	D1E0067	DE10404
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 15:40	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-185
Date Sampled: 04/28/21 09:30
Percent Solids: N/A
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 16:40	D1E0067	DE10404
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 16:40	D1E0067	DE10404
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 16:40	D1E0067	DE10404
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 16:40	D1E0067	DE10404
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 16:40	D1E0067	DE10404
Aroclor 1254	**3.4** (0.1)		8082A		1	05/05/21 16:40	D1E0067	DE10404
Aroclor 1260 [2C]	**5.3** (0.2)		8082A		2	05/07/21 15:40	D1E0067	DE10404
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 16:40	D1E0067	DE10404
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 16:40	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-186
Date Sampled: 04/28/21 09:35
Percent Solids: N/A
Initial Volume: 5.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 17:00	D1E0067	DE10404
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 17:00	D1E0067	DE10404
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 17:00	D1E0067	DE10404
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 17:00	D1E0067	DE10404
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 17:00	D1E0067	DE10404
Aroclor 1254	**3.2** (0.09)		8082A		1	05/05/21 17:00	D1E0067	DE10404
Aroclor 1260 [2C]	**5.5** (0.2)		8082A		2	05/07/21 16:00	D1E0067	DE10404
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 17:00	D1E0067	DE10404
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 17:00	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*62 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-187
Date Sampled: 04/28/21 09:40
Percent Solids: N/A
Initial Volume: 5.56
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 19:59	D1E0067	DE10404
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 19:59	D1E0067	DE10404
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 19:59	D1E0067	DE10404
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 19:59	D1E0067	DE10404
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 19:59	D1E0067	DE10404
Aroclor 1254	**5.2** (0.4)		8082A		5	05/07/21 16:20	D1E0067	DE10404
Aroclor 1260 [2C]	**8.9** (0.4)		8082A		5	05/07/21 16:20	D1E0067	DE10404
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 19:59	D1E0067	DE10404
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 19:59	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-188
Date Sampled: 04/28/21 09:45
Percent Solids: N/A
Initial Volume: 5.21
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 20:19	D1E0067	DE10404
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 20:19	D1E0067	DE10404
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 20:19	D1E0067	DE10404
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 20:19	D1E0067	DE10404
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 20:19	D1E0067	DE10404
Aroclor 1254	**5.4** (0.5)		8082A		5	05/07/21 16:39	D1E0067	DE10404
Aroclor 1260 [2C]	**8.4** (0.5)		8082A		5	05/07/21 16:39	D1E0067	DE10404
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 20:19	D1E0067	DE10404
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 20:19	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*73 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-189
Date Sampled: 04/28/21 09:50
Percent Solids: N/A
Initial Volume: 5.33
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 20:39	D1E0067	DE10404
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 20:39	D1E0067	DE10404
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 20:39	D1E0067	DE10404
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 20:39	D1E0067	DE10404
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 20:39	D1E0067	DE10404
Aroclor 1254	**2.9** (0.09)		8082A		1	05/05/21 20:39	D1E0067	DE10404
Aroclor 1260 [2C]	**10.0** (0.5)		8082A		5	05/07/21 16:59	D1E0067	DE10404
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 20:39	D1E0067	DE10404
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 20:39	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-190
Date Sampled: 04/28/21 09:55
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 20:59	D1E0067	DE10404
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 20:59	D1E0067	DE10404
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 20:59	D1E0067	DE10404
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 20:59	D1E0067	DE10404
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 20:59	D1E0067	DE10404
Aroclor 1254	**2.5** (0.1)		8082A		1	05/05/21 20:59	D1E0067	DE10404
Aroclor 1260 [2C]	**9.2** (0.5)		8082A		5	05/07/21 17:19	D1E0067	DE10404
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 20:59	D1E0067	DE10404
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 20:59	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-191
Date Sampled: 04/28/21 10:00
Percent Solids: N/A
Initial Volume: 5.64
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 21:19	D1E0067	DE10404
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 21:19	D1E0067	DE10404
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 21:19	D1E0067	DE10404
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 21:19	D1E0067	DE10404
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 21:19	D1E0067	DE10404
Aroclor 1254	**1.1** (0.09)		8082A		1	05/05/21 21:19	D1E0067	DE10404
Aroclor 1260 [2C]	**2.0** (0.09)		8082A		1	05/05/21 21:19	D1E0067	DE10404
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 21:19	D1E0067	DE10404
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 21:19	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-192
Date Sampled: 04/28/21 10:05
Percent Solids: N/A
Initial Volume: 5.14
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-11
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 21:39	D1E0067	DE10404
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 21:39	D1E0067	DE10404
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 21:39	D1E0067	DE10404
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 21:39	D1E0067	DE10404
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 21:39	D1E0067	DE10404
Aroclor 1254	**1.4** (0.1)		8082A		1	05/05/21 21:39	D1E0067	DE10404
Aroclor 1260 [2C]	**2.2** (0.1)		8082A		1	05/05/21 21:39	D1E0067	DE10404
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 21:39	D1E0067	DE10404
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 21:39	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-193
Date Sampled: 04/28/21 10:10
Percent Solids: N/A
Initial Volume: 3.65
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-12
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 21:59	D1E0067	DE10404
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 21:59	D1E0067	DE10404
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 21:59	D1E0067	DE10404
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 21:59	D1E0067	DE10404
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 21:59	D1E0067	DE10404
Aroclor 1254	**2.7** (0.1)		8082A		1	05/05/21 21:59	D1E0067	DE10404
Aroclor 1260 [2C]	**3.8** (0.1)		8082A		1	05/05/21 21:59	D1E0067	DE10404
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 21:59	D1E0067	DE10404
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 21:59	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-194
Date Sampled: 04/28/21 10:15
Percent Solids: N/A
Initial Volume: 2.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-13
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	05/05/21 22:19	D1E0067	DE10404
Aroclor 1221	ND (0.2)		8082A		1	05/05/21 22:19	D1E0067	DE10404
Aroclor 1232	ND (0.2)		8082A		1	05/05/21 22:19	D1E0067	DE10404
Aroclor 1242	ND (0.2)		8082A		1	05/05/21 22:19	D1E0067	DE10404
Aroclor 1248	ND (0.2)		8082A		1	05/05/21 22:19	D1E0067	DE10404
Aroclor 1254	**3.6** (0.2)		8082A		1	05/05/21 22:19	D1E0067	DE10404
Aroclor 1260 [2C]	**5.7** (0.2)		8082A		1	05/05/21 22:19	D1E0067	DE10404
Aroclor 1262	ND (0.2)		8082A		1	05/05/21 22:19	D1E0067	DE10404
Aroclor 1268	ND (0.2)		8082A		1	05/05/21 22:19	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-195
Date Sampled: 04/28/21 10:20
Percent Solids: N/A
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-14
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 22:38	D1E0067	DE10404
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 22:38	D1E0067	DE10404
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 22:38	D1E0067	DE10404
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 22:38	D1E0067	DE10404
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 22:38	D1E0067	DE10404
Aroclor 1254 [2C]	**P, LC 0.3** (0.1)		8082A		1	05/05/21 22:38	D1E0067	DE10404
Aroclor 1260 [2C]	**0.3** (0.1)		8082A		1	05/05/21 22:38	D1E0067	DE10404
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 22:38	D1E0067	DE10404
Aroclor 1268 [2C]	**0.3** (0.1)		8082A		1	05/05/21 22:38	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*205 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*242 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*32 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*36 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-196
Date Sampled: 04/28/21 10:25
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-15
Sample Matrix: Solid
Units: mg/kg wet
Analyst: DMC
Prepared: 5/6/21 16:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/08/21 2:18	D1E0123	DE10609
Aroclor 1221	ND (0.1)		8082A		1	05/08/21 2:18	D1E0123	DE10609
Aroclor 1232	ND (0.1)		8082A		1	05/08/21 2:18	D1E0123	DE10609
Aroclor 1242	ND (0.1)		8082A		1	05/08/21 2:18	D1E0123	DE10609
Aroclor 1248	ND (0.1)		8082A		1	05/08/21 2:18	D1E0123	DE10609
Aroclor 1254 [2C]	**P, LC 0.4** (0.1)		8082A		1	05/08/21 2:18	D1E0123	DE10609
Aroclor 1260 [2C]	**0.6** (0.1)		8082A		1	05/08/21 2:18	D1E0123	DE10609
Aroclor 1262	ND (0.1)		8082A		1	05/08/21 2:18	D1E0123	DE10609
Aroclor 1268	**1.6** (0.1)		8082A		1	05/08/21 2:18	D1E0123	DE10609

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*1180 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*833 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*37 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*39 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-197
Date Sampled: 04/28/21 10:30
Percent Solids: N/A
Initial Volume: 5.43
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-16
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 23:18	D1E0067	DE10404
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 23:18	D1E0067	DE10404
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 23:18	D1E0067	DE10404
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 23:18	D1E0067	DE10404
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 23:18	D1E0067	DE10404
Aroclor 1254	**0.6** (0.09)		8082A		1	05/05/21 23:18	D1E0067	DE10404
Aroclor 1260	**0.8** (0.09)		8082A		1	05/05/21 23:18	D1E0067	DE10404
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 23:18	D1E0067	DE10404
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 23:18	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*31 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*34 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*29 %*	*S-*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*31 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-198
Date Sampled: 04/28/21 10:35
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-17
Sample Matrix: Solid
Units: mg/kg wet
Analyst: DMC
Prepared: 5/6/21 16:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/08/21 2:37	D1E0123	DE10609
Aroclor 1221	ND (0.1)		8082A		1	05/08/21 2:37	D1E0123	DE10609
Aroclor 1232	ND (0.1)		8082A		1	05/08/21 2:37	D1E0123	DE10609
Aroclor 1242	ND (0.1)		8082A		1	05/08/21 2:37	D1E0123	DE10609
Aroclor 1248	ND (0.1)		8082A		1	05/08/21 2:37	D1E0123	DE10609
Aroclor 1254	**1.1** (0.1)		8082A		1	05/08/21 2:37	D1E0123	DE10609
Aroclor 1260	**1.1** (0.1)		8082A		1	05/08/21 2:37	D1E0123	DE10609
Aroclor 1262	ND (0.1)		8082A		1	05/08/21 2:37	D1E0123	DE10609
Aroclor 1268	ND (0.1)		8082A		1	05/08/21 2:37	D1E0123	DE10609

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*52 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-199
Date Sampled: 04/29/21 08:00
Percent Solids: N/A
Initial Volume: 5.26
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-18
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 23:58	D1E0067	DE10404
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 23:58	D1E0067	DE10404
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 23:58	D1E0067	DE10404
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 23:58	D1E0067	DE10404
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 23:58	D1E0067	DE10404
Aroclor 1254	**2.0** (0.1)		8082A		1	05/05/21 23:58	D1E0067	DE10404
Aroclor 1260 [2C]	**2.6** (0.1)		8082A		1	05/05/21 23:58	D1E0067	DE10404
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 23:58	D1E0067	DE10404
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 23:58	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-200
Date Sampled: 04/29/21 08:05
Percent Solids: N/A
Initial Volume: 5.51
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-19
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/06/21 0:18	D1E0067	DE10404
Aroclor 1221	ND (0.09)		8082A		1	05/06/21 0:18	D1E0067	DE10404
Aroclor 1232	ND (0.09)		8082A		1	05/06/21 0:18	D1E0067	DE10404
Aroclor 1242	ND (0.09)		8082A		1	05/06/21 0:18	D1E0067	DE10404
Aroclor 1248	ND (0.09)		8082A		1	05/06/21 0:18	D1E0067	DE10404
Aroclor 1254	**2.5** (0.09)		8082A		1	05/06/21 0:18	D1E0067	DE10404
Aroclor 1260 [2C]	**3.5** (0.09)		8082A		1	05/06/21 0:18	D1E0067	DE10404
Aroclor 1262	ND (0.09)		8082A		1	05/06/21 0:18	D1E0067	DE10404
Aroclor 1268	ND (0.09)		8082A		1	05/06/21 0:18	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-201
Date Sampled: 04/29/21 08:10
Percent Solids: N/A
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0018
ESS Laboratory Sample ID: 21E0018-20
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/06/21 0:38	D1E0067	DE10404
Aroclor 1221	ND (0.1)		8082A		1	05/06/21 0:38	D1E0067	DE10404
Aroclor 1232	ND (0.1)		8082A		1	05/06/21 0:38	D1E0067	DE10404
Aroclor 1242	ND (0.1)		8082A		1	05/06/21 0:38	D1E0067	DE10404
Aroclor 1248	ND (0.1)		8082A		1	05/06/21 0:38	D1E0067	DE10404
Aroclor 1254	**3.4** (0.1)		8082A		1	05/06/21 0:38	D1E0067	DE10404
Aroclor 1260 [2C]	**2.8** (0.1)		8082A		1	05/06/21 0:38	D1E0067	DE10404
Aroclor 1262	ND (0.1)		8082A		1	05/06/21 0:38	D1E0067	DE10404
Aroclor 1268	ND (0.1)		8082A		1	05/06/21 0:38	D1E0067	DE10404

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*73 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0018

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10404 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140			
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		85	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		84	40-140			
Surrogate: Decachlorobiphenyl	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		94	40-140	3	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		94	40-140	5	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		87	40-140	3	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0206*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0219*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Matrix Spike **Source: 21E0018-03**										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0018

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10404 - 3540C										
Aroclor 1016	3.0	0.2	mg/kg wet	3.968	ND	77	40-140			
Aroclor 1016 [2C]	3.0	0.2	mg/kg wet	3.968	ND	74	40-140			
Aroclor 1260	4.3	0.2	mg/kg wet	3.968	1.4	73	40-140			
Aroclor 1260 [2C]	4.1	0.2	mg/kg wet	3.968	1.5	66	40-140			
Surrogate: Decachlorobiphenyl	*0.129*		mg/kg wet	*0.1984*		*65*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.145*		mg/kg wet	*0.1984*		*73*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.149*		mg/kg wet	*0.1984*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.167*		mg/kg wet	*0.1984*		*84*	*30-150*			
Matrix Spike Dup Source: 21E0018-03										
Aroclor 1016	3.3	0.2	mg/kg wet	4.000	ND	83	40-140	9	30	
Aroclor 1016 [2C]	3.3	0.2	mg/kg wet	4.000	ND	83	40-140	11	30	
Aroclor 1260	4.6	0.2	mg/kg wet	4.000	1.4	82	40-140	8	30	
Aroclor 1260 [2C]	4.7	0.2	mg/kg wet	4.000	1.5	79	40-140	13	30	
Surrogate: Decachlorobiphenyl	*0.145*		mg/kg wet	*0.2000*		*72*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.161*		mg/kg wet	*0.2000*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.169*		mg/kg wet	*0.2000*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.187*		mg/kg wet	*0.2000*		*93*	*30-150*			
Batch DE10609 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
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	*0.0226*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
LCS										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0018

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10609 - 3540C										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		93	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		94	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		95	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Surrogate: Decachlorobiphenyl	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		95	40-140	2	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		96	40-140	2	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		97	40-140	2	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		93	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0259*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0241*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0018

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).
S-	Surrogate recovery(ies) below lower control limit (S-).
P	Percent difference between primary and confirmation results exceeds 40% (P).
LC	Lower value is used due to matrix interferences (LC).
D	Diluted.
CD+	Continuing Calibration %Diff/Drift is above control limit (CD+).
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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0018

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21E0018
Date Received: 5/3/2021
Project Due Date: 5/10/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.9 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	160908	Yes	N/A	Yes	4 oz. Jar	NP	
2	160909	Yes	N/A	Yes	4 oz. Jar	NP	
3	160910	Yes	N/A	Yes	4 oz. Jar	NP	
4	160911	Yes	N/A	Yes	4 oz. Jar	NP	
5	160912	Yes	N/A	Yes	4 oz. Jar	NP	
6	160913	Yes	N/A	Yes	4 oz. Jar	NP	
7	160914	Yes	N/A	Yes	4 oz. Jar	NP	
8	160915	Yes	N/A	Yes	4 oz. Jar	NP	
9	160916	Yes	N/A	Yes	4 oz. Jar	NP	
10	160917	Yes	N/A	Yes	4 oz. Jar	NP	
11	160918	Yes	N/A	Yes	4 oz. Jar	NP	
12	160919	Yes	N/A	Yes	4 oz. Jar	NP	
13	160920	Yes	N/A	Yes	4 oz. Jar	NP	
14	160921	Yes	N/A	Yes	4 oz. Jar	NP	
15	160922	Yes	N/A	Yes	4 oz. Jar	NP	
16	160923	Yes	N/A	Yes	4 oz. Jar	NP	

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 21E0018

Date Received: 5/3/2021

17	160924	Yes	N/A	Yes	4 oz. Jar	NP
18	160925	Yes	N/A	Yes	4 oz. Jar	NP
19	160926	Yes	N/A	Yes	4 oz. Jar	NP
20	160927	Yes	N/A	Yes	4 oz. Jar	NP

2nd Review

Were all containers scanned into storage/lab? Initials TD

Are barcode labels on correct containers? Yes / No

Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA

Are all Hex Chrome stickers attached? Yes / No / NA

Are all QC stickers attached? Yes / No / NA

Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Taylor Davis Date & Time: 5/3/21 1800

Reviewed By: DLT Date & Time: 5/3/21 1855

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21E0018 | Page 6 of 11

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island **Criteria:** <0.5 mg/kg

Is this project for any of the following?:
☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	MS/MSD	Total Number of Bottles
1	4/28/21	9:15 am	Grab	Solid	PS-182	X		
2		9:20 am			PS-183	X		
3		9:25 am			PS-184	X	X	
4		9:30 am			PS-185	X		
5		9:35 am			PS-186	X		
6		9:40 am			PS-187	X		
7		9:45 am			PS-188	X		
8		9:50 am			PS-189	X		
9		9:55 am			PS-190	X		
10		10:00 am			PS-191	X		
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial					AG		
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					9		
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					11		

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.9
Ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
David Shannon	4/30/21	1:01 pm	5/3/21 12:11		5/3/21	16:44	Gaylon Davis 5/3/21 16:44

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21E0018 | Page 6 X of X X

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island **Criteria:** <0.5 mg/kg

Is this project for any of the following?: ☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	Total Number of Bottles
11	4/28/21	10:05 am	Grab	Solid	PS-192	X	
12		10:10 am			PS-193	X	
13		10:15 am			PS-194	X	
14		10:20 am			PS-195	X	
15		10:25 am			PS-196	X	
16		10:30 am			PS-197	X	
17	↓	10:35 am			PS-198	X	
18	4/29/21	8:00 am			PS-199	X	
19		8:05 am			PS-~~19~~ (DD) 200	X	
20	↓	8:10 am	↓	↓	PS-201	X	
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial					AG	
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					9	
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					11	

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.9 / Ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Daniel Plummer	4/30/21	1:01 pm	5/3/21 12:11		5/3/21	16:44	5/3/21 16:44

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 21E0019

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 11:59 am, May 10, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0019

SAMPLE RECEIPT

The following samples were received on May 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21E0019-01	PS-202	Solid	8082A
21E0019-02	PS-203	Solid	8082A
21E0019-03	PS-204	Solid	8082A
21E0019-04	PS-205	Solid	8082A
21E0019-05	PS-206	Solid	8082A
21E0019-06	PS-207	Solid	8082A
21E0019-07	PS-208	Solid	8082A
21E0019-08	PS-209	Solid	8082A
21E0019-09	PS-210	Solid	8082A
21E0019-10	PS-211	Solid	8082A
21E0019-11	PS-212	Solid	8082A
21E0019-12	PS-213	Solid	8082A
21E0019-13	PS-214	Solid	8082A
21E0019-14	PS-215	Solid	8082A
21E0019-15	PS-216	Solid	8082A
21E0019-16	PS-217	Solid	8082A
21E0019-17	PS-218	Solid	8082A
21E0019-18	PS-219	Solid	8082A
21E0019-19	PS-220	Solid	8082A
21E0019-20	PS-221	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0019

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

21E0019-05 **Lower value is used due to matrix interferences (LC).**
Aroclor 1260 [2C]

21E0019-05 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1260 [2C]

21E0019-18 **Lower value is used due to matrix interferences (LC).**
Aroclor 1254 [2C] , Aroclor 1260 [2C]

21E0019-18 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1254 [2C] , Aroclor 1260 [2C]

21E0019-19 **Lower value is used due to matrix interferences (LC).**
Aroclor 1254 [2C]

21E0019-19 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1254 [2C]

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0019

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-202
Date Sampled: 04/29/21 08:15
Percent Solids: N/A
Initial Volume: 5.15
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 15:05	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 15:05	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 15:05	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 15:05	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 15:05	D1E0068	DE10405
Aroclor 1254	**2.1** (0.1)		8082A		1	05/05/21 15:05	D1E0068	DE10405
Aroclor 1260	**2.0** (0.1)		8082A		1	05/05/21 15:05	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 15:05	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 15:05	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-203
Date Sampled: 04/29/21 08:20
Percent Solids: N/A
Initial Volume: 5.66
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 15:25	D1E0068	DE10405
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 15:25	D1E0068	DE10405
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 15:25	D1E0068	DE10405
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 15:25	D1E0068	DE10405
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 15:25	D1E0068	DE10405
Aroclor 1254	**1.2** (0.09)		8082A		1	05/05/21 15:25	D1E0068	DE10405
Aroclor 1260	**0.8** (0.09)		8082A		1	05/05/21 15:25	D1E0068	DE10405
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 15:25	D1E0068	DE10405
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 15:25	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*64 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-204
Date Sampled: 04/29/21 08:25
Percent Solids: N/A
Initial Volume: 5.29
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 15:45	D1E0068	DE10405
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 15:45	D1E0068	DE10405
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 15:45	D1E0068	DE10405
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 15:45	D1E0068	DE10405
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 15:45	D1E0068	DE10405
Aroclor 1254 [2C]	**1.4** (0.09)		8082A		1	05/05/21 15:45	D1E0068	DE10405
Aroclor 1260	**0.7** (0.09)		8082A		1	05/05/21 15:45	D1E0068	DE10405
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 15:45	D1E0068	DE10405
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 15:45	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*62 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-205
Date Sampled: 04/29/21 08:30
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 16:05	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 16:05	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 16:05	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 16:05	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 16:05	D1E0068	DE10405
Aroclor 1254	**1.2** (0.1)		8082A		1	05/05/21 16:05	D1E0068	DE10405
Aroclor 1260	**0.7** (0.1)		8082A		1	05/05/21 16:05	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 16:05	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 16:05	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*60 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-206
Date Sampled: 04/29/21 08:35
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 17:05	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 17:05	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 17:05	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 17:05	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 17:05	D1E0068	DE10405
Aroclor 1254	**0.9** (0.1)		8082A		1	05/05/21 17:05	D1E0068	DE10405
Aroclor 1260 [2C]	**P, LC 0.3** (0.1)		8082A		1	05/05/21 17:05	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 17:05	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 17:05	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*60 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-207
Date Sampled: 04/29/21 08:40
Percent Solids: N/A
Initial Volume: 5.66
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 20:04	D1E0068	DE10405
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 20:04	D1E0068	DE10405
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 20:04	D1E0068	DE10405
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 20:04	D1E0068	DE10405
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 20:04	D1E0068	DE10405
Aroclor 1254	**0.4** (0.09)		8082A		1	05/05/21 20:04	D1E0068	DE10405
Aroclor 1260 [2C]	**0.9** (0.09)		8082A		1	05/05/21 20:04	D1E0068	DE10405
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 20:04	D1E0068	DE10405
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 20:04	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-208
Date Sampled: 04/29/21 08:45
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 20:24	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 20:24	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 20:24	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 20:24	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 20:24	D1E0068	DE10405
Aroclor 1254	**0.5** (0.1)		8082A		1	05/05/21 20:24	D1E0068	DE10405
Aroclor 1260 [2C]	**1.1** (0.1)		8082A		1	05/05/21 20:24	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 20:24	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 20:24	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-209
Date Sampled: 04/29/21 08:50
Percent Solids: N/A
Initial Volume: 4.38
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 20:44	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 20:44	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 20:44	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 20:44	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 20:44	D1E0068	DE10405
Aroclor 1254	**1.3** (0.1)		8082A		1	05/05/21 20:44	D1E0068	DE10405
Aroclor 1260	**1.9** (0.1)		8082A		1	05/05/21 20:44	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 20:44	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 20:44	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-210
Date Sampled: 04/29/21 08:55
Percent Solids: N/A
Initial Volume: 5.17
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 21:03	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 21:03	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 21:03	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 21:03	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 21:03	D1E0068	DE10405
Aroclor 1254	**0.5** (0.1)		8082A		1	05/05/21 21:03	D1E0068	DE10405
Aroclor 1260 [2C]	**0.8** (0.1)		8082A		1	05/05/21 21:03	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 21:03	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 21:03	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*70 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-211
Date Sampled: 04/29/21 09:00
Percent Solids: N/A
Initial Volume: 5.42
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 21:23	D1E0068	DE10405
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 21:23	D1E0068	DE10405
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 21:23	D1E0068	DE10405
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 21:23	D1E0068	DE10405
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 21:23	D1E0068	DE10405
Aroclor 1254	**0.4** (0.09)		8082A		1	05/05/21 21:23	D1E0068	DE10405
Aroclor 1260 [2C]	**0.9** (0.09)		8082A		1	05/05/21 21:23	D1E0068	DE10405
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 21:23	D1E0068	DE10405
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 21:23	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-212
Date Sampled: 04/29/21 09:05
Percent Solids: N/A
Initial Volume: 5.41
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-11
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/05/21 21:43	D1E0068	DE10405
Aroclor 1221	ND (0.09)		8082A		1	05/05/21 21:43	D1E0068	DE10405
Aroclor 1232	ND (0.09)		8082A		1	05/05/21 21:43	D1E0068	DE10405
Aroclor 1242	ND (0.09)		8082A		1	05/05/21 21:43	D1E0068	DE10405
Aroclor 1248	ND (0.09)		8082A		1	05/05/21 21:43	D1E0068	DE10405
Aroclor 1254 [2C]	**0.7** (0.09)		8082A		1	05/05/21 21:43	D1E0068	DE10405
Aroclor 1260 [2C]	**1.3** (0.09)		8082A		1	05/05/21 21:43	D1E0068	DE10405
Aroclor 1262	ND (0.09)		8082A		1	05/05/21 21:43	D1E0068	DE10405
Aroclor 1268	ND (0.09)		8082A		1	05/05/21 21:43	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-213
Date Sampled: 04/29/21 09:10
Percent Solids: N/A
Initial Volume: 4.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-12
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 22:03	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 22:03	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 22:03	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 22:03	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 22:03	D1E0068	DE10405
Aroclor 1254	**1.6** (0.1)		8082A		1	05/05/21 22:03	D1E0068	DE10405
Aroclor 1260	**2.4** (0.1)		8082A		1	05/05/21 22:03	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 22:03	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 22:03	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-214
Date Sampled: 04/29/21 09:15
Percent Solids: N/A
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-13
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 22:23	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 22:23	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 22:23	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 22:23	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 22:23	D1E0068	DE10405
Aroclor 1254	**1.5** (0.1)		8082A		1	05/05/21 22:23	D1E0068	DE10405
Aroclor 1260	**2.0** (0.1)		8082A		1	05/05/21 22:23	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 22:23	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 22:23	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-215
Date Sampled: 04/29/21 09:20
Percent Solids: N/A
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-14
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 22:43	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 22:43	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 22:43	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 22:43	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 22:43	D1E0068	DE10405
Aroclor 1254	**2.0** (0.1)		8082A		1	05/05/21 22:43	D1E0068	DE10405
Aroclor 1260	**2.7** (0.1)		8082A		1	05/05/21 22:43	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 22:43	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 22:43	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-216
Date Sampled: 04/29/21 09:25
Percent Solids: N/A
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-15
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 23:03	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 23:03	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 23:03	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 23:03	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 23:03	D1E0068	DE10405
Aroclor 1254	**0.9** (0.1)		8082A		1	05/05/21 23:03	D1E0068	DE10405
Aroclor 1260	**1.2** (0.1)		8082A		1	05/05/21 23:03	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 23:03	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 23:03	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-217
Date Sampled: 04/29/21 09:30
Percent Solids: N/A
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-16
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 23:22	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 23:22	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 23:22	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 23:22	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 23:22	D1E0068	DE10405
Aroclor 1254	**0.2** (0.1)		8082A		1	05/05/21 23:22	D1E0068	DE10405
Aroclor 1260	**0.2** (0.1)		8082A		1	05/05/21 23:22	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 23:22	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 23:22	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*35 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*36 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-218
Date Sampled: 04/29/21 09:35
Percent Solids: N/A
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-17
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/05/21 23:42	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/05/21 23:42	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/05/21 23:42	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/05/21 23:42	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/05/21 23:42	D1E0068	DE10405
Aroclor 1254	ND (0.1)		8082A		1	05/05/21 23:42	D1E0068	DE10405
Aroclor 1260	**0.2** (0.1)		8082A		1	05/05/21 23:42	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/05/21 23:42	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/05/21 23:42	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-219
Date Sampled: 04/29/21 09:40
Percent Solids: N/A
Initial Volume: 5.54
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-18
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/06/21 0:02	D1E0068	DE10405
Aroclor 1221	ND (0.09)		8082A		1	05/06/21 0:02	D1E0068	DE10405
Aroclor 1232	ND (0.09)		8082A		1	05/06/21 0:02	D1E0068	DE10405
Aroclor 1242	ND (0.09)		8082A		1	05/06/21 0:02	D1E0068	DE10405
Aroclor 1248	ND (0.09)		8082A		1	05/06/21 0:02	D1E0068	DE10405
Aroclor 1254 [2C]	**P, LC 1.0** (0.09)		8082A		1	05/06/21 0:02	D1E0068	DE10405
Aroclor 1260 [2C]	**P, LC 1.0** (0.09)		8082A		1	05/06/21 0:02	D1E0068	DE10405
Aroclor 1262	ND (0.09)		8082A		1	05/06/21 0:02	D1E0068	DE10405
Aroclor 1268	ND (0.09)		8082A		1	05/06/21 0:02	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*52 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-220
Date Sampled: 04/29/21 09:45
Percent Solids: N/A
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-19
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/06/21 0:22	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/06/21 0:22	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/06/21 0:22	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/06/21 0:22	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/06/21 0:22	D1E0068	DE10405
Aroclor 1254 [2C]	**P, LC 1.1** (0.1)		8082A		1	05/06/21 0:22	D1E0068	DE10405
Aroclor 1260	**1.7** (0.1)		8082A		1	05/06/21 0:22	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/06/21 0:22	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/06/21 0:22	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-221
Date Sampled: 04/29/21 09:50
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0019
ESS Laboratory Sample ID: 21E0019-20
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/4/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/06/21 0:42	D1E0068	DE10405
Aroclor 1221	ND (0.1)		8082A		1	05/06/21 0:42	D1E0068	DE10405
Aroclor 1232	ND (0.1)		8082A		1	05/06/21 0:42	D1E0068	DE10405
Aroclor 1242	ND (0.1)		8082A		1	05/06/21 0:42	D1E0068	DE10405
Aroclor 1248	ND (0.1)		8082A		1	05/06/21 0:42	D1E0068	DE10405
Aroclor 1254	**0.9** (0.1)		8082A		1	05/06/21 0:42	D1E0068	DE10405
Aroclor 1260	**1.0** (0.1)		8082A		1	05/06/21 0:42	D1E0068	DE10405
Aroclor 1262	ND (0.1)		8082A		1	05/06/21 0:42	D1E0068	DE10405
Aroclor 1268	ND (0.1)		8082A		1	05/06/21 0:42	D1E0068	DE10405

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*59 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0019

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10405 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0244*		mg/kg wet	*0.02500*		*98*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		104	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		101	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		104	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		104	40-140			
Surrogate: Decachlorobiphenyl	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		106	40-140	2	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		104	40-140	3	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		103	40-140	2	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		99	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0224*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0241*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Matrix Spike **Source: 21E0019-04**										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0019

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10405 - 3540C										
Aroclor 1016	4.8	0.3	mg/kg wet	6.061	ND	79	40-140			
Aroclor 1016 [2C]	4.6	0.3	mg/kg wet	6.061	ND	75	40-140			
Aroclor 1260	5.1	0.3	mg/kg wet	6.061	0.7	73	40-140			
Aroclor 1260 [2C]	4.2	0.3	mg/kg wet	6.061	0.5	60	40-140			
Surrogate: Decachlorobiphenyl	*0.217*		mg/kg wet	*0.3030*		*71*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.205*		mg/kg wet	*0.3030*		*68*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.239*		mg/kg wet	*0.3030*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.228*		mg/kg wet	*0.3030*		*75*	*30-150*			
Matrix Spike Dup Source: 21E0019-04										
Aroclor 1016	4.8	0.3	mg/kg wet	5.780	ND	83	40-140	0.2	30	
Aroclor 1016 [2C]	4.2	0.3	mg/kg wet	5.780	ND	72	40-140	9	30	
Aroclor 1260	4.8	0.3	mg/kg wet	5.780	0.7	72	40-140	6	30	
Aroclor 1260 [2C]	4.1	0.3	mg/kg wet	5.780	0.5	61	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.196*		mg/kg wet	*0.2890*		*68*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.193*		mg/kg wet	*0.2890*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.222*		mg/kg wet	*0.2890*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.217*		mg/kg wet	*0.2890*		*75*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0019

Notes and Definitions

U	Analyte included in the analysis, but not detected
P	Percent difference between primary and confirmation results exceeds 40% (P).
LC	Lower value is used due to matrix interferences (LC).
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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0019

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21E0019
Date Received: 5/3/2021
Project Due Date: 5/10/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.9 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	160928	Yes	N/A	Yes	4 oz. Jar	NP	
2	160929	Yes	N/A	Yes	4 oz. Jar	NP	
3	160930	Yes	N/A	Yes	4 oz. Jar	NP	
4	160931	Yes	N/A	Yes	4 oz. Jar	NP	
5	160932	Yes	N/A	Yes	4 oz. Jar	NP	
6	160933	Yes	N/A	Yes	4 oz. Jar	NP	
7	160934	Yes	N/A	Yes	4 oz. Jar	NP	
8	160935	Yes	N/A	Yes	4 oz. Jar	NP	
9	160936	Yes	N/A	Yes	4 oz. Jar	NP	
10	160937	Yes	N/A	Yes	4 oz. Jar	NP	
11	160938	Yes	N/A	Yes	4 oz. Jar	NP	
12	160939	Yes	N/A	Yes	4 oz. Jar	NP	
13	160940	Yes	N/A	Yes	4 oz. Jar	NP	
14	160941	Yes	N/A	Yes	4 oz. Jar	NP	
15	160942	Yes	N/A	Yes	4 oz. Jar	NP	
16	160943	Yes	N/A	Yes	4 oz. Jar	NP	

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 21E0019
Date Received: 5/3/2021

17	160944	Yes	N/A	Yes	4 oz. Jar	NP
18	160945	Yes	N/A	Yes	4 oz. Jar	NP
19	160946	Yes	N/A	Yes	4 oz. Jar	NP
20	160947	Yes	N/A	Yes	4 oz. Jar	NP

2nd Review

Were all containers scanned into storage/lab? Initials TD Yes / No

Are barcode labels on correct containers? Yes / No

Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA

Are all Hex Chrome stickers attached? Yes / No / NA

Are all QC stickers attached? Yes / No / NA

Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Taylor Davis Date & Time: 18:01 5/3/21

Reviewed By: [signature] Date & Time: 5/3/21 1903

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 71E0019 | Page 7 of 19

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island **Criteria:** <0.5 mg/kg

Is this project for any of the following?: ☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	MS/MSD	Total Number of Bottles
1	4/29/21	8:15 am	Grab	Solid	PS-202	X		
2		8:20 am			PS-203	X		
3		8:25 am			PS-204	X		
4		8:30 am			PS-205	X	X	
5		8:35 am			PS-206	X		
6		8:40 am			PS-207	X		
7		8:45 am			PS-208	X		
8		8:50 am			PS-209	X		
9		8:55 am			PS-210	X		
10	↓	9:00 am	↓	↓	PS-211	X		
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial					AG		
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					9		
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					11		

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.9 / Ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Donald Damman	4/30/21	1:01 pm	5/3/21 12:11		5/3/21	16:44	Taylor Davis 5/3/21 16:44

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21E0019 | Page 8 of 10

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island **Criteria:** <0.5 mg/kg

Is this project for any of the following?:
☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	Total Number of Bottles
11	4/29/21	9:05 am			PS-212		
12	↓	9:10 am			PS-213		
13		9:15 am			PS-214		
14		9:20 am			PS-215		
15		9:25 am			PS-216		
16		9:30 am			PS-217		
17		9:35 am			PS-218		
18		9:40 am			PS-219		
19		9:45 am			PS-220		
20	↓	9:50 am			PS-221		

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.9
1 ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Dave Dawson	4/30/21	1:01 pm	5/3/21 12:11		5/3/21	16:44	Taylor Dawson 5/3/21 11:44

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 21E0020

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 12:11 pm, May 10, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0020

SAMPLE RECEIPT

The following samples were received on May 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21E0020-01	PS-222	Solid	8082A
21E0020-02	PS-223	Solid	8082A
21E0020-03	PS-224	Solid	8082A
21E0020-04	PS-225	Solid	8082A
21E0020-05	PS-226	Solid	8082A
21E0020-06	PS-227	Solid	8082A
21E0020-07	PS-228	Solid	8082A
21E0020-08	DUP-07	Solid	8082A
21E0020-09	DUP-08	Solid	8082A
21E0020-10	DUP-09	Solid	8082A
21E0020-11	DUP-10	Solid	8082A
21E0020-12	DUP-11	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0020

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

21E0020-07	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (262% @ 30-150%), Decachlorobiphenyl [2C] (236% @ 30-150%)
21E0020-10	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1262 [2C]
21E0020-10	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1262 [2C]

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0020

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-222
Date Sampled: 04/29/21 09:55
Percent Solids: N/A
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0020
ESS Laboratory Sample ID: 21E0020-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 14:10	D1E0038	DE10324
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 14:10	D1E0038	DE10324
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 14:10	D1E0038	DE10324
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 14:10	D1E0038	DE10324
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 14:10	D1E0038	DE10324
Aroclor 1254	**1.1** (0.1)		8082A		1	05/04/21 14:10	D1E0038	DE10324
Aroclor 1260	ND (0.1)		8082A		1	05/04/21 14:10	D1E0038	DE10324
Aroclor 1262	**1.2** (0.1)		8082A		1	05/04/21 14:10	D1E0038	DE10324
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 14:10	D1E0038	DE10324

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-223
Date Sampled: 04/29/21 10:00
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0020
ESS Laboratory Sample ID: 21E0020-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 14:29	D1E0038	DE10324
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 14:29	D1E0038	DE10324
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 14:29	D1E0038	DE10324
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 14:29	D1E0038	DE10324
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 14:29	D1E0038	DE10324
Aroclor 1254	**1.2** (0.1)		8082A		1	05/04/21 14:29	D1E0038	DE10324
Aroclor 1260	**0.9** (0.1)		8082A		1	05/04/21 14:29	D1E0038	DE10324
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 14:29	D1E0038	DE10324
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 14:29	D1E0038	DE10324

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*40 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*42 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*37 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*44 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-224
Date Sampled: 04/29/21 10:05
Percent Solids: N/A
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0020
ESS Laboratory Sample ID: 21E0020-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 14:48	D1E0038	DE10324
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 14:48	D1E0038	DE10324
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 14:48	D1E0038	DE10324
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 14:48	D1E0038	DE10324
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 14:48	D1E0038	DE10324
Aroclor 1254	**1.3** (0.1)		8082A		1	05/04/21 14:48	D1E0038	DE10324
Aroclor 1260	**0.6** (0.1)		8082A		1	05/04/21 14:48	D1E0038	DE10324
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 14:48	D1E0038	DE10324
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 14:48	D1E0038	DE10324

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*48 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*61 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-225
Date Sampled: 04/29/21 10:10
Percent Solids: N/A
Initial Volume: 5.28
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0020
ESS Laboratory Sample ID: 21E0020-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/04/21 15:08	D1E0038	DE10324
Aroclor 1221	ND (0.09)		8082A		1	05/04/21 15:08	D1E0038	DE10324
Aroclor 1232	ND (0.09)		8082A		1	05/04/21 15:08	D1E0038	DE10324
Aroclor 1242	ND (0.09)		8082A		1	05/04/21 15:08	D1E0038	DE10324
Aroclor 1248	ND (0.09)		8082A		1	05/04/21 15:08	D1E0038	DE10324
Aroclor 1254	**1.2** (0.09)		8082A		1	05/04/21 15:08	D1E0038	DE10324
Aroclor 1260	**1.0** (0.09)		8082A		1	05/04/21 15:08	D1E0038	DE10324
Aroclor 1262	ND (0.09)		8082A		1	05/04/21 15:08	D1E0038	DE10324
Aroclor 1268	ND (0.09)		8082A		1	05/04/21 15:08	D1E0038	DE10324

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*53 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*51 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*58 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-226
Date Sampled: 04/29/21 10:15
Percent Solids: N/A
Initial Volume: 5.29
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0020
ESS Laboratory Sample ID: 21E0020-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/04/21 15:27	D1E0038	DE10324
Aroclor 1221	ND (0.09)		8082A		1	05/04/21 15:27	D1E0038	DE10324
Aroclor 1232	ND (0.09)		8082A		1	05/04/21 15:27	D1E0038	DE10324
Aroclor 1242	ND (0.09)		8082A		1	05/04/21 15:27	D1E0038	DE10324
Aroclor 1248	ND (0.09)		8082A		1	05/04/21 15:27	D1E0038	DE10324
Aroclor 1254	**2.9** (0.09)		8082A		1	05/04/21 15:27	D1E0038	DE10324
Aroclor 1260 [2C]	**5.8** (0.5)		8082A		5	05/06/21 4:25	D1E0038	DE10324
Aroclor 1262	ND (0.09)		8082A		1	05/04/21 15:27	D1E0038	DE10324
Aroclor 1268	ND (0.09)		8082A		1	05/04/21 15:27	D1E0038	DE10324

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*132 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*124 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-227
Date Sampled: 04/29/21 10:20
Percent Solids: N/A
Initial Volume: 5.31
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0020
ESS Laboratory Sample ID: 21E0020-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/04/21 15:46	D1E0038	DE10324
Aroclor 1221	ND (0.09)		8082A		1	05/04/21 15:46	D1E0038	DE10324
Aroclor 1232	ND (0.09)		8082A		1	05/04/21 15:46	D1E0038	DE10324
Aroclor 1242	ND (0.09)		8082A		1	05/04/21 15:46	D1E0038	DE10324
Aroclor 1248	ND (0.09)		8082A		1	05/04/21 15:46	D1E0038	DE10324
Aroclor 1254	**12.2** (0.9)		8082A		10	05/06/21 4:44	D1E0038	DE10324
Aroclor 1260	**27.8** (0.9)		8082A		10	05/06/21 4:44	D1E0038	DE10324
Aroclor 1262	ND (0.09)		8082A		1	05/04/21 15:46	D1E0038	DE10324
Aroclor 1268	ND (0.09)		8082A		1	05/04/21 15:46	D1E0038	DE10324

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-228
Date Sampled: 04/29/21 10:25
Percent Solids: N/A
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0020
ESS Laboratory Sample ID: 21E0020-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 16:06	D1E0038	DE10324
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 16:06	D1E0038	DE10324
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 16:06	D1E0038	DE10324
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 16:06	D1E0038	DE10324
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 16:06	D1E0038	DE10324
Aroclor 1254	**16.8** (1.0)		8082A		10	05/06/21 5:04	D1E0038	DE10324
Aroclor 1260	**34.9** (1.0)		8082A		10	05/06/21 5:04	D1E0038	DE10324
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 16:06	D1E0038	DE10324
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 16:06	D1E0038	DE10324

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*262 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*236 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-07
Date Sampled: 04/29/21 10:30
Percent Solids: N/A
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0020
ESS Laboratory Sample ID: 21E0020-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 16:25	D1E0038	DE10324
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 16:25	D1E0038	DE10324
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 16:25	D1E0038	DE10324
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 16:25	D1E0038	DE10324
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 16:25	D1E0038	DE10324
Aroclor 1254	**2.8** (0.1)		8082A		1	05/04/21 16:25	D1E0038	DE10324
Aroclor 1260	**2.8** (0.1)		8082A		1	05/04/21 16:25	D1E0038	DE10324
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 16:25	D1E0038	DE10324
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 16:25	D1E0038	DE10324

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-08
Date Sampled: 04/29/21 10:35
Percent Solids: N/A
Initial Volume: 5.22
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0020
ESS Laboratory Sample ID: 21E0020-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 16:45	D1E0038	DE10324
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 16:45	D1E0038	DE10324
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 16:45	D1E0038	DE10324
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 16:45	D1E0038	DE10324
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 16:45	D1E0038	DE10324
Aroclor 1254	**1.8** (0.1)		8082A		1	05/04/21 16:45	D1E0038	DE10324
Aroclor 1260	ND (0.1)		8082A		1	05/04/21 16:45	D1E0038	DE10324
Aroclor 1262	**2.2** (0.1)		8082A		1	05/04/21 16:45	D1E0038	DE10324
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 16:45	D1E0038	DE10324

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-09
Date Sampled: 04/29/21 10:40
Percent Solids: N/A
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0020
ESS Laboratory Sample ID: 21E0020-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 17:04	D1E0038	DE10324
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 17:04	D1E0038	DE10324
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 17:04	D1E0038	DE10324
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 17:04	D1E0038	DE10324
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 17:04	D1E0038	DE10324
Aroclor 1254	**2.6** (0.1)		8082A		1	05/04/21 17:04	D1E0038	DE10324
Aroclor 1260	ND (0.1)		8082A		1	05/04/21 17:04	D1E0038	DE10324
Aroclor 1262 [2C]	**P, LC 2.0** (0.1)		8082A		1	05/04/21 17:04	D1E0038	DE10324
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 17:04	D1E0038	DE10324

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*102 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-10
Date Sampled: 04/29/21 10:45
Percent Solids: N/A
Initial Volume: 5.17
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0020
ESS Laboratory Sample ID: 21E0020-11
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	05/04/21 17:23	D1E0038	DE10324
Aroclor 1221	ND (0.1)		8082A		1	05/04/21 17:23	D1E0038	DE10324
Aroclor 1232	ND (0.1)		8082A		1	05/04/21 17:23	D1E0038	DE10324
Aroclor 1242	ND (0.1)		8082A		1	05/04/21 17:23	D1E0038	DE10324
Aroclor 1248	ND (0.1)		8082A		1	05/04/21 17:23	D1E0038	DE10324
Aroclor 1254	**1.3** (0.1)		8082A		1	05/04/21 17:23	D1E0038	DE10324
Aroclor 1260	**1.0** (0.1)		8082A		1	05/04/21 17:23	D1E0038	DE10324
Aroclor 1262	ND (0.1)		8082A		1	05/04/21 17:23	D1E0038	DE10324
Aroclor 1268	ND (0.1)		8082A		1	05/04/21 17:23	D1E0038	DE10324

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*59 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-11
Date Sampled: 04/29/21 10:50
Percent Solids: N/A
Initial Volume: 5.32
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21E0020
ESS Laboratory Sample ID: 21E0020-12
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 5/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	05/04/21 17:43	D1E0038	DE10324
Aroclor 1221	ND (0.09)		8082A		1	05/04/21 17:43	D1E0038	DE10324
Aroclor 1232	ND (0.09)		8082A		1	05/04/21 17:43	D1E0038	DE10324
Aroclor 1242	ND (0.09)		8082A		1	05/04/21 17:43	D1E0038	DE10324
Aroclor 1248	ND (0.09)		8082A		1	05/04/21 17:43	D1E0038	DE10324
Aroclor 1254	**1.1** (0.09)		8082A		1	05/04/21 17:43	D1E0038	DE10324
Aroclor 1260	**1.1** (0.09)		8082A		1	05/04/21 17:43	D1E0038	DE10324
Aroclor 1262	ND (0.09)		8082A		1	05/04/21 17:43	D1E0038	DE10324
Aroclor 1268	ND (0.09)		8082A		1	05/04/21 17:43	D1E0038	DE10324

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*44 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*51 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0020

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DE10324 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0242*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		88	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		90	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		95	40-140			
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140			
Surrogate: Decachlorobiphenyl	*0.0261*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		87	40-140	2	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		88	40-140	2	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		92	40-140	4	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0246*		mg/kg wet	*0.02500*		*98*	*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*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0020

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).
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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21E0020

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21E0020
Date Received: 5/3/2021
Project Due Date: 5/10/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.9 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	160948	Yes	N/A	Yes	4 oz. Jar	NP	
2	160949	Yes	N/A	Yes	4 oz. Jar	NP	
3	160950	Yes	N/A	Yes	4 oz. Jar	NP	
4	160951	Yes	N/A	Yes	4 oz. Jar	NP	
5	160952	Yes	N/A	Yes	4 oz. Jar	NP	
6	160953	Yes	N/A	Yes	4 oz. Jar	NP	
7	160954	Yes	N/A	Yes	4 oz. Jar	NP	
8	160955	Yes	N/A	Yes	4 oz. Jar	NP	
9	160956	Yes	N/A	Yes	4 oz. Jar	NP	
10	160957	Yes	N/A	Yes	4 oz. Jar	NP	
11	160958	Yes	N/A	Yes	4 oz. Jar	NP	
12	160959	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials TD
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / (NA)

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 21E0020

Date Received: 5/3/2021

Are all Hex Chrome stickers attached? Yes / No / NA

Are all QC stickers attached? Yes / No / NA

Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Clayton Davis Date & Time: 1758 5/3/21

Reviewed By: [signature] Date & Time: 5/3/21 1900

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21E0020 | Page 9 1 (DD) of 10

Turn Time (Days): ☑ > 5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island Criteria: <0.5 mg/kg

Is this project for any of the following?: ☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	Total Number of Bottles
1	4/29/21	9:55 am	Grab	Solid	PS-222	X	
2		10:00 am			PS-223	X	
3		10:05 am			PS-224	X	
4		10:10 am			PS-225	X	
5		10:15 am			PS-226	X	
6		10:20 am			PS-227	X	
7		10:25 am			PS-228	X	
8		10:30 am			DUP-07	X	
9		10:35 am			DUP-08	X	
10		10:40 am			DUP-09	X	
Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial						AG	
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*						9	
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*						11	

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.9
1 Ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Daniel D'Amico	4/30/21	1:01 pm	5/3/21 12:11		5/3/21	16:44	Taylor Davis 5/3/21 16:44
Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)

ESS LABORATORY
185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21E0020 | Page 10 of 10

Turn Time (Days) ☑ >5 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Rhode Island **Criteria:** <0.5 mg/kg

Is this project for any of the following?: ☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☑ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers and Scientists
Address: 4 First Street, Bridgewater, MA
Phone: 5086973191
Email Distribution List: Jaevazelis, Mzoller, Kloftus, ddifrancesco@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House, 6 Thornton Street, Pawtucket, RI
Project Location: 6 Thornton Street, Pawtucket, RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to:
PO#: 5675.F
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by 8082	Total Number of Bottles
11	4/29/21	10:45am	Grab	Solid	DUP-10	X	
12	4/29/21	10:50am	Grab	Solid	DUP-11	X	
Container Type						AG	
Container Volume							
Preservation Code						11	

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.9 Ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project, TSCA requirements, use manual soxhlet extraction per EPA method 3540, Report dry weight, homogenize sample, provide full data package, 11 = Ice

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration ☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
[signature]	4/30/21	1:01 pm	[signature] 5/3/21 12:11	[signature]	5/3/21	16:44	Taylor Davis 5/3/21 16:44
Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 21I0139

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 5:12 pm, Sep 14, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0139

SAMPLE RECEIPT

The following samples were received on September 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21I0139-01	PS-229	Solid	8082A
21I0139-02	PS-230	Solid	8082A
21I0139-03	PS-231	Solid	8082A
21I0139-04	PS-232	Solid	8082A
21I0139-05	PS-233	Solid	8082A
21I0139-06	PS-234	Solid	8082A
21I0139-07	PS-235	Solid	8082A
21I0139-08	PS-236	Solid	8082A
21I0139-09	PS-237	Solid	8082A
21I0139-10	PS-238	Solid	8082A
21I0139-11	PS-239	Solid	8082A
21I0139-12	PS-240	Solid	8082A
21I0139-13	PS-241	Solid	8082A
21I0139-14	PS-242	Solid	8082A
21I0139-15	PS-243	Solid	8082A
21I0139-16	PS-244	Solid	8082A
21I0139-17	PS-245	Solid	8082A
21I0139-18	PS-246	Solid	8082A
21I0139-19	PS-247	Solid	8082A
21I0139-20	PS-249	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0139

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

21I0139-04 **Surrogate recovery(ies) below lower control limit (S-).**
Decachlorobiphenyl (29% @ 30-150%)

21I0139-08 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (154% @ 30-150%), Decachlorobiphenyl [2C] (170% @ 30-150%)

21I0139-10 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (252% @ 30-150%), Decachlorobiphenyl [2C] (280% @ 30-150%)

21I0139-13 **Surrogate recovery(ies) below lower control limit (S-).**
Decachlorobiphenyl (27% @ 30-150%)

21I0139-16 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (339% @ 30-150%), Decachlorobiphenyl [2C] (366% @ 30-150%)

21I0139-17 **Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
Decachlorobiphenyl (693% @ 30-150%), Decachlorobiphenyl [2C] (781% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0139

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-229
Date Sampled: 09/01/21 11:00
Percent Solids: N/A
Initial Volume: 5.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 6:56	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 6:56	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 6:56	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 6:56	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 6:56	D1I0091	DI10306
Aroclor 1254 [2C]	**2.2** (0.1)		8082A		1	09/10/21 6:56	D1I0091	DI10306
Aroclor 1260 [2C]	**2.8** (0.1)		8082A		1	09/10/21 6:56	D1I0091	DI10306
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 6:56	D1I0091	DI10306
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 6:56	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-230
Date Sampled: 09/01/21 11:10
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 7:15	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 7:15	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 7:15	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 7:15	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 7:15	D1I0091	DI10306
Aroclor 1254 [2C]	**1.6** (0.1)		8082A		1	09/10/21 7:15	D1I0091	DI10306
Aroclor 1260 [2C]	**1.8** (0.1)		8082A		1	09/10/21 7:15	D1I0091	DI10306
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 7:15	D1I0091	DI10306
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 7:15	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-231
Date Sampled: 09/01/21 11:15
Percent Solids: N/A
Initial Volume: 2.94
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/13/21 15:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	09/14/21 13:32	D1I0190	DI11305
Aroclor 1221	ND (0.3)		8082A		1	09/14/21 13:32	D1I0190	DI11305
Aroclor 1232	ND (0.3)		8082A		1	09/14/21 13:32	D1I0190	DI11305
Aroclor 1242	ND (0.3)		8082A		1	09/14/21 13:32	D1I0190	DI11305
Aroclor 1248	ND (0.3)		8082A		1	09/14/21 13:32	D1I0190	DI11305
Aroclor 1254 [2C]	**1.3** (0.3)		8082A		1	09/14/21 13:32	D1I0190	DI11305
Aroclor 1260	**0.8** (0.3)		8082A		1	09/14/21 13:32	D1I0190	DI11305
Aroclor 1262	ND (0.3)		8082A		1	09/14/21 13:32	D1I0190	DI11305
Aroclor 1268	ND (0.3)		8082A		1	09/14/21 13:32	D1I0190	DI11305

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*36 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*38 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*55 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-232
Date Sampled: 09/01/21 11:20
Percent Solids: N/A
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/13/21 15:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/14/21 13:51	D1I0190	DI11305
Aroclor 1221	ND (0.2)		8082A		1	09/14/21 13:51	D1I0190	DI11305
Aroclor 1232	ND (0.2)		8082A		1	09/14/21 13:51	D1I0190	DI11305
Aroclor 1242	ND (0.2)		8082A		1	09/14/21 13:51	D1I0190	DI11305
Aroclor 1248	ND (0.2)		8082A		1	09/14/21 13:51	D1I0190	DI11305
Aroclor 1254 [2C]	**0.9** (0.2)		8082A		1	09/14/21 13:51	D1I0190	DI11305
Aroclor 1260	**0.5** (0.2)		8082A		1	09/14/21 13:51	D1I0190	DI11305
Aroclor 1262	ND (0.2)		8082A		1	09/14/21 13:51	D1I0190	DI11305
Aroclor 1268	ND (0.2)		8082A		1	09/14/21 13:51	D1I0190	DI11305

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*29 %*	*S-*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*35 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*43 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-233
Date Sampled: 09/01/21 13:00
Percent Solids: N/A
Initial Volume: 5.25
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 8:14	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 8:14	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 8:14	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 8:14	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 8:14	D1I0091	DI10306
Aroclor 1254 [2C]	**0.6** (0.1)		8082A		1	09/10/21 8:14	D1I0091	DI10306
Aroclor 1260 [2C]	**0.5** (0.1)		8082A		1	09/10/21 8:14	D1I0091	DI10306
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 8:14	D1I0091	DI10306
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 8:14	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*41 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-234
Date Sampled: 09/01/21 13:10
Percent Solids: N/A
Initial Volume: 5.19
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 8:34	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 8:34	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 8:34	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 8:34	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 8:34	D1I0091	DI10306
Aroclor 1254	**0.5** (0.1)		8082A		1	09/10/21 8:34	D1I0091	DI10306
Aroclor 1260 [2C]	**0.2** (0.1)		8082A		1	09/10/21 8:34	D1I0091	DI10306
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 8:34	D1I0091	DI10306
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 8:34	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*40 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*50 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-235
Date Sampled: 09/01/21 13:20
Percent Solids: N/A
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 8:54	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 8:54	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 8:54	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 8:54	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 8:54	D1I0091	DI10306
Aroclor 1254	**0.6** (0.1)		8082A		1	09/10/21 8:54	D1I0091	DI10306
Aroclor 1260	ND (0.1)		8082A		1	09/10/21 8:54	D1I0091	DI10306
Aroclor 1262	**0.3** (0.1)		8082A		1	09/10/21 8:54	D1I0091	DI10306
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 8:54	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*57 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*58 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-236
Date Sampled: 09/01/21 13:25
Percent Solids: N/A
Initial Volume: 5.25
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 9:14	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 9:14	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 9:14	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 9:14	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 9:14	D1I0091	DI10306
Aroclor 1254 [2C]	**1.0** (0.1)		8082A		1	09/10/21 9:14	D1I0091	DI10306
Aroclor 1260 [2C]	**0.8** (0.1)		8082A		1	09/10/21 9:14	D1I0091	DI10306
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 9:14	D1I0091	DI10306
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 9:14	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*154 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*170 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-237
Date Sampled: 09/01/21 13:30
Percent Solids: N/A
Initial Volume: 5.18
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 9:34	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 9:34	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 9:34	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 9:34	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 9:34	D1I0091	DI10306
Aroclor 1254 [2C]	**0.9** (0.1)		8082A		1	09/10/21 9:34	D1I0091	DI10306
Aroclor 1260	ND (0.1)		8082A		1	09/10/21 9:34	D1I0091	DI10306
Aroclor 1262	**0.7** (0.1)		8082A		1	09/10/21 9:34	D1I0091	DI10306
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 9:34	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*70 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-238
Date Sampled: 09/01/21 13:35
Percent Solids: N/A
Initial Volume: 5.24
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 9:54	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 9:54	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 9:54	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 9:54	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 9:54	D1I0091	DI10306
Aroclor 1254 [2C]	**2.0** (0.1)		8082A		1	09/10/21 9:54	D1I0091	DI10306
Aroclor 1260 [2C]	**1.7** (0.1)		8082A		1	09/10/21 9:54	D1I0091	DI10306
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 9:54	D1I0091	DI10306
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 9:54	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*252 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*280 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-239
Date Sampled: 09/01/21 08:05
Percent Solids: N/A
Initial Volume: 5.17
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-11
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 10:14	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 10:14	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 10:14	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 10:14	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 10:14	D1I0091	DI10306
Aroclor 1254	**0.8** (0.1)		8082A		1	09/10/21 10:14	D1I0091	DI10306
Aroclor 1260	ND (0.1)		8082A		1	09/10/21 10:14	D1I0091	DI10306
Aroclor 1262	**0.8** (0.1)		8082A		1	09/10/21 10:14	D1I0091	DI10306
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 10:14	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*64 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-240
Date Sampled: 09/01/21 08:15
Percent Solids: N/A
Initial Volume: 5.24
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-12
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 10:34	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 10:34	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 10:34	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 10:34	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 10:34	D1I0091	DI10306
Aroclor 1254 [2C]	**1.5** (0.1)		8082A		1	09/10/21 10:34	D1I0091	DI10306
Aroclor 1260 [2C]	**1.4** (0.1)		8082A		1	09/10/21 10:34	D1I0091	DI10306
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 10:34	D1I0091	DI10306
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 10:34	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-241
Date Sampled: 09/01/21 08:20
Percent Solids: N/A
Initial Volume: 5.22
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-13
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 10:54	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 10:54	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 10:54	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 10:54	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 10:54	D1I0091	DI10306
Aroclor 1254 [2C]	**0.2** (0.1)		8082A		1	09/10/21 10:54	D1I0091	DI10306
Aroclor 1260	ND (0.1)		8082A		1	09/10/21 10:54	D1I0091	DI10306
Aroclor 1262	**0.1** (0.1)		8082A		1	09/10/21 10:54	D1I0091	DI10306
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 10:54	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*27 %*	*S-*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*31 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-242
Date Sampled: 09/01/21 09:00
Percent Solids: N/A
Initial Volume: 1.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-14
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	09/10/21 11:14	D1I0091	DI10306
Aroclor 1221	ND (0.5)		8082A		1	09/10/21 11:14	D1I0091	DI10306
Aroclor 1232	ND (0.5)		8082A		1	09/10/21 11:14	D1I0091	DI10306
Aroclor 1242	ND (0.5)		8082A		1	09/10/21 11:14	D1I0091	DI10306
Aroclor 1248	ND (0.5)		8082A		1	09/10/21 11:14	D1I0091	DI10306
Aroclor 1254 [2C]	**4.6** (0.5)		8082A		1	09/10/21 11:14	D1I0091	DI10306
Aroclor 1260 [2C]	**2.7** (0.5)		8082A		1	09/10/21 11:14	D1I0091	DI10306
Aroclor 1262	ND (0.5)		8082A		1	09/10/21 11:14	D1I0091	DI10306
Aroclor 1268	ND (0.5)		8082A		1	09/10/21 11:14	D1I0091	DI10306

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*104 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-243
Date Sampled: 09/01/21 09:20
Percent Solids: N/A
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-15
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 16:53	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 16:53	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 16:53	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 16:53	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 16:53	D1I0091	DI10306
Aroclor 1254 [2C]	**3.6** (0.1)		8082A		1	09/10/21 16:53	D1I0091	DI10306
Aroclor 1260 [2C]	**2.3** (0.1)		8082A		1	09/10/21 16:53	D1I0091	DI10306
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 16:53	D1I0091	DI10306
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 16:53	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*110 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*120 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-244
Date Sampled: 09/01/21 09:25
Percent Solids: N/A
Initial Volume: 4.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-16
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 17:13	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 17:13	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 17:13	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 17:13	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 17:13	D1I0091	DI10306
Aroclor 1254 [2C]	**2.4** (0.1)		8082A		1	09/10/21 17:13	D1I0091	DI10306
Aroclor 1260 [2C]	**1.6** (0.1)		8082A		1	09/10/21 17:13	D1I0091	DI10306
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 17:13	D1I0091	DI10306
Aroclor 1268 [2C]	**0.7** (0.1)		8082A		1	09/10/21 17:13	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*339 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*366 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-245
Date Sampled: 09/01/21 09:30
Percent Solids: N/A
Initial Volume: 4.66
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-17
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 17:32	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 17:32	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 17:32	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 17:32	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 17:32	D1I0091	DI10306
Aroclor 1254 [2C]	**4.1** (0.1)		8082A		1	09/10/21 17:32	D1I0091	DI10306
Aroclor 1260 [2C]	**3.1** (0.1)		8082A		1	09/10/21 17:32	D1I0091	DI10306
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 17:32	D1I0091	DI10306
Aroclor 1268 [2C]	**1.6** (0.1)		8082A		1	09/10/21 17:32	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*693 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*781 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-246
Date Sampled: 09/01/21 10:00
Percent Solids: N/A
Initial Volume: 5.37
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-18
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	09/10/21 17:52	D1I0091	DI10306
Aroclor 1221	ND (0.09)		8082A		1	09/10/21 17:52	D1I0091	DI10306
Aroclor 1232	ND (0.09)		8082A		1	09/10/21 17:52	D1I0091	DI10306
Aroclor 1242	ND (0.09)		8082A		1	09/10/21 17:52	D1I0091	DI10306
Aroclor 1248	ND (0.09)		8082A		1	09/10/21 17:52	D1I0091	DI10306
Aroclor 1254	**1.7** (0.09)		8082A		1	09/10/21 17:52	D1I0091	DI10306
Aroclor 1260	ND (0.09)		8082A		1	09/10/21 17:52	D1I0091	DI10306
Aroclor 1262 [2C]	**1.8** (0.09)		8082A		1	09/10/21 17:52	D1I0091	DI10306
Aroclor 1268	ND (0.09)		8082A		1	09/10/21 17:52	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*60 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-247
Date Sampled: 09/01/21 10:30
Percent Solids: N/A
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-19
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 18:12	D1I0091	DI10306
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 18:12	D1I0091	DI10306
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 18:12	D1I0091	DI10306
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 18:12	D1I0091	DI10306
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 18:12	D1I0091	DI10306
Aroclor 1254	**1.9** (0.1)		8082A		1	09/10/21 18:12	D1I0091	DI10306
Aroclor 1260	ND (0.1)		8082A		1	09/10/21 18:12	D1I0091	DI10306
Aroclor 1262	**2.8** (0.1)		8082A		1	09/10/21 18:12	D1I0091	DI10306
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 18:12	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-249
Date Sampled: 09/01/21 10:45
Percent Solids: N/A
Initial Volume: 5.33
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0139
ESS Laboratory Sample ID: 21I0139-20
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/3/21 20:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	09/10/21 18:32	D1I0091	DI10306
Aroclor 1221	ND (0.09)		8082A		1	09/10/21 18:32	D1I0091	DI10306
Aroclor 1232	ND (0.09)		8082A		1	09/10/21 18:32	D1I0091	DI10306
Aroclor 1242	ND (0.09)		8082A		1	09/10/21 18:32	D1I0091	DI10306
Aroclor 1248	ND (0.09)		8082A		1	09/10/21 18:32	D1I0091	DI10306
Aroclor 1254	**2.6** (0.09)		8082A		1	09/10/21 18:32	D1I0091	DI10306
Aroclor 1260	ND (0.09)		8082A		1	09/10/21 18:32	D1I0091	DI10306
Aroclor 1262	**3.2** (0.09)		8082A		1	09/10/21 18:32	D1I0091	DI10306
Aroclor 1268	ND (0.09)		8082A		1	09/10/21 18:32	D1I0091	DI10306

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0139

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI10306 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		90	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		90	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		93	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		93	40-140			
Surrogate: Decachlorobiphenyl	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		90	40-140	0.2	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		93	40-140	3	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		95	40-140	3	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		95	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*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*			
Matrix Spike **Source: 21I0139-14**										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0139

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI10306 - 3540C										
Aroclor 1016	5.7	0.4	mg/kg wet	7.092	ND	80	40-140			
Aroclor 1016 [2C]	5.6	0.4	mg/kg wet	7.092	ND	79	40-140			
Aroclor 1260	8.1	0.4	mg/kg wet	7.092	2.0	86	40-140			
Aroclor 1260 [2C]	8.1	0.4	mg/kg wet	7.092	2.7	77	40-140			
Surrogate: Decachlorobiphenyl	*0.301*		mg/kg wet	*0.3546*		*85*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.320*		mg/kg wet	*0.3546*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.278*		mg/kg wet	*0.3546*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.296*		mg/kg wet	*0.3546*		*84*	*30-150*			
Matrix Spike Dup Source: 21I0139-14										
Aroclor 1016	6.0	0.3	mg/kg wet	6.757	ND	89	40-140	6	30	
Aroclor 1016 [2C]	6.0	0.3	mg/kg wet	6.757	ND	89	40-140	7	30	
Aroclor 1260	8.2	0.3	mg/kg wet	6.757	2.0	93	40-140	2	30	
Aroclor 1260 [2C]	8.5	0.3	mg/kg wet	6.757	2.7	86	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.300*		mg/kg wet	*0.3378*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.331*		mg/kg wet	*0.3378*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.283*		mg/kg wet	*0.3378*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.306*		mg/kg wet	*0.3378*		*90*	*30-150*			
Batch DI11305 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0221*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0139

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI11305 - 3540C										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		91	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		91	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		94	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		92	40-140			
Surrogate: Decachlorobiphenyl	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0234*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		90	40-140	0.5	30	
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		87	40-140	4	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		91	40-140	4	30	
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		89	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0201*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0139

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).
S-	Surrogate recovery(ies) below lower control limit (S-).
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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0139

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 2110139
Date Received: 9/3/2021
Project Due Date: 9/13/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 4.1 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	204181	Yes	N/A	Yes	4 oz. Jar	NP	
2	204182	Yes	N/A	Yes	4 oz. Jar	NP	
3	204183	Yes	N/A	Yes	4 oz. Jar	NP	
4	204184	Yes	N/A	Yes	4 oz. Jar	NP	
5	204185	Yes	N/A	Yes	4 oz. Jar	NP	
6	204186	Yes	N/A	Yes	4 oz. Jar	NP	
7	204187	Yes	N/A	Yes	4 oz. Jar	NP	
8	204188	Yes	N/A	Yes	4 oz. Jar	NP	
9	204189	Yes	N/A	Yes	4 oz. Jar	NP	
10	204190	Yes	N/A	Yes	4 oz. Jar	NP	
11	204191	Yes	N/A	Yes	4 oz. Jar	NP	
12	204192	Yes	N/A	Yes	4 oz. Jar	NP	
13	204193	Yes	N/A	Yes	4 oz. Jar	NP	
14	204194	Yes	N/A	Yes	4 oz. Jar	NP	
15	204195	Yes	N/A	Yes	4 oz. Jar	NP	
16	204196	Yes	N/A	Yes	4 oz. Jar	NP	

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 2110139
Date Received: 9/3/2021

17	204197	Yes	N/A	Yes	4 oz. Jar	NP
18	204198	Yes	N/A	Yes	4 oz. Jar	NP
19	204199	Yes	N/A	Yes	4 oz. Jar	NP
20	204200	Yes	N/A	Yes	4 oz. Jar	NP

2nd Review

Were all containers scanned into storage/lab? Initials KL

Are barcode labels on correct containers? (Yes) / No

Are all Flashpoint stickers attached/container ID # circled? Yes / No / (NA)

Are all Hex Chrome stickers attached? Yes / No / (NA)

Are all QC stickers attached? (Yes) / No / NA

Are VOA stickers attached if bubbles noted? Yes / No / (NA)

Completed By: [signature] Date & Time: 9.3.21 18:26

Reviewed By: [signature] Date & Time: 9/3/21 1918

185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21I0139 | Page 1 of 3

Turn Time (Days) ☐>5 ~~☒5~~ ☐4 ☐3 ☐2 ☐1 ☐ Same Day

Regulatory State: Rhode Island Criteria: CO. 50ppm

Is this project for any of the following?:
☐CT RCP ☐MA MCP ☐RGP ☐Permit ☐401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☒ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers & Scientists, Inc
Address: 4 First Street
Bridgewater, Massachusetts 02324
Phone: 508-697-3191

Email Distribution List: jaevacelis, mzoller, kloftus, cmachvich, jkearney, mnash, mlabelle@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House
Project Location: 6 Thornton street, Pawtucket RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to: Environmental AP
PO#: 5675.F.101.4
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs 8082	Total Number of Bottles
1	9/1/21	11:00 am	Grab	Paint	PS-229	X	1
2		11:10 am			PS-230	X	1
3		11:15 am			PS-231	X	1
4		11:20 am			PS-232	X	1
5		1:00 pm			PS-233	X	1
6		1:10 pm			PS-234	X	1
7		1:20 pm			PS-235	X	1
8		1:25 pm			PS-236	X	1
9		1:30 pm			PS-237	X	1
10		1:35 pm			PS-238	X	1
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial					AG	
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					9	10
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					11	

Sampled by : MLL / DCK / MHN

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 4.1 / ice

Comments: * Please specify "Other" preservative and containers types in this space
TSCA reg. 11:ice Manual surface eff. EPA 3540 Natural Grid Project Report dry weight, homogenize Full Date per Lab

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
	9/2/2021	2:50 pm	9/3/21 10:08		9/3/21	16:42	9-3-21 16:42
Relinquished by (Signature)	**Date**	**Time**	**Received by (Signature)**	**Relinquished by (Signature)**	**Date**	**Time**	**Received by (Signature)**

CHAIN OF CUSTODY

ESS LABORATORY
185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

ESS Lab # 21D0139 | Page 2 of 3

Turn Time (Days) ☐>5 ☒5 ☐4 ☐3 ☐2 ☐1 ☐ Same Day

Regulatory State: Rhode Island Criteria: 20.5 ppm

Is this project for any of the following?: ☐CT RCP ☐MA MCP ☐RGP ☐Permit ☐401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☒ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers & Scientists, Inc
Address: 4 First Street
Bridgewater, Massachusetts 02324
Phone: 508-697-3191
Email Distribution List: Jawarbsimzollerklotfus, Cmacuch, Jkearney, mnash, mlabelle@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House & Thorton St. Pawtucket RI
Project Location:
Project Number: 5675.F
Project Manager: Katie Lotfus
Bill to: Environmental AP
PO#: 5675.F.101.4
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs Aroclors	MS/MSD													Total Number of Bottles
11	9/1/21	8:05 am	Grab	Paint	PS-239	X														1
12		8:15 am			PS-240	X														1
13		8:20 am			PS-241	X														1
14		9:00 am			PS-242	X	X													1
15		9:20 am			PS-243	X														1
16		9:25 am			PS-244	X														1
17		9:30 am			PS-245	X														1
18		10:00 am			PS-246	X														1
19		10:30 am			PS-247	X														1
20		10:45 am			PS-249	X														1
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial					A6														10
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					9														
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					11														

Sampled by : MLL/DCK/MHN

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 4.1 / Ice

Comments: * Please specify "Other" preservative and containers types in this space
11=ice
Manual Soxhlet extraction EPA 3546
Report dry weight, homogenize
TAT req. National Grid Project Full Data Package

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
	9/2/2021	2:51pm	9/3/21 10:28		9/3/21	16:48	9-3-21 16:42
Relinquished by (Signature)	**Date**	**Time**	**Received by (Signature)**	**Relinquished by (Signature)**	**Date**	**Time**	**Received by (Signature)**

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 21I0140

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 4:14 pm, Sep 13, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0140

SAMPLE RECEIPT

The following samples were received on September 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21I0140-01	PS-250	Solid	8082A
21I0140-02	PS-251	Solid	8082A
21I0140-03	DUP-08	Solid	8082A
21I0140-04	PS-248	Solid	8082A
21I0140-05	PS-252	Solid	8082A
21I0140-06	DUP-07	Solid	8082A
21I0140-07	PS-253	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0140

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

21I0140-05 **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%)

DI10707-MS2 **Matrix Spike recovery is below lower control limit (M-).**
Aroclor 1260 (-188% @ 40-140%), Aroclor 1260 [2C] (-141% @ 40-140%)

DI10707-MSD2 **Matrix Spike recovery is below lower control limit (M-).**
Aroclor 1260 (-10% @ 40-140%), Aroclor 1260 [2C] (-2% @ 40-140%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0140

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-250
Date Sampled: 09/01/21 13:40
Percent Solids: N/A
Initial Volume: 4.25
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0140
ESS Laboratory Sample ID: 21I0140-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 21:39	D1I0072	DI10707
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 21:39	D1I0072	DI10707
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 21:39	D1I0072	DI10707
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 21:39	D1I0072	DI10707
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 21:39	D1I0072	DI10707
Aroclor 1254	ND (0.1)		8082A		1	09/10/21 21:39	D1I0072	DI10707
Aroclor 1260	**24.1** (1.2)		8082A		10	09/12/21 11:38	D1I0072	DI10707
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 21:39	D1I0072	DI10707
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 21:39	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-251
Date Sampled: 09/01/21 13:45
Percent Solids: N/A
Initial Volume: 4.94
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0140
ESS Laboratory Sample ID: 21I0140-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 21:58	D1I0072	DI10707
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 21:58	D1I0072	DI10707
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 21:58	D1I0072	DI10707
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 21:58	D1I0072	DI10707
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 21:58	D1I0072	DI10707
Aroclor 1254	ND (0.1)		8082A		1	09/10/21 21:58	D1I0072	DI10707
Aroclor 1260	**28.6** (1.0)		8082A		10	09/12/21 11:58	D1I0072	DI10707
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 21:58	D1I0072	DI10707
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 21:58	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-08
Date Sampled: 09/01/21 14:00
Percent Solids: N/A
Initial Volume: 4.97
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0140
ESS Laboratory Sample ID: 21I0140-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 22:17	D1I0072	DI10707
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 22:17	D1I0072	DI10707
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 22:17	D1I0072	DI10707
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 22:17	D1I0072	DI10707
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 22:17	D1I0072	DI10707
Aroclor 1254	**1.9** (0.1)		8082A		1	09/10/21 22:17	D1I0072	DI10707
Aroclor 1260	**1.9** (0.1)		8082A		1	09/10/21 22:17	D1I0072	DI10707
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 22:17	D1I0072	DI10707
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 22:17	D1I0072	DI10707

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*63 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-248
Date Sampled: 09/01/21 14:15
Percent Solids: N/A
Initial Volume: 5.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0140
ESS Laboratory Sample ID: 21I0140-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 23:15	D1I0072	DI10707
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 23:15	D1I0072	DI10707
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 23:15	D1I0072	DI10707
Aroclor 1242	**2.9** (0.1)		8082A		1	09/10/21 23:15	D1I0072	DI10707
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 23:15	D1I0072	DI10707
Aroclor 1254	ND (0.1)		8082A		1	09/10/21 23:15	D1I0072	DI10707
Aroclor 1260	ND (0.1)		8082A		1	09/10/21 23:15	D1I0072	DI10707
Aroclor 1262	**3.5** (0.1)		8082A		1	09/10/21 23:15	D1I0072	DI10707
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 23:15	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-252
Date Sampled: 09/02/21 08:00
Percent Solids: N/A
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0140
ESS Laboratory Sample ID: 21I0140-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (9.9)		8082A		100	09/12/21 12:36	D1I0159	DI10707
Aroclor 1221	ND (9.9)		8082A		100	09/12/21 12:36	D1I0159	DI10707
Aroclor 1232	ND (9.9)		8082A		100	09/12/21 12:36	D1I0159	DI10707
Aroclor 1242	ND (9.9)		8082A		100	09/12/21 12:36	D1I0159	DI10707
Aroclor 1248	ND (9.9)		8082A		100	09/12/21 12:36	D1I0159	DI10707
Aroclor 1254 [2C]	**282** (9.9)		8082A		100	09/12/21 12:36	D1I0159	DI10707
Aroclor 1260	**207** (9.9)		8082A		100	09/12/21 12:36	D1I0159	DI10707
Aroclor 1262	ND (9.9)		8082A		100	09/12/21 12:36	D1I0159	DI10707
Aroclor 1268	ND (9.9)		8082A		100	09/12/21 12:36	D1I0159	DI10707

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: DUP-07
Date Sampled: 09/02/21 08:05
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0140
ESS Laboratory Sample ID: 21I0140-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/10/21 23:53	D1I0072	DI10707
Aroclor 1221	ND (0.1)		8082A		1	09/10/21 23:53	D1I0072	DI10707
Aroclor 1232	ND (0.1)		8082A		1	09/10/21 23:53	D1I0072	DI10707
Aroclor 1242	ND (0.1)		8082A		1	09/10/21 23:53	D1I0072	DI10707
Aroclor 1248	ND (0.1)		8082A		1	09/10/21 23:53	D1I0072	DI10707
Aroclor 1254	ND (0.1)		8082A		1	09/10/21 23:53	D1I0072	DI10707
Aroclor 1260	**26.1** (1.0)		8082A		10	09/12/21 12:55	D1I0072	DI10707
Aroclor 1262	ND (0.1)		8082A		1	09/10/21 23:53	D1I0072	DI10707
Aroclor 1268	ND (0.1)		8082A		1	09/10/21 23:53	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-253
Date Sampled: 09/02/21 08:30
Percent Solids: N/A
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0140
ESS Laboratory Sample ID: 21I0140-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	09/11/21 0:51	D1I0072	DI10707
Aroclor 1221	ND (0.1)		8082A		1	09/11/21 0:51	D1I0072	DI10707
Aroclor 1232	ND (0.1)		8082A		1	09/11/21 0:51	D1I0072	DI10707
Aroclor 1242	ND (0.1)		8082A		1	09/11/21 0:51	D1I0072	DI10707
Aroclor 1248	ND (0.1)		8082A		1	09/11/21 0:51	D1I0072	DI10707
Aroclor 1254	ND (0.1)		8082A		1	09/11/21 0:51	D1I0072	DI10707
Aroclor 1260	**27.0** (1.0)		8082A		10	09/12/21 13:53	D1I0072	DI10707
Aroclor 1262	ND (0.1)		8082A		1	09/11/21 0:51	D1I0072	DI10707
Aroclor 1268	ND (0.1)		8082A		1	09/11/21 0:51	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*69 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0140

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI10707 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		95	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		91	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		97	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		94	40-140			
Surrogate: Decachlorobiphenyl	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.05	mg/kg wet	0.5000		85	40-140	11	30	
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		83	40-140	9	30	
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		88	40-140	10	30	
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		86	40-140	9	30	
Surrogate: Decachlorobiphenyl	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Matrix Spike **Source: 21I0140-03**										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0140

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI10707 - 3540C										
Aroclor 1016	1.6	0.1	mg/kg wet	1.976	ND	80	40-140			
Aroclor 1016 [2C]	1.6	0.1	mg/kg wet	1.976	ND	79	40-140			
Aroclor 1260	3.4	0.1	mg/kg wet	1.976	1.9	74	40-140			
Aroclor 1260 [2C]	2.7	0.1	mg/kg wet	1.976	1.7	53	40-140			
Surrogate: Decachlorobiphenyl	*0.0611*		mg/kg wet	*0.09881*		*62*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0652*		mg/kg wet	*0.09881*		*66*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0722*		mg/kg wet	*0.09881*		*73*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0779*		mg/kg wet	*0.09881*		*79*	*30-150*			
Matrix Spike **Source: 21I0140-06**										
Aroclor 1016	1.6	0.1	mg/kg wet	1.976	ND	81	40-140			
Aroclor 1016 [2C]	1.4	0.1	mg/kg wet	1.976	ND	69	40-140			
Aroclor 1260	22.4	1.0	mg/kg wet	1.976	26.1	NR	40-140			M-
Aroclor 1260 [2C]	19.7	1.0	mg/kg wet	1.976	22.5	NR	40-140			M-
Surrogate: Decachlorobiphenyl	*0.0596*		mg/kg wet	*0.09881*		*60*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0572*		mg/kg wet	*0.09881*		*58*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0590*		mg/kg wet	*0.09881*		*60*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0631*		mg/kg wet	*0.09881*		*64*	*30-150*			
Matrix Spike Dup **Source: 21I0140-03**										
Aroclor 1016	1.5	0.1	mg/kg wet	1.980	ND	78	40-140	2	30	
Aroclor 1016 [2C]	1.5	0.1	mg/kg wet	1.980	ND	76	40-140	4	30	
Aroclor 1260	3.3	0.1	mg/kg wet	1.980	1.9	69	40-140	3	30	
Aroclor 1260 [2C]	2.6	0.1	mg/kg wet	1.980	1.7	49	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0593*		mg/kg wet	*0.09901*		*60*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0580*		mg/kg wet	*0.09901*		*59*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0701*		mg/kg wet	*0.09901*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0753*		mg/kg wet	*0.09901*		*76*	*30-150*			
Matrix Spike Dup **Source: 21I0140-06**										
Aroclor 1016	1.9	0.1	mg/kg wet	1.984	ND	98	40-140	20	30	
Aroclor 1016 [2C]	1.7	0.1	mg/kg wet	1.984	ND	87	40-140	23	30	
Aroclor 1260	25.9	1.0	mg/kg wet	1.984	26.1	NR	40-140	15	30	M-
Aroclor 1260 [2C]	22.4	1.0	mg/kg wet	1.984	22.5	NR	40-140	13	30	M-
Surrogate: Decachlorobiphenyl	*0.0868*		mg/kg wet	*0.09921*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0798*		mg/kg wet	*0.09921*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0732*		mg/kg wet	*0.09921*		*74*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0781*		mg/kg wet	*0.09921*		*79*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0140

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
M-	Matrix Spike recovery is below lower control limit (M-).
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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0140

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 2110140
Date Received: 9/3/2021
Project Due Date: 9/13/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 4.1 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	204213	Yes	N/A	Yes	4 oz. Jar	NP	
2	204214	Yes	N/A	Yes	4 oz. Jar	NP	
3	204215	Yes	N/A	Yes	4 oz. Jar	NP	
4	204216	Yes	N/A	Yes	4 oz. Jar	NP	
5	204217	Yes	N/A	Yes	4 oz. Jar	NP	
6	204218	Yes	N/A	Yes	4 oz. Jar	NP	
7	204219	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials KL
Are barcode labels on correct containers? Yes / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 2110140

Date Received: 9/3/2021

By: [signature] Date & Time: 9-3-21 18:23

Reviewed By: [signature] Date & Time: 9/3/21 1915

CHAIN OF CUSTODY

ESS Laboratory
185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

ESS Lab # 21I0140 | Page 3 of 3

Turn Time (Days) ☐>5 ☒5 ☐4 ☐3 ☐2 ☐1 ☐ Same Day

Regulatory State: Rhode Island   Criteria: <0.5ppm

Is this project for any of the following?: ☐CT RCP ☐MA MCP ☐RGP ☐Permit ☐401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☐ Limit Checker ☐ State Forms ☐ EQuIS
☐ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☒ Other (Specify) → PDF

CLIENT INFORMATION

Client: Coneco Engineers & Scientists, Inc
Address: 4 First Street
Bridgewater, Massachusetts 02324
Phone: 508-697-3191
Email Distribution List: Juevazelsi, mzoller, klofus, cmacuch, dKearney, mnash, mlabelle@conecо.com

PROJECT INFORMATION

Project Name: Pawtucket 1 Control House
Project Location: 6 Thornton St, Pawtucket RI
Project Number: 5675.F
Project Manager: Katie Loftus
Bill to: Environmental AP
PO#: 5675.F.101.4
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs 8082	MS/MSD	Total Number of Bottles
1	9/1/21	1:40pm	Grab	Paint	PS-250	X		1
2	↓	1:45pm	↓	↓	PS-251	X		1
3	↓ 9/1/21	2:00pm	↓	↓	DUP-08	X	X	1
4	~~9/2/21~~ (ML)	2:15pm	↓	↓	PS-248	X		1
5	9/2/21	8:00am	↓	↓	PS-252	X		1
6	9/2/21	8:05am	↓	↓	DUP-07	X	X	1
7	9/2/21	8:30am	↓	↓	PS-253	X		1

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG →
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9 → — Total: 7
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11 →

Sampled by: MLL / DCK / MHN

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 4.1 / ice

Comments: * Please specify "Other" preservative and containers types in this space
TSCA Req. 11 = ice. Manual Soxhlet extr. EPA 3546. Report dry weight, homogenize. National Grid Project. Full Data Package

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration: ☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
[signature]	9/2/2021	2:50pm	[signature] 9/3/21 12:28	[signature]	9/3/21	16:42	[signature] 9-3-21 16:42

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F.101.4)
ESS Laboratory Work Order Number: 21J0814

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 3:10 pm, Nov 01, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0814

SAMPLE RECEIPT

The following samples were received on October 22, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21J0814-01	PS-254	Solid	8082A
21J0814-02	PS-255	Solid	8082A
21J0814-03	PS-256	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0814

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0814

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-254
Date Sampled: 10/21/21 08:59
Percent Solids: N/A
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0814
ESS Laboratory Sample ID: 21J0814-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: JLG
Prepared: 10/28/21 20:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/29/21 14:34	D1J0491	DJ12805
Aroclor 1221	ND (0.1)		8082A		1	10/29/21 14:34	D1J0491	DJ12805
Aroclor 1232	ND (0.1)		8082A		1	10/29/21 14:34	D1J0491	DJ12805
Aroclor 1242	ND (0.1)		8082A		1	10/29/21 14:34	D1J0491	DJ12805
Aroclor 1248	ND (0.1)		8082A		1	10/29/21 14:34	D1J0491	DJ12805
Aroclor 1254	**3.8** (0.1)		8082A		1	10/29/21 14:34	D1J0491	DJ12805
Aroclor 1260 [2C]	**7.8** (0.5)		8082A		5	10/29/21 15:32	D1J0491	DJ12805
Aroclor 1262	ND (0.1)		8082A		1	10/29/21 14:34	D1J0491	DJ12805
Aroclor 1268	ND (0.1)		8082A		1	10/29/21 14:34	D1J0491	DJ12805

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*38 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*39 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-255
Date Sampled: 10/21/21 09:03
Percent Solids: N/A
Initial Volume: 5.44
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0814
ESS Laboratory Sample ID: 21J0814-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.09)		8082A		1	10/27/21 17:49	D1J0446	DJ12506
Aroclor 1221	ND (0.09)		8082A		1	10/27/21 17:49	D1J0446	DJ12506
Aroclor 1232	ND (0.09)		8082A		1	10/27/21 17:49	D1J0446	DJ12506
Aroclor 1242	ND (0.09)		8082A		1	10/27/21 17:49	D1J0446	DJ12506
Aroclor 1248	ND (0.09)		8082A		1	10/27/21 17:49	D1J0446	DJ12506
Aroclor 1254	**2.1** (0.09)		8082A		1	10/27/21 17:49	D1J0446	DJ12506
Aroclor 1260	**6.7** (0.5)		8082A		5	10/29/21 10:23	D1J0446	DJ12506
Aroclor 1262	ND (0.09)		8082A		1	10/27/21 17:49	D1J0446	DJ12506
Aroclor 1268	ND (0.09)		8082A		1	10/27/21 17:49	D1J0446	DJ12506

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*49 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*60 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: PS-256
Date Sampled: 10/21/21 09:11
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0814
ESS Laboratory Sample ID: 21J0814-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/27/21 18:08	D1J0446	DJ12506
Aroclor 1221	ND (0.1)		8082A		1	10/27/21 18:08	D1J0446	DJ12506
Aroclor 1232	ND (0.1)		8082A		1	10/27/21 18:08	D1J0446	DJ12506
Aroclor 1242	ND (0.1)		8082A		1	10/27/21 18:08	D1J0446	DJ12506
Aroclor 1248	ND (0.1)		8082A		1	10/27/21 18:08	D1J0446	DJ12506
Aroclor 1254	**7.3** (0.5)		8082A		5	10/29/21 10:43	D1J0446	DJ12506
Aroclor 1260	**10.9** (0.5)		8082A		5	10/29/21 10:43	D1J0446	DJ12506
Aroclor 1262	ND (0.1)		8082A		1	10/27/21 18:08	D1J0446	DJ12506
Aroclor 1268	ND (0.1)		8082A		1	10/27/21 18:08	D1J0446	DJ12506

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0814

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DJ12506 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0257*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0242*		mg/kg wet	*0.02500*		*97*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		96	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		92	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		105	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		95	40-140			
Surrogate: Decachlorobiphenyl	*0.0271*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		97	40-140	1	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		93	40-140	1	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		107	40-140	1	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		96	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0274*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Batch DJ12805 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0814

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DJ12805 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		90	40-140			
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		87	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		99	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		90	40-140			
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0231*		mg/kg wet	*0.02500*		*93*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		92	40-140	2	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		89	40-140	2	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		101	40-140	2	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		92	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0814

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probable Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0814

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21J0814
Date Received: 10/22/2021
Project Due Date: 10/29/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 2.1 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	221482	Yes	N/A	Yes	4 oz. Jar	NP	
2	221483	Yes	N/A	Yes	4 oz. Jar	NP	
3	221484	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review

Were all containers scanned into storage/lab? Initials: [illegible]
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: [signature] Date & Time: 10/22/21 1627
Reviewed By: [signature] Date & Time: 10/22/21 1631

CHAIN OF CUSTODY

185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

ESS Lab # 21J0814 | Page 1 of 1

Turn Time (Days) ☐>5 ☑5 ☐4 ☐3 ☐2 ☐1 ☐ Same Day

Regulatory State: RI **Criteria:** <0.5 mg/kg

Is this project for any of the following?:
☐CT RCP ☐MA MCP ☐RGP ☐Permit ☐401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☑ Limit Checker ☐ State Forms ☐ EQuIS
☑ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☐ Other (Specify) →

CLIENT INFORMATION

Client: Coneco Engineers & Scientists, Inc
Address: 4 First Street
Bridgewater, Massachusetts 02324
Phone: 508-697-3191

Email Distribution List: dkearney, cmacuch, kloftus, jaevazelis@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket Control House
Project Location: 6 Thorton Street, Pawtucket, RI
Project Number: 5675.F.101.4
Project Manager: Katie Loftus
Bill to: Environmental AP
PO#: 5675.F.101.4
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by EPA 8082	Total Number of Bottles
1	10/21/2021	0859	Grab	Paint	PS-254	X	1
2	10/21/2021	0903	Grab	↓	PS-255	X	1
3	10/21/2021	0911	Grab	↓	PS-256	X	1

Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*	11

Total Number of Bottles: 3

Sampled by : DCK

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 2.1
1 Ice

Comments: * Please specify "Other" preservative and containers types in this space
National Grid Project Preservation code 11 = ice Homogenize samples
Use manual soxhlet extraction per EPA Method 3540 TSCA Requirements
Please provide full data package

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
	10/21/21	1400	10/22/21 11:52		10/22/21	16:03	
Relinquished by (Signature)	**Date**	**Time**	**Received by (Signature)**	**Relinquished by (Signature)**	**Date**	**Time**	**Received by (Signature)**

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1810191

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 6:01 pm, Oct 12, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810191

SAMPLE RECEIPT

The following samples were received on October 04, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1810191-01	1009	Solid	8082A
1810191-02	1010	Solid	8082A
1810191-03	1013	Solid	8082A
1810191-04	1024	Solid	8082A
1810191-05	1026	Solid	8082A
1810191-06	2001	Solid	8082A
1810191-07	2003A	Solid	8082A
1810191-08	2004	Solid	8082A
1810191-09	2011	Solid	8082A
1810191-10	2012	Solid	8082A
1810191-11	2014	Solid	8082A
1810191-12	2015	Solid	8082A
1810191-13	2016	Solid	8082A
1810191-14	2018	Solid	8082A
1810191-15	2035	Solid	8082A
1810191-16	3015	Solid	8082A
1810191-17	4006	Solid	8082A
1810191-18	5001	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810191

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1810191-06	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (463% @ 30-150%), Decachlorobiphenyl [2C] (450% @ 30-150%)
1810191-07	**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%)
1810191-08	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1254
1810191-08	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1254

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810191

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 1009
Date Sampled: 10/01/18 09:25
Percent Solids: N/A
Initial Volume: 2.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	10/10/18 22:37		CJ80913
Aroclor 1221	ND (0.2)		8082A		1	10/10/18 22:37		CJ80913
Aroclor 1232	ND (0.2)		8082A		1	10/10/18 22:37		CJ80913
Aroclor 1242	**0.4** (0.2)		8082A		1	10/10/18 22:37		CJ80913
Aroclor 1248	ND (0.2)		8082A		1	10/10/18 22:37		CJ80913
Aroclor 1254 [2C]	**1.9** (0.2)		8082A		1	10/10/18 22:37		CJ80913
Aroclor 1260	ND (0.2)		8082A		1	10/10/18 22:37		CJ80913
Aroclor 1262	ND (0.2)		8082A		1	10/10/18 22:37		CJ80913
Aroclor 1268	ND (0.2)		8082A		1	10/10/18 22:37		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*59 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 1010
Date Sampled: 10/01/18 09:30
Percent Solids: N/A
Initial Volume: 0.16
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (3.1)		8082A		1	10/10/18 22:56		CJ80913
Aroclor 1221	ND (3.1)		8082A		1	10/10/18 22:56		CJ80913
Aroclor 1232	ND (3.1)		8082A		1	10/10/18 22:56		CJ80913
Aroclor 1242	ND (3.1)		8082A		1	10/10/18 22:56		CJ80913
Aroclor 1248	ND (3.1)		8082A		1	10/10/18 22:56		CJ80913
Aroclor 1254 [2C]	**13.9** (3.1)		8082A		1	10/10/18 22:56		CJ80913
Aroclor 1260	ND (3.1)		8082A		1	10/10/18 22:56		CJ80913
Aroclor 1262	ND (3.1)		8082A		1	10/10/18 22:56		CJ80913
Aroclor 1268	ND (3.1)		8082A		1	10/10/18 22:56		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*104 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 1013
Date Sampled: 10/01/18 10:05
Percent Solids: N/A
Initial Volume: 1.55
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	10/10/18 23:15		CJ80913
Aroclor 1221	ND (0.3)		8082A		1	10/10/18 23:15		CJ80913
Aroclor 1232	ND (0.3)		8082A		1	10/10/18 23:15		CJ80913
Aroclor 1242	ND (0.3)		8082A		1	10/10/18 23:15		CJ80913
Aroclor 1248	ND (0.3)		8082A		1	10/10/18 23:15		CJ80913
Aroclor 1254 [2C]	**2.2** (0.3)		8082A		1	10/10/18 23:15		CJ80913
Aroclor 1260	ND (0.3)		8082A		1	10/10/18 23:15		CJ80913
Aroclor 1262	ND (0.3)		8082A		1	10/10/18 23:15		CJ80913
Aroclor 1268	ND (0.3)		8082A		1	10/10/18 23:15		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 1024
Date Sampled: 10/01/18 10:32
Percent Solids: N/A
Initial Volume: 2.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	10/10/18 23:34		CJ80913
Aroclor 1221	ND (0.2)		8082A		1	10/10/18 23:34		CJ80913
Aroclor 1232	ND (0.2)		8082A		1	10/10/18 23:34		CJ80913
Aroclor 1242	ND (0.2)		8082A		1	10/10/18 23:34		CJ80913
Aroclor 1248	ND (0.2)		8082A		1	10/10/18 23:34		CJ80913
Aroclor 1254 [2C]	**5.9** (0.2)		8082A		1	10/10/18 23:34		CJ80913
Aroclor 1260	ND (0.2)		8082A		1	10/10/18 23:34		CJ80913
Aroclor 1262	ND (0.2)		8082A		1	10/10/18 23:34		CJ80913
Aroclor 1268	ND (0.2)		8082A		1	10/10/18 23:34		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*47 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*46 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 1026
Date Sampled: 10/01/18 10:38
Percent Solids: N/A
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/10/18 23:53		CJ80913
Aroclor 1221	ND (0.1)		8082A		1	10/10/18 23:53		CJ80913
Aroclor 1232	ND (0.1)		8082A		1	10/10/18 23:53		CJ80913
Aroclor 1242	ND (0.1)		8082A		1	10/10/18 23:53		CJ80913
Aroclor 1248	ND (0.1)		8082A		1	10/10/18 23:53		CJ80913
Aroclor 1254	ND (0.1)		8082A		1	10/10/18 23:53		CJ80913
Aroclor 1260 [2C]	**5.1** (0.5)		8082A		5	10/12/18 3:08		CJ80913
Aroclor 1262	ND (0.1)		8082A		1	10/10/18 23:53		CJ80913
Aroclor 1268	ND (0.1)		8082A		1	10/10/18 23:53		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*53 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*104 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*69 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2001
Date Sampled: 10/01/18 11:30
Percent Solids: N/A
Initial Volume: 3.58
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 0:12		CJ80913
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 0:12		CJ80913
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 0:12		CJ80913
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 0:12		CJ80913
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 0:12		CJ80913
Aroclor 1254 [2C]	**14.4** (0.7)		8082A		5	10/12/18 3:27		CJ80913
Aroclor 1260	**5.5** (0.1)		8082A		1	10/11/18 0:12		CJ80913
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 0:12		CJ80913
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 0:12		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*463 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*450 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2003A
Date Sampled: 10/01/18 11:43
Percent Solids: N/A
Initial Volume: 5.17
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.9)		8082A		20	10/12/18 3:47		CJ80913
Aroclor 1221	ND (1.9)		8082A		20	10/12/18 3:47		CJ80913
Aroclor 1232	ND (1.9)		8082A		20	10/12/18 3:47		CJ80913
Aroclor 1242	ND (1.9)		8082A		20	10/12/18 3:47		CJ80913
Aroclor 1248	ND (1.9)		8082A		20	10/12/18 3:47		CJ80913
Aroclor 1254	ND (1.9)		8082A		20	10/12/18 3:47		CJ80913
Aroclor 1260 [2C]	**42.3** (1.9)		8082A		20	10/12/18 3:47		CJ80913
Aroclor 1262	ND (1.9)		8082A		20	10/12/18 3:47		CJ80913
Aroclor 1268	ND (1.9)		8082A		20	10/12/18 3:47		CJ80913

	%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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2004
Date Sampled: 10/01/18 11:50
Percent Solids: N/A
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 0:51		CJ80913
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 0:51		CJ80913
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 0:51		CJ80913
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 0:51		CJ80913
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 0:51		CJ80913
Aroclor 1254	**LC, P 1.1** (0.1)		8082A		1	10/11/18 0:51		CJ80913
Aroclor 1260	ND (0.1)		8082A		1	10/11/18 0:51		CJ80913
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 0:51		CJ80913
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 0:51		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*45 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2011
Date Sampled: 10/01/18 12:30
Percent Solids: N/A
Initial Volume: 2.24
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	10/11/18 1:10		CJ80913
Aroclor 1221	ND (0.2)		8082A		1	10/11/18 1:10		CJ80913
Aroclor 1232	ND (0.2)		8082A		1	10/11/18 1:10		CJ80913
Aroclor 1242	ND (0.2)		8082A		1	10/11/18 1:10		CJ80913
Aroclor 1248	ND (0.2)		8082A		1	10/11/18 1:10		CJ80913
Aroclor 1254	**1.0** (0.2)		8082A		1	10/11/18 1:10		CJ80913
Aroclor 1260 [2C]	**1.2** (0.2)		8082A		1	10/11/18 1:10		CJ80913
Aroclor 1262	ND (0.2)		8082A		1	10/11/18 1:10		CJ80913
Aroclor 1268 [2C]	**0.3** (0.2)		8082A		1	10/11/18 1:10		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2012
Date Sampled: 10/01/18 12:35
Percent Solids: N/A
Initial Volume: 4.66
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/11/18 16:22

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/12/18 13:02		CJ81012
Aroclor 1221	ND (0.1)		8082A		1	10/12/18 13:02		CJ81012
Aroclor 1232	ND (0.1)		8082A		1	10/12/18 13:02		CJ81012
Aroclor 1242	ND (0.1)		8082A		1	10/12/18 13:02		CJ81012
Aroclor 1248	ND (0.1)		8082A		1	10/12/18 13:02		CJ81012
Aroclor 1254	**0.8** (0.1)		8082A		1	10/12/18 13:02		CJ81012
Aroclor 1260	**0.7** (0.1)		8082A		1	10/12/18 13:02		CJ81012
Aroclor 1262	ND (0.1)		8082A		1	10/12/18 13:02		CJ81012
Aroclor 1268	ND (0.1)		8082A		1	10/12/18 13:02		CJ81012

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*31 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*30 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*31 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*34 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2014
Date Sampled: 10/01/18 12:40
Percent Solids: N/A
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-11
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 1:48		CJ80913
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 1:48		CJ80913
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 1:48		CJ80913
Aroclor 1242	**0.9** (0.1)		8082A		1	10/11/18 1:48		CJ80913
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 1:48		CJ80913
Aroclor 1254	**1.3** (0.1)		8082A		1	10/11/18 1:48		CJ80913
Aroclor 1260	**1.2** (0.1)		8082A		1	10/11/18 1:48		CJ80913
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 1:48		CJ80913
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 1:48		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*52 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*51 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2015
Date Sampled: 10/01/18 12:45
Percent Solids: N/A
Initial Volume: 5.14
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-12
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 4:21		CJ80913
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 4:21		CJ80913
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 4:21		CJ80913
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 4:21		CJ80913
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 4:21		CJ80913
Aroclor 1254	**3.5** (0.1)		8082A		1	10/11/18 4:21		CJ80913
Aroclor 1260 [2C]	**2.9** (0.1)		8082A		1	10/11/18 4:21		CJ80913
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 4:21		CJ80913
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 4:21		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*57 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*45 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*54 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2016
Date Sampled: 10/01/18 12:50
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-13
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 4:40		CJ80913
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 4:40		CJ80913
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 4:40		CJ80913
Aroclor 1242	ND (0.1)		8082A		1	10/11/18 4:40		CJ80913
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 4:40		CJ80913
Aroclor 1254	**6.1** (0.5)		8082A		5	10/12/18 4:06		CJ80913
Aroclor 1260 [2C]	**7.1** (0.5)		8082A		5	10/12/18 4:06		CJ80913
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 4:40		CJ80913
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 4:40		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2018
Date Sampled: 10/01/18 13:10
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-14
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	10/11/18 4:59		CJ80913
Aroclor 1221	ND (0.1)		8082A		1	10/11/18 4:59		CJ80913
Aroclor 1232	ND (0.1)		8082A		1	10/11/18 4:59		CJ80913
Aroclor 1242	**2.3** (0.1)		8082A		1	10/11/18 4:59		CJ80913
Aroclor 1248	ND (0.1)		8082A		1	10/11/18 4:59		CJ80913
Aroclor 1254 [2C]	**3.7** (0.1)		8082A		1	10/11/18 4:59		CJ80913
Aroclor 1260	**1.6** (0.1)		8082A		1	10/11/18 4:59		CJ80913
Aroclor 1262	ND (0.1)		8082A		1	10/11/18 4:59		CJ80913
Aroclor 1268	ND (0.1)		8082A		1	10/11/18 4:59		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2035
Date Sampled: 10/02/18 11:18
Percent Solids: N/A
Initial Volume: 2.75
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-15
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	10/11/18 5:18		CJ80913
Aroclor 1221	ND (0.2)		8082A		1	10/11/18 5:18		CJ80913
Aroclor 1232	ND (0.2)		8082A		1	10/11/18 5:18		CJ80913
Aroclor 1242	**1.0** (0.2)		8082A		1	10/11/18 5:18		CJ80913
Aroclor 1248	ND (0.2)		8082A		1	10/11/18 5:18		CJ80913
Aroclor 1254	**5.7** (0.2)		8082A		1	10/11/18 5:18		CJ80913
Aroclor 1260	**3.1** (0.2)		8082A		1	10/11/18 5:18		CJ80913
Aroclor 1262	ND (0.2)		8082A		1	10/11/18 5:18		CJ80913
Aroclor 1268	**0.7** (0.2)		8082A		1	10/11/18 5:18		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*49 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*58 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 3015
Date Sampled: 10/02/18 13:10
Percent Solids: N/A
Initial Volume: 1.95
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-16
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	10/11/18 5:37		CJ80913
Aroclor 1221	ND (0.3)		8082A		1	10/11/18 5:37		CJ80913
Aroclor 1232	ND (0.3)		8082A		1	10/11/18 5:37		CJ80913
Aroclor 1242	ND (0.3)		8082A		1	10/11/18 5:37		CJ80913
Aroclor 1248	ND (0.3)		8082A		1	10/11/18 5:37		CJ80913
Aroclor 1254	ND (0.3)		8082A		1	10/11/18 5:37		CJ80913
Aroclor 1260 [2C]	**9.0** (0.3)		8082A		1	10/11/18 5:37		CJ80913
Aroclor 1262	ND (0.3)		8082A		1	10/11/18 5:37		CJ80913
Aroclor 1268	ND (0.3)		8082A		1	10/11/18 5:37		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 4006
Date Sampled: 10/03/18 10:10
Percent Solids: N/A
Initial Volume: 0.28
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-17
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:13

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.8)		8082A		1	10/11/18 5:56		CJ80913
Aroclor 1221	ND (1.8)		8082A		1	10/11/18 5:56		CJ80913
Aroclor 1232	ND (1.8)		8082A		1	10/11/18 5:56		CJ80913
Aroclor 1242	ND (1.8)		8082A		1	10/11/18 5:56		CJ80913
Aroclor 1248	ND (1.8)		8082A		1	10/11/18 5:56		CJ80913
Aroclor 1254 [2C]	**5.6** (1.8)		8082A		1	10/11/18 5:56		CJ80913
Aroclor 1260	**3.7** (1.8)		8082A		1	10/11/18 5:56		CJ80913
Aroclor 1262	ND (1.8)		8082A		1	10/11/18 5:56		CJ80913
Aroclor 1268	ND (1.8)		8082A		1	10/11/18 5:56		CJ80913

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*82 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 5001
Date Sampled: 10/03/18 12:50
Percent Solids: N/A
Initial Volume: 2.19
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810191
ESS Laboratory Sample ID: 1810191-18
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 10/9/18 17:44

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	10/11/18 6:15		CJ80914
Aroclor 1221	ND (0.2)		8082A		1	10/11/18 6:15		CJ80914
Aroclor 1232	ND (0.2)		8082A		1	10/11/18 6:15		CJ80914
Aroclor 1242	ND (0.2)		8082A		1	10/11/18 6:15		CJ80914
Aroclor 1248	ND (0.2)		8082A		1	10/11/18 6:15		CJ80914
Aroclor 1254 [2C]	**1.5** (0.2)		8082A		1	10/11/18 6:15		CJ80914
Aroclor 1260	**0.9** (0.2)		8082A		1	10/11/18 6:15		CJ80914
Aroclor 1262	ND (0.2)		8082A		1	10/11/18 6:15		CJ80914
Aroclor 1268	ND (0.2)		8082A		1	10/11/18 6:15		CJ80914

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810191

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80913 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0233*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0250*		mg/kg wet	*0.02500*		*100*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		102	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		103	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		92	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		103	40-140			
Surrogate: Decachlorobiphenyl	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		107	40-140	5	30	
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		107	40-140	4	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		98	40-140	6	30	
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		108	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0221*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0244*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0226*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Batch CJ80914 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810191

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ80914 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0190*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0198*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
LCS										
Aroclor 1016	0.4	0.05	mg/kg wet	0.5000		88	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		90	40-140			
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		85	40-140			
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		89	40-140			
Surrogate: Decachlorobiphenyl	*0.0202*		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	*0.0183*		mg/kg wet	*0.02500*		*73*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0192*		mg/kg wet	*0.02500*		*77*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.05	mg/kg wet	0.5000		89	40-140	0.6	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		92	40-140	2	30	
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		81	40-140	5	30	
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		89	40-140	0.8	30	
Surrogate: Decachlorobiphenyl	*0.0178*		mg/kg wet	*0.02500*		*71*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0199*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0187*		mg/kg wet	*0.02500*		*75*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0194*		mg/kg wet	*0.02500*		*78*	*30-150*			
Batch CJ81012 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810191

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ81012 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0259*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0204*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0201*		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	0.5	0.05	mg/kg wet	0.5000		96	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		99	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		95	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		97	40-140			
Surrogate: Decachlorobiphenyl	*0.0254*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0201*		mg/kg wet	*0.02500*		*80*	*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*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		92	40-140	4	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		95	40-140	4	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		94	40-140	2	30	
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		95	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0201*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0214*		mg/kg wet	*0.02500*		*85*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810191

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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810191

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1810191
Date Received: 10/4/2018
Project Due Date: 10/12/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	274682	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	274681	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	274680	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	274679	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	274678	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	274677	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	274676	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	274675	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	274674	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	274673	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	274672	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	274671	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	274670	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	274669	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	274668	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	274667	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	274666	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	274665	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

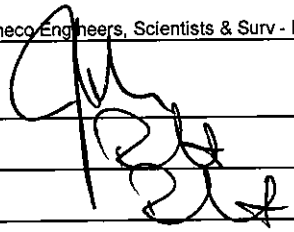
2nd Review
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 1810191

Date Received: 10/4/2018

Completed By: 

Date & Time: 10/4/18 2103

Reviewed By:

Date & Time: 10/4/18 2137

Delivered By:

10/4/18 2137

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1810191

Turn Time 5-Day **Rush**

Regulatory State Rhode Island

Is this project for any of the following?: ○CT RCP ○MA MCP ○RGP

Reporting Limits PCBs < 0.5 mg/kg

Electonic Deliverables ☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	MA	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	10/1/2018	9:25 AM	Grab	Solid	1009	X
02	10/1/2018	9:30 AM	Grab	Solid	1010	X
03	10/1/2018	10:05 AM	Grab	Solid	1013	X
04	10/1/2018	10:32 AM	Grab	Solid	1024	X
05	10/1/2018	10:38 AM	Grab	Solid	1026	X
06	10/1/2018	11:30 AM	Grab	Solid	2001	X
07	10/1/2018	11:43 AM	Grab	Solid	2003A	X
08	10/1/2018	11:50 AM	Grab	Solid	2004	X
09	10/1/2018	12:30 PM	Grab	Solid	2011	X
10	10/1/2018	12:35 PM	Grab	Solid	2012	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓

Seals Intact: ____

Cooler Temperature: 1.8+3.2 °C ICE RC

Sampled by : KML

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual soxhlet extraction per EPA Method 3540, Report dry weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 1:30pm	R. Carlson 10/4/18 1330	R Carlson 10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 18101911

Turn Time: 5-Day Rush
Regulatory State: Rhode Island
Is this project for any of the following?: ○CT RCP ○MA MCP ○RGP
Reporting Limits: PCBs < 0.5 mg/kg
Electonic Deliverables: ☐Limit Checker ☑Other (Please Specify →) PDF ☐Excel

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave,

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	MA	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
11	10/1/18	12:40 PM	Grab	Solid	2014	X
12	10/1/18	12:45 PM	Grab	Solid	2015	X
13	10/1/18	12:50 PM	Grab	Solid	2016	X
14	10/1/18	1:10 PM	Grab	Solid	2018	X
15	10/2/18	11:18AM	Grab	Solid	2035	X
16	10/2/18	1:10 PM	Grab	Solid	3015	X
17	10/3/18	10:10 AM	Grab	Solid	4006	X
18	10/3/18	12:50 PM	Grab	Solid	5001	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: ✓
Seals Intact:
Cooler Temperature: 1.8 + 3.2 °C ICE RC

Sampled by : KML

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual soxhlet extraction per EPA Method 3540, Report dry weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
10/4/18 1:30pm	10/4/18 1330	10/4/18 1545	10/4/18 2047
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1810434

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 3:03 pm, Oct 18, 2018

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810434

SAMPLE RECEIPT

The following samples were received on October 15, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1810434-01	2003B	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810434

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810434

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
MADEP 04-2.1 - 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

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2003B
Date Sampled: 10/01/18 11:45
Percent Solids: 98
Initial Volume: 2.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1810434
ESS Laboratory Sample ID: 1810434-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 10/15/18 17:43

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	10/17/18 3:24		CJ81507
Aroclor 1221	ND (0.2)		8082A		1	10/17/18 3:24		CJ81507
Aroclor 1232	ND (0.2)		8082A		1	10/17/18 3:24		CJ81507
Aroclor 1242	**3.0** (0.2)		8082A		1	10/17/18 3:24		CJ81507
Aroclor 1248	ND (0.2)		8082A		1	10/17/18 3:24		CJ81507
Aroclor 1254 [2C]	**9.4** (0.2)		8082A		1	10/17/18 3:24		CJ81507
Aroclor 1260 [2C]	**18.9** (1.2)		8082A		5	10/17/18 11:38		CJ81507
Aroclor 1262	ND (0.2)		8082A		1	10/17/18 3:24		CJ81507
Aroclor 1268	ND (0.2)		8082A		1	10/17/18 3:24		CJ81507

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*66 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810434

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ81507 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0204*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0195*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		105	40-140			
Aroclor 1016 [2C]	0.6	0.02	mg/kg wet	0.5000		113	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		104	40-140			
Aroclor 1260 [2C]	0.6	0.02	mg/kg wet	0.5000		117	40-140			
Surrogate: Decachlorobiphenyl	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0226*		mg/kg wet	*0.02500*		*90*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		103	40-140	2	30	
Aroclor 1016 [2C]	0.6	0.02	mg/kg wet	0.5000		111	40-140	2	30	
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		103	40-140	1	30	
Aroclor 1260 [2C]	0.6	0.02	mg/kg wet	0.5000		116	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0199*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810434

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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1810434

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1810434
Date Received: 10/15/2018
Project Due Date: 10/18/2018
Days for Project: 3 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.1 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	277821	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

Completed By: Date & Time: 10/15/18 1522
Reviewed By: Date & Time: 10/15/18 1547
Delivered By: 10/15/18 1547

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # R610434

Turn Time 72 hr Rush

Regulatory State Rhode Island

Is this project for any of the following?:
○CT RCP ○MA MCP ○RGP

Reporting Limits <0.5 mg/kg

Electonic Deliverables ☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers and Scientists	5675.F	Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	MA	02324	5675.F

Telephone Number	FAX Number	Email Address
508-697-3191		jaevazalis, mzoller,kloftus@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	10/1/2018	11:45 AM	Grab	Solid	2003B	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓

Seals Intact:

Cooler Temperature: 1.1 °C ICE RC

Sampled by : KML

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual soxhlet extraction per EPA Method 3540, Report dry weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
	10/15/18 1020	10/15/18 1445	10/15/18 1570
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 1811062

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 1:33 pm, Nov 09, 2018

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.

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CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811062

SAMPLE RECEIPT

The following samples were received on November 02, 2018 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1811062-01	012	Soil	8082A
1811062-02	013	Soil	8082A
1811062-03	014	Soil	8082A
1811062-04	016	Soil	8082A
1811062-05	019	Soil	8082A
1811062-06	022	Soil	8082A
1811062-07	023	Soil	8082A
1811062-08	024	Soil	8082A
1811062-09	028	Soil	8082A
1811062-10	029	Soil	8082A
1811062-11	2003C	Soil	8082A
1811062-12	2012B	Soil	8082A
1811062-13	2016B	Soil	8082A
1811062-14	2016C	Soil	8082A
1811062-15	5009	Soil	8082A
1811062-16	5010	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811062

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1811062-03 **Surrogate recovery(ies) below lower control limit (S-).**
Decachlorobiphenyl (23% @ 30-150%), Decachlorobiphenyl [2C] (24% @ 30-150%)

1811062-04 **Surrogate recovery(ies) below lower control limit (S-).**
Tetrachloro-m-xylene (28% @ 30-150%)

1811062-08 **Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).**
Decachlorobiphenyl (19% @ 30-150%), Decachlorobiphenyl [2C] (20% @ 30-150%),
Tetrachloro-m-xylene (26% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

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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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811062

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

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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)
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Prep Methods

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3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
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3541 - Automated Soxhlet Extraction
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3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 012
Date Sampled: 10/30/18 09:45
Percent Solids: N/A
Initial Volume: 2.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-01
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/06/18 14:18		CK80511
Aroclor 1221	ND (0.2)		8082A		1	11/06/18 14:18		CK80511
Aroclor 1232	ND (0.2)		8082A		1	11/06/18 14:18		CK80511
Aroclor 1242	ND (0.2)		8082A		1	11/06/18 14:18		CK80511
Aroclor 1248	ND (0.2)		8082A		1	11/06/18 14:18		CK80511
Aroclor 1254	ND (0.2)		8082A		1	11/06/18 14:18		CK80511
Aroclor 1260	ND (0.2)		8082A		1	11/06/18 14:18		CK80511
Aroclor 1262	ND (0.2)		8082A		1	11/06/18 14:18		CK80511
Aroclor 1268	ND (0.2)		8082A		1	11/06/18 14:18		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 013
Date Sampled: 10/30/18 10:12
Percent Solids: N/A
Initial Volume: 0.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-02
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.8)		8082A		1	11/06/18 14:37		CK80511
Aroclor 1221	ND (0.8)		8082A		1	11/06/18 14:37		CK80511
Aroclor 1232	ND (0.8)		8082A		1	11/06/18 14:37		CK80511
Aroclor 1242	ND (0.8)		8082A		1	11/06/18 14:37		CK80511
Aroclor 1248	ND (0.8)		8082A		1	11/06/18 14:37		CK80511
Aroclor 1254	ND (0.8)		8082A		1	11/06/18 14:37		CK80511
Aroclor 1260	ND (0.8)		8082A		1	11/06/18 14:37		CK80511
Aroclor 1262	ND (0.8)		8082A		1	11/06/18 14:37		CK80511
Aroclor 1268	ND (0.8)		8082A		1	11/06/18 14:37		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*79 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 014
Date Sampled: 10/30/18 10:20
Percent Solids: N/A
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-03
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 14:56		CK80511
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 14:56		CK80511
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 14:56		CK80511
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 14:56		CK80511
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 14:56		CK80511
Aroclor 1254	ND (0.1)		8082A		1	11/06/18 14:56		CK80511
Aroclor 1260	ND (0.1)		8082A		1	11/06/18 14:56		CK80511
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 14:56		CK80511
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 14:56		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*23 %*	*S-*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*24 %*	*S-*	*30-150*
Surrogate: Tetrachloro-m-xylene	*35 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*40 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 016
Date Sampled: 10/30/18 10:28
Percent Solids: N/A
Initial Volume: 2.19
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-04
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.1)		8082A		5	11/06/18 15:16		CK80511
Aroclor 1221	ND (1.1)		8082A		5	11/06/18 15:16		CK80511
Aroclor 1232	ND (1.1)		8082A		5	11/06/18 15:16		CK80511
Aroclor 1242	ND (1.1)		8082A		5	11/06/18 15:16		CK80511
Aroclor 1248	ND (1.1)		8082A		5	11/06/18 15:16		CK80511
Aroclor 1254	ND (1.1)		8082A		5	11/06/18 15:16		CK80511
Aroclor 1260	ND (1.1)		8082A		5	11/06/18 15:16		CK80511
Aroclor 1262	ND (1.1)		8082A		5	11/06/18 15:16		CK80511
Aroclor 1268	**1.2** (1.1)		8082A		5	11/06/18 15:16		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*143 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*129 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*28 %*	*S-*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*31 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 019
Date Sampled: 10/30/18 10:45
Percent Solids: N/A
Initial Volume: 0.41
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-05
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.2)		8082A		1	11/06/18 15:35		CK80511
Aroclor 1221	ND (1.2)		8082A		1	11/06/18 15:35		CK80511
Aroclor 1232	ND (1.2)		8082A		1	11/06/18 15:35		CK80511
Aroclor 1242	ND (1.2)		8082A		1	11/06/18 15:35		CK80511
Aroclor 1248	ND (1.2)		8082A		1	11/06/18 15:35		CK80511
Aroclor 1254	ND (1.2)		8082A		1	11/06/18 15:35		CK80511
Aroclor 1260	ND (1.2)		8082A		1	11/06/18 15:35		CK80511
Aroclor 1262	ND (1.2)		8082A		1	11/06/18 15:35		CK80511
Aroclor 1268	ND (1.2)		8082A		1	11/06/18 15:35		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 022
Date Sampled: 10/30/18 11:00
Percent Solids: N/A
Initial Volume: 1.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-06
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	11/06/18 15:54		CK80511
Aroclor 1221	ND (0.5)		8082A		1	11/06/18 15:54		CK80511
Aroclor 1232	ND (0.5)		8082A		1	11/06/18 15:54		CK80511
Aroclor 1242	ND (0.5)		8082A		1	11/06/18 15:54		CK80511
Aroclor 1248	ND (0.5)		8082A		1	11/06/18 15:54		CK80511
Aroclor 1254 [2C]	**1.2** (0.5)		8082A		1	11/06/18 15:54		CK80511
Aroclor 1260	ND (0.5)		8082A		1	11/06/18 15:54		CK80511
Aroclor 1262	ND (0.5)		8082A		1	11/06/18 15:54		CK80511
Aroclor 1268	ND (0.5)		8082A		1	11/06/18 15:54		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*67 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 023
Date Sampled: 10/30/18 11:12
Percent Solids: N/A
Initial Volume: 2.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-07
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/06/18 16:13		CK80511
Aroclor 1221	ND (0.2)		8082A		1	11/06/18 16:13		CK80511
Aroclor 1232	ND (0.2)		8082A		1	11/06/18 16:13		CK80511
Aroclor 1242	ND (0.2)		8082A		1	11/06/18 16:13		CK80511
Aroclor 1248	ND (0.2)		8082A		1	11/06/18 16:13		CK80511
Aroclor 1254 [2C]	ND (0.2)		8082A		1	11/06/18 16:13		CK80511
Aroclor 1260 [2C]	ND (0.2)		8082A		1	11/06/18 16:13		CK80511
Aroclor 1262	ND (0.2)		8082A		1	11/06/18 16:13		CK80511
Aroclor 1268	ND (0.2)		8082A		1	11/06/18 16:13		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*66 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 024
Date Sampled: 10/30/18 11:22
Percent Solids: N/A
Initial Volume: 2.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-08
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/06/18 16:32		CK80511
Aroclor 1221	ND (0.2)		8082A		1	11/06/18 16:32		CK80511
Aroclor 1232	ND (0.2)		8082A		1	11/06/18 16:32		CK80511
Aroclor 1242	ND (0.2)		8082A		1	11/06/18 16:32		CK80511
Aroclor 1248	ND (0.2)		8082A		1	11/06/18 16:32		CK80511
Aroclor 1254 [2C]	ND (0.2)		8082A		1	11/06/18 16:32		CK80511
Aroclor 1260	ND (0.2)		8082A		1	11/06/18 16:32		CK80511
Aroclor 1262	ND (0.2)		8082A		1	11/06/18 16:32		CK80511
Aroclor 1268	ND (0.2)		8082A		1	11/06/18 16:32		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*19 %*	*SC*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*20 %*	*SC*	*30-150*
Surrogate: Tetrachloro-m-xylene	*26 %*	*SC*	*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*30 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 028
Date Sampled: 10/30/18 12:35
Percent Solids: N/A
Initial Volume: 2.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-09
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/06/18 16:51		CK80511
Aroclor 1221	ND (0.2)		8082A		1	11/06/18 16:51		CK80511
Aroclor 1232	ND (0.2)		8082A		1	11/06/18 16:51		CK80511
Aroclor 1242	ND (0.2)		8082A		1	11/06/18 16:51		CK80511
Aroclor 1248	ND (0.2)		8082A		1	11/06/18 16:51		CK80511
Aroclor 1254 [2C]	**1.3** (0.2)		8082A		1	11/06/18 16:51		CK80511
Aroclor 1260 [2C]	**0.9** (0.2)		8082A		1	11/06/18 16:51		CK80511
Aroclor 1262	ND (0.2)		8082A		1	11/06/18 16:51		CK80511
Aroclor 1268	ND (0.2)		8082A		1	11/06/18 16:51		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*49 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 029
Date Sampled: 10/30/18 12:15
Percent Solids: N/A
Initial Volume: 2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-10
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/06/18 17:11		CK80511
Aroclor 1221	ND (0.2)		8082A		1	11/06/18 17:11		CK80511
Aroclor 1232	ND (0.2)		8082A		1	11/06/18 17:11		CK80511
Aroclor 1242	ND (0.2)		8082A		1	11/06/18 17:11		CK80511
Aroclor 1248	ND (0.2)		8082A		1	11/06/18 17:11		CK80511
Aroclor 1254 [2C]	**0.3** (0.2)		8082A		1	11/06/18 17:11		CK80511
Aroclor 1260	ND (0.2)		8082A		1	11/06/18 17:11		CK80511
Aroclor 1262	ND (0.2)		8082A		1	11/06/18 17:11		CK80511
Aroclor 1268	ND (0.2)		8082A		1	11/06/18 17:11		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*64 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*82 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2003C
Date Sampled: 10/30/18 12:30
Percent Solids: N/A
Initial Volume: 5.18
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-11
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 17:30		CK80511
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 17:30		CK80511
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 17:30		CK80511
Aroclor 1242	ND (0.1)		8082A		1	11/06/18 17:30		CK80511
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 17:30		CK80511
Aroclor 1254 [2C]	**6.1** (0.5)		8082A		5	11/07/18 12:36		CK80511
Aroclor 1260 [2C]	**10.3** (0.5)		8082A		5	11/07/18 12:36		CK80511
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 17:30		CK80511
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 17:30		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*62 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2012B
Date Sampled: 10/30/18 12:33
Percent Solids: N/A
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-12
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/07/18 12:54		CK80511
Aroclor 1221	ND (0.1)		8082A		1	11/07/18 12:54		CK80511
Aroclor 1232	ND (0.1)		8082A		1	11/07/18 12:54		CK80511
Aroclor 1242 [2C]	**0.7** (0.1)		8082A		1	11/07/18 12:54		CK80511
Aroclor 1248	ND (0.1)		8082A		1	11/07/18 12:54		CK80511
Aroclor 1254 [2C]	**1.1** (0.1)		8082A		1	11/07/18 12:54		CK80511
Aroclor 1260	**0.9** (0.1)		8082A		1	11/07/18 12:54		CK80511
Aroclor 1262	ND (0.1)		8082A		1	11/07/18 12:54		CK80511
Aroclor 1268 [2C]	**0.2** (0.1)		8082A		1	11/07/18 12:54		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*54 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2016B
Date Sampled: 10/30/18 12:36
Percent Solids: N/A
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-13
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/06/18 18:08		CK80511
Aroclor 1221	ND (0.1)		8082A		1	11/06/18 18:08		CK80511
Aroclor 1232	ND (0.1)		8082A		1	11/06/18 18:08		CK80511
Aroclor 1242	**0.9** (0.1)		8082A		1	11/06/18 18:08		CK80511
Aroclor 1248	ND (0.1)		8082A		1	11/06/18 18:08		CK80511
Aroclor 1254	**3.6** (0.1)		8082A		1	11/06/18 18:08		CK80511
Aroclor 1260 [2C]	**3.1** (0.1)		8082A		1	11/06/18 18:08		CK80511
Aroclor 1262	ND (0.1)		8082A		1	11/06/18 18:08		CK80511
Aroclor 1268	ND (0.1)		8082A		1	11/06/18 18:08		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*54 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2016C
Date Sampled: 10/30/18 12:39
Percent Solids: N/A
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-14
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/07/18 13:13		CK80511
Aroclor 1221	ND (0.1)		8082A		1	11/07/18 13:13		CK80511
Aroclor 1232	ND (0.1)		8082A		1	11/07/18 13:13		CK80511
Aroclor 1242	**7.8** (0.5)		8082A		5	11/07/18 17:21		CK80511
Aroclor 1248	ND (0.1)		8082A		1	11/07/18 13:13		CK80511
Aroclor 1254 [2C]	**8.4** (0.5)		8082A		5	11/07/18 17:21		CK80511
Aroclor 1260 [2C]	**5.6** (0.5)		8082A		5	11/07/18 17:21		CK80511
Aroclor 1262	ND (0.1)		8082A		1	11/07/18 13:13		CK80511
Aroclor 1268	**1.0** (0.1)		8082A		1	11/07/18 13:13		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*80 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 5009
Date Sampled: 10/30/18 14:30
Percent Solids: N/A
Initial Volume: 1.47
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-15
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	11/07/18 13:32		CK80511
Aroclor 1221	ND (0.3)		8082A		1	11/07/18 13:32		CK80511
Aroclor 1232	ND (0.3)		8082A		1	11/07/18 13:32		CK80511
Aroclor 1242	ND (0.3)		8082A		1	11/07/18 13:32		CK80511
Aroclor 1248	ND (0.3)		8082A		1	11/07/18 13:32		CK80511
Aroclor 1254	ND (0.3)		8082A		1	11/07/18 13:32		CK80511
Aroclor 1260	**0.7** (0.3)		8082A		1	11/07/18 13:32		CK80511
Aroclor 1262	ND (0.3)		8082A		1	11/07/18 13:32		CK80511
Aroclor 1268 [2C]	**0.7** (0.3)		8082A		1	11/07/18 13:32		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*117 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*129 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*39 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*44 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 5010
Date Sampled: 10/30/18 14:45
Percent Solids: N/A
Initial Volume: 0.07
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1811062
ESS Laboratory Sample ID: 1811062-16
Sample Matrix: Soil
Units: mg/kg wet
Analyst: CAD
Prepared: 11/5/18 16:01

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (7.1)		8082A		1	11/06/18 21:00		CK80511
Aroclor 1221	ND (7.1)		8082A		1	11/06/18 21:00		CK80511
Aroclor 1232	ND (7.1)		8082A		1	11/06/18 21:00		CK80511
Aroclor 1242	ND (7.1)		8082A		1	11/06/18 21:00		CK80511
Aroclor 1248	ND (7.1)		8082A		1	11/06/18 21:00		CK80511
Aroclor 1254	ND (7.1)		8082A		1	11/06/18 21:00		CK80511
Aroclor 1260	**11.8** (7.1)		8082A		1	11/06/18 21:00		CK80511
Aroclor 1262	ND (7.1)		8082A		1	11/06/18 21:00		CK80511
Aroclor 1268	ND (7.1)		8082A		1	11/06/18 21:00		CK80511

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*107 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811062

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CK80511 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0252*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0197*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		99	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		97	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		100	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		92	40-140			
Surrogate: Decachlorobiphenyl	*0.0242*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0204*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		99	40-140	0.04	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		98	40-140	0.8	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		102	40-140	1	30	
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		93	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0243*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0221*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0203*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811062

Notes and Definitions

U	Analyte included in the analysis, but not detected
SC	Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).
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
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 1811062

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1811062
Date Received: 11/2/2018
Project Due Date: 11/9/2018
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.5 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	285718	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	285717	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	285716	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	285715	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	285714	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	285713	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	285712	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	285711	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	285710	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	285709	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	285708	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	285707	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	285706	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	285705	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	285704	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	285703	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review

Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

Completed By: Date & Time: 11-2-18 19:23

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Cardno Engineers, Scientists & Surv - KPB/TB/MM

ESS Project ID: 1811062

Date Received: 11/2/2018

Reviewed By:

Date & Time: 11/2/18 1946

Delivered By:

11/2/18 1946

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1811062

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ◉MA MCP ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Standard Excel ☑Other (Please Specify →) PDF

Company Name: Coneco Engineers and Scientists	Project #: 5675.F	Project Name: Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI	
Contact Person: Mark Zoller		Address: 4 First Street	
City: Bridgewater	State: MA	Zip Code: 02324	PO #: 5675.F
Telephone Number: 508-697-3191	FAX Number:	Email Address: jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	10/30/18	9:45 am	Grab	Solid	012	X
02	10/30/18	10:12 am	Grab	Solid	013	X
03	10/30/18	10:20 am	Grab	Solid	014	X
04	10/30/18	10:28 am	Grab	Solid	016	X
05	10/30/18	10:45 am	Grab	Solid	019	X
06	10/30/18	11:00 am	Grab	Solid	022	X
07	10/30/18	11:12 am	Grab	Solid	023	X
08	10/30/18	11:22 am	Grab	Solid	024	X
09	10/30/18	12:35 pm	Grab	Solid	028	X
10	10/30/18	12:15 pm	Grab	Solid	029	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: ✓
Seals Intact: ____
Cooler Temperature: 3.5 °C ICE RC

Sampled by : KML

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
	11/2/18 1340	11/2/18 1727	11-2-18 19:16
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 181062

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○CT RCP ◉MA MCP ○RGP
Reporting Limits	PCBs < 0.5 mg/kg
Electonic Deliverables	☐Limit Checker ☐Excel ☑Other (Please Specify →)

Company Name: Coneco Engineers and Scientists	Project #: 5675.F	Project Name: Pawtucket 1 Control House, 6 Thornton Ave,	
Contact Person: Mark Zoller		Address: 4 First Street	
City: Bridgewater	State: MA	Zip Code: 02324	PO #: 5675.F
Telephone Number: 508-697-3191	FAX Number	Email Address: jaevazalis, mzoller,kloftus@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
11	10/30/18	12:30 pm	Grab	Solid	2003C	X
12	10/30/18	12:33 pm	Grab	Solid	2012B	X
13	10/30/18	12:36 pm	Grab	Solid	2016B	X
14	10/30/18	12:39 pm	Grab	Solid	2016C	X
15	10/31/18	2:30 pm	Grab	Solid	5009	X
16	10/31/18	2:45 pm	Grab	Solid	5010	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-MeOH 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: ✓
Seals Intact: ____
Cooler Temperature: 3.5 °C ICE RC

Sampled by : KML

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
[signature]	R. Carlson 11/2/18 1340	R. Carlson 11/2/18 1727	[signature] 11-2-18 19:16
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F.101.004)
ESS Laboratory Work Order Number: 21I0141

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 4:23 pm, Sep 13, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0141

SAMPLE RECEIPT

The following samples were received on September 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21I0141-01	5010A	Solid	8082A
21I0141-02	5010B	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0141

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0141

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 5010A
Date Sampled: 09/01/21 13:31
Percent Solids: N/A
Initial Volume: 0.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0141
ESS Laboratory Sample ID: 21I0141-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.7)		8082A		1	09/11/21 1:11	D1I0072	DI10707
Aroclor 1221	ND (0.7)		8082A		1	09/11/21 1:11	D1I0072	DI10707
Aroclor 1232	ND (0.7)		8082A		1	09/11/21 1:11	D1I0072	DI10707
Aroclor 1242	ND (0.7)		8082A		1	09/11/21 1:11	D1I0072	DI10707
Aroclor 1248	ND (0.7)		8082A		1	09/11/21 1:11	D1I0072	DI10707
Aroclor 1254	**4.0** (0.7)		8082A		1	09/11/21 1:11	D1I0072	DI10707
Aroclor 1260	ND (0.7)		8082A		1	09/11/21 1:11	D1I0072	DI10707
Aroclor 1262	**3.9** (0.7)		8082A		1	09/11/21 1:11	D1I0072	DI10707
Aroclor 1268	ND (0.7)		8082A		1	09/11/21 1:11	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 5010B
Date Sampled: 09/01/21 13:39
Percent Solids: N/A
Initial Volume: 0.76
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0141
ESS Laboratory Sample ID: 21I0141-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.7)		8082A		1	09/11/21 1:30	D1I0072	DI10707
Aroclor 1221	ND (0.7)		8082A		1	09/11/21 1:30	D1I0072	DI10707
Aroclor 1232	ND (0.7)		8082A		1	09/11/21 1:30	D1I0072	DI10707
Aroclor 1242	ND (0.7)		8082A		1	09/11/21 1:30	D1I0072	DI10707
Aroclor 1248	ND (0.7)		8082A		1	09/11/21 1:30	D1I0072	DI10707
Aroclor 1254 [2C]	**4.1** (0.7)		8082A		1	09/11/21 1:30	D1I0072	DI10707
Aroclor 1260	ND (0.7)		8082A		1	09/11/21 1:30	D1I0072	DI10707
Aroclor 1262	**2.9** (0.7)		8082A		1	09/11/21 1:30	D1I0072	DI10707
Aroclor 1268	ND (0.7)		8082A		1	09/11/21 1:30	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*76 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0141

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI10707 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		95	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		91	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		97	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		94	40-140			
Surrogate: Decachlorobiphenyl	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.05	mg/kg wet	0.5000		85	40-140	11	30	
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		83	40-140	9	30	
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		88	40-140	10	30	
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		86	40-140	9	30	
Surrogate: Decachlorobiphenyl	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0141

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0141

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 2110141
Date Received: 9/3/2021
Project Due Date: 9/13/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 4.1 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	204220	Yes	N/A	Yes	8 oz jar	NP	
2	204221	Yes	N/A	Yes	8 oz jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials KL
Are barcode labels on correct containers? Yes / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Date & Time: 9.3.21 18:44
Reviewed By: Date & Time: 9/3/21 1902

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21I0141

Turn Time 5-Day **Rush**
Regulatory State Rhode Island
Is this project for any of the following?: ○ CT RCP ○ MA MCP ○ RGP

Reporting Limits <0.5 mg/kg
Electonic Deliverables ☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers & Scientists	5675.F.101.004	Pawtucket Control House, 6 Thorton Ave, Pawtucket, RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	Massachusetts	02324	5675.F.101.004

Telephone Number	FAX Number	Email Address
(508) 697-3191		Jaevaelis, Mzoller, Kloftus, cmacuch@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by 8082
01	9/1/21	1:31 pm	Grab	Solid	5010A	X
02	9/1/21	1:39 pm	Grab	Solid	5010B	X
						X
						X
						X
						X
						X
						X
						X
						X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 10
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: Yes
Seals Intact:
Cooler Temperature: 4.1 °C IR

Sampled by : KML

Comments: **Please specify "Other" preservative and containers types in this space**
National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice
TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
	9/3/21 10:08	9/3/21 16:42	9-3-21 16:42
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F.101.004)
ESS Laboratory Work Order Number: 21I0142

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 4:52 pm, Sep 13, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0142

SAMPLE RECEIPT

The following samples were received on September 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21I0142-01	1026B	Solid	8082A
21I0142-02	2004A	Solid	8082A
21I0142-03	2004B	Solid	8082A
21I0142-04	2011A	Solid	8082A
21I0142-05	2011B	Solid	8082A
21I0142-06	2018A	Solid	8082A
21I0142-07	2018B	Solid	8082A
21I0142-08	2035B	Solid	8082A
21I0142-09	5009A	Solid	8082A
21I0142-10	5009B	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0142

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

21I0142-02	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1254 [2C]
21I0142-08	**Lower value is used due to matrix interferences (LC).**
	Aroclor 1248 [2C]
21I0142-08	**Percent difference between primary and confirmation results exceeds 40% (P).**
	Aroclor 1248 [2C]
21I0142-09	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (971% @ 30-150%), Decachlorobiphenyl [2C] (752% @ 30-150%)
21I0142-10	**Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).**
	Decachlorobiphenyl (385% @ 30-150%), Decachlorobiphenyl [2C] (325% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0142

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 1026B
Date Sampled: 09/01/21 12:35
Percent Solids: N/A
Initial Volume: 1.99
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0142
ESS Laboratory Sample ID: 21I0142-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	09/11/21 1:49	D1I0072	DI10707
Aroclor 1221	ND (0.3)		8082A		1	09/11/21 1:49	D1I0072	DI10707
Aroclor 1232	ND (0.3)		8082A		1	09/11/21 1:49	D1I0072	DI10707
Aroclor 1242	ND (0.3)		8082A		1	09/11/21 1:49	D1I0072	DI10707
Aroclor 1248	ND (0.3)		8082A		1	09/11/21 1:49	D1I0072	DI10707
Aroclor 1254	**2.9** (0.3)		8082A		1	09/11/21 1:49	D1I0072	DI10707
Aroclor 1260	**6.9** (0.3)		8082A		1	09/11/21 1:49	D1I0072	DI10707
Aroclor 1262	ND (0.3)		8082A		1	09/11/21 1:49	D1I0072	DI10707
Aroclor 1268	ND (0.3)		8082A		1	09/11/21 1:49	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*88 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2004A
Date Sampled: 09/01/21 12:47
Percent Solids: N/A
Initial Volume: 1.99
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0142
ESS Laboratory Sample ID: 21I0142-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	09/11/21 2:08	D1I0072	DI10707
Aroclor 1221	ND (0.3)		8082A		1	09/11/21 2:08	D1I0072	DI10707
Aroclor 1232	ND (0.3)		8082A		1	09/11/21 2:08	D1I0072	DI10707
Aroclor 1242	ND (0.3)		8082A		1	09/11/21 2:08	D1I0072	DI10707
Aroclor 1248	ND (0.3)		8082A		1	09/11/21 2:08	D1I0072	DI10707
Aroclor 1254 [2C]	**P 3.3** (0.3)		8082A		1	09/11/21 2:08	D1I0072	DI10707
Aroclor 1260	**0.6** (0.3)		8082A		1	09/11/21 2:08	D1I0072	DI10707
Aroclor 1262	ND (0.3)		8082A		1	09/11/21 2:08	D1I0072	DI10707
Aroclor 1268	ND (0.3)		8082A		1	09/11/21 2:08	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2004B
Date Sampled: 09/01/21 12:49
Percent Solids: N/A
Initial Volume: 2.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0142
ESS Laboratory Sample ID: 21I0142-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/11/21 2:28	D1I0072	DI10707
Aroclor 1221	ND (0.2)		8082A		1	09/11/21 2:28	D1I0072	DI10707
Aroclor 1232	ND (0.2)		8082A		1	09/11/21 2:28	D1I0072	DI10707
Aroclor 1242 [2C]	**2.0** (0.2)		8082A		1	09/11/21 2:28	D1I0072	DI10707
Aroclor 1248	ND (0.2)		8082A		1	09/11/21 2:28	D1I0072	DI10707
Aroclor 1254	**2.2** (0.2)		8082A		1	09/11/21 2:28	D1I0072	DI10707
Aroclor 1260	**0.8** (0.2)		8082A		1	09/11/21 2:28	D1I0072	DI10707
Aroclor 1262	ND (0.2)		8082A		1	09/11/21 2:28	D1I0072	DI10707
Aroclor 1268	ND (0.2)		8082A		1	09/11/21 2:28	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*82 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2011A
Date Sampled: 09/01/21 12:58
Percent Solids: N/A
Initial Volume: 2.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0142
ESS Laboratory Sample ID: 21I0142-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/11/21 2:47	D1I0072	DI10707
Aroclor 1221	ND (0.2)		8082A		1	09/11/21 2:47	D1I0072	DI10707
Aroclor 1232	ND (0.2)		8082A		1	09/11/21 2:47	D1I0072	DI10707
Aroclor 1242	ND (0.2)		8082A		1	09/11/21 2:47	D1I0072	DI10707
Aroclor 1248	ND (0.2)		8082A		1	09/11/21 2:47	D1I0072	DI10707
Aroclor 1254	**0.8** (0.2)		8082A		1	09/11/21 2:47	D1I0072	DI10707
Aroclor 1260	ND (0.2)		8082A		1	09/11/21 2:47	D1I0072	DI10707
Aroclor 1262	**0.4** (0.2)		8082A		1	09/11/21 2:47	D1I0072	DI10707
Aroclor 1268	ND (0.2)		8082A		1	09/11/21 2:47	D1I0072	DI10707

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*71 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2011B
Date Sampled: 09/01/21 13:00
Percent Solids: N/A
Initial Volume: 2.12
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0142
ESS Laboratory Sample ID: 21I0142-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/11/21 5:02	D1I0072	DI10707
Aroclor 1221	ND (0.2)		8082A		1	09/11/21 5:02	D1I0072	DI10707
Aroclor 1232	ND (0.2)		8082A		1	09/11/21 5:02	D1I0072	DI10707
Aroclor 1242	ND (0.2)		8082A		1	09/11/21 5:02	D1I0072	DI10707
Aroclor 1248	ND (0.2)		8082A		1	09/11/21 5:02	D1I0072	DI10707
Aroclor 1254	**1.9** (0.2)		8082A		1	09/11/21 5:02	D1I0072	DI10707
Aroclor 1260	ND (0.2)		8082A		1	09/11/21 5:02	D1I0072	DI10707
Aroclor 1262	**1.1** (0.2)		8082A		1	09/11/21 5:02	D1I0072	DI10707
Aroclor 1268	ND (0.2)		8082A		1	09/11/21 5:02	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*103 %*		*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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2018A
Date Sampled: 09/01/21 13:05
Percent Solids: N/A
Initial Volume: 2.29
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0142
ESS Laboratory Sample ID: 21I0142-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/11/21 5:21	D1I0072	DI10707
Aroclor 1221	ND (0.2)		8082A		1	09/11/21 5:21	D1I0072	DI10707
Aroclor 1232	ND (0.2)		8082A		1	09/11/21 5:21	D1I0072	DI10707
Aroclor 1242	ND (0.2)		8082A		1	09/11/21 5:21	D1I0072	DI10707
Aroclor 1248	**4.2** (0.2)		8082A		1	09/11/21 5:21	D1I0072	DI10707
Aroclor 1254	ND (0.2)		8082A		1	09/11/21 5:21	D1I0072	DI10707
Aroclor 1260	ND (0.2)		8082A		1	09/11/21 5:21	D1I0072	DI10707
Aroclor 1262 [2C]	**1.9** (0.2)		8082A		1	09/11/21 5:21	D1I0072	DI10707
Aroclor 1268	ND (0.2)		8082A		1	09/11/21 5:21	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*54 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2018B
Date Sampled: 09/01/21 13:08
Percent Solids: N/A
Initial Volume: 2.29
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0142
ESS Laboratory Sample ID: 21I0142-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/11/21 5:41	D1I0072	DI10707
Aroclor 1221	ND (0.2)		8082A		1	09/11/21 5:41	D1I0072	DI10707
Aroclor 1232	ND (0.2)		8082A		1	09/11/21 5:41	D1I0072	DI10707
Aroclor 1242	ND (0.2)		8082A		1	09/11/21 5:41	D1I0072	DI10707
Aroclor 1248	**5.5** (0.2)		8082A		1	09/11/21 5:41	D1I0072	DI10707
Aroclor 1254	ND (0.2)		8082A		1	09/11/21 5:41	D1I0072	DI10707
Aroclor 1260	ND (0.2)		8082A		1	09/11/21 5:41	D1I0072	DI10707
Aroclor 1262 [2C]	**1.7** (0.2)		8082A		1	09/11/21 5:41	D1I0072	DI10707
Aroclor 1268	ND (0.2)		8082A		1	09/11/21 5:41	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 2035B
Date Sampled: 09/01/21 13:17
Percent Solids: N/A
Initial Volume: 2.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0142
ESS Laboratory Sample ID: 21I0142-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/11/21 6:00	D1I0072	DI10707
Aroclor 1221	ND (0.2)		8082A		1	09/11/21 6:00	D1I0072	DI10707
Aroclor 1232	ND (0.2)		8082A		1	09/11/21 6:00	D1I0072	DI10707
Aroclor 1242	ND (0.2)		8082A		1	09/11/21 6:00	D1I0072	DI10707
Aroclor 1248 [2C]	**P, LC 3.8** (0.2)		8082A		1	09/11/21 6:00	D1I0072	DI10707
Aroclor 1254	ND (0.2)		8082A		1	09/11/21 6:00	D1I0072	DI10707
Aroclor 1260	ND (0.2)		8082A		1	09/11/21 6:00	D1I0072	DI10707
Aroclor 1262 [2C]	**5.5** (0.2)		8082A		1	09/11/21 6:00	D1I0072	DI10707
Aroclor 1268	ND (0.2)		8082A		1	09/11/21 6:00	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*62 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 5009A
Date Sampled: 09/01/21 13:24
Percent Solids: N/A
Initial Volume: 1.82
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0142
ESS Laboratory Sample ID: 21I0142-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.3)		8082A		1	09/11/21 6:19	D1I0072	DI10707
Aroclor 1221	ND (0.3)		8082A		1	09/11/21 6:19	D1I0072	DI10707
Aroclor 1232	ND (0.3)		8082A		1	09/11/21 6:19	D1I0072	DI10707
Aroclor 1242	ND (0.3)		8082A		1	09/11/21 6:19	D1I0072	DI10707
Aroclor 1248	ND (0.3)		8082A		1	09/11/21 6:19	D1I0072	DI10707
Aroclor 1254	ND (0.3)		8082A		1	09/11/21 6:19	D1I0072	DI10707
Aroclor 1260	**9.8** (0.3)		8082A		1	09/11/21 6:19	D1I0072	DI10707
Aroclor 1262	ND (0.3)		8082A		1	09/11/21 6:19	D1I0072	DI10707
Aroclor 1268	**6.0** (0.3)		8082A		1	09/11/21 6:19	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*971 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*752 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 5009B
Date Sampled: 09/01/21 13:26
Percent Solids: N/A
Initial Volume: 1.41
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0142
ESS Laboratory Sample ID: 21I0142-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.4)		8082A		1	09/11/21 6:38	D1I0072	DI10707
Aroclor 1221	ND (0.4)		8082A		1	09/11/21 6:38	D1I0072	DI10707
Aroclor 1232	ND (0.4)		8082A		1	09/11/21 6:38	D1I0072	DI10707
Aroclor 1242	ND (0.4)		8082A		1	09/11/21 6:38	D1I0072	DI10707
Aroclor 1248	ND (0.4)		8082A		1	09/11/21 6:38	D1I0072	DI10707
Aroclor 1254	ND (0.4)		8082A		1	09/11/21 6:38	D1I0072	DI10707
Aroclor 1260	**2.3** (0.4)		8082A		1	09/11/21 6:38	D1I0072	DI10707
Aroclor 1262	ND (0.4)		8082A		1	09/11/21 6:38	D1I0072	DI10707
Aroclor 1268 [2C]	**2.4** (0.4)		8082A		1	09/11/21 6:38	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*385 %*	*SM*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*325 %*	*SM*	*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0142

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI10707 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		95	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		91	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		97	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		94	40-140			
Surrogate: Decachlorobiphenyl	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.05	mg/kg wet	0.5000		85	40-140	11	30	
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		83	40-140	9	30	
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		88	40-140	10	30	
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		86	40-140	9	30	
Surrogate: Decachlorobiphenyl	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0142

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).
LC	Lower value is used due to matrix interferences (LC).
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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0142

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 2110142
Date Received: 9/3/2021
Project Due Date: 9/13/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 4.1 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	204222	Yes	N/A	Yes	8 oz jar	NP	
2	204223	Yes	N/A	Yes	8 oz jar	NP	
3	204224	Yes	N/A	Yes	8 oz jar	NP	
4	204225	Yes	N/A	Yes	8 oz jar	NP	
5	204226	Yes	N/A	Yes	8 oz jar	NP	
6	204227	Yes	N/A	Yes	8 oz jar	NP	
7	204228	Yes	N/A	Yes	8 oz jar	NP	
8	204229	Yes	N/A	Yes	8 oz jar	NP	
9	204230	Yes	N/A	Yes	8 oz jar	NP	
10	204231	Yes	N/A	Yes	8 oz jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials KL
Are barcode labels on correct containers? Yes / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 21I0142

Date Received: 9/3/2021

Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: _____ Date & Time: 9.3.21 18:43

Reviewed By: _____ Date & Time: 9/3/21 1905

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21I0142

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	<0.5 mg/kg
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers & Scientists	5675.F.101.004	Pawtucket Control House, 6 Thorton Ave, Pawtucket, RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	Massachusetts	02324	5675.F.101.004

Telephone Number	FAX Number	Email Address
(508) 697-3191		Jaevaelis, Mzoller, Kloftus, cmacuch@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by 8082
01	9/1/2021	12:35 pm	Grab	Solid	1026B	X
02	9/1/2021	12:47 pm	Grab	Solid	2004A	X
03	9/1/2021	12:49 pm	Grab	Solid	2004B	X
04	9/1/2021	12:58 pm	Grab	Solid	2011A	X
05	9/1/2021	1:00 pm	Grab	Solid	2011B	X
06	9/1/2021	1:05 pm	Grab	Solid	2018A	X
07	9/1/2021	1:08 pm	Grab	Solid	2018B	X
08	9/1/2021	1:17 pm	Grab	Solid	2035B	X
09	9/1/2021	1:24 pm	Grab	Solid	5009A	X
10	9/1/2021	1:26 pm	Grab	Solid	5009B	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 10

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: Yes
Seals Intact: ____
Cooler Temperature: 4.1 °C Ice

Sampled by : KML

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice
TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
	9/3/21 12:38	9/3/21 16:42	9-3-21 16:42
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F.101.004)
ESS Laboratory Work Order Number: 21I0143

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 12:07 pm, Sep 14, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0143

SAMPLE RECEIPT

The following samples were received on September 03, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21I0143-01	022A	Solid	8082A
21I0143-02	022B	Solid	8082A
21I0143-03	028A	Solid	8082A
21I0143-04	028B	Solid	8082A
21I0143-05	1009A	Solid	8082A
21I0143-06	1010A	Solid	8082A
21I0143-07	1010B	Solid	8082A
21I0143-08	1013A	Solid	8082A
21I0143-09	1024A	Solid	8082A
21I0143-10	1026A	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0143

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0143

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 022A
Date Sampled: 09/01/21 11:15
Percent Solids: N/A
Initial Volume: 2.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0143
ESS Laboratory Sample ID: 21I0143-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/11/21 6:58	D1I0072	DI10707
Aroclor 1221	ND (0.2)		8082A		1	09/11/21 6:58	D1I0072	DI10707
Aroclor 1232	ND (0.2)		8082A		1	09/11/21 6:58	D1I0072	DI10707
Aroclor 1242	ND (0.2)		8082A		1	09/11/21 6:58	D1I0072	DI10707
Aroclor 1248	ND (0.2)		8082A		1	09/11/21 6:58	D1I0072	DI10707
Aroclor 1254 [2C]	**1.0** (0.2)		8082A		1	09/11/21 6:58	D1I0072	DI10707
Aroclor 1260	ND (0.2)		8082A		1	09/11/21 6:58	D1I0072	DI10707
Aroclor 1262 [2C]	**0.5** (0.2)		8082A		1	09/11/21 6:58	D1I0072	DI10707
Aroclor 1268	ND (0.2)		8082A		1	09/11/21 6:58	D1I0072	DI10707

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*61 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*73 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 022B
Date Sampled: 09/01/21 11:18
Percent Solids: N/A
Initial Volume: 2.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0143
ESS Laboratory Sample ID: 21I0143-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/10/21 21:51	D1I0091	DI10708
Aroclor 1221	ND (0.2)		8082A		1	09/10/21 21:51	D1I0091	DI10708
Aroclor 1232	ND (0.2)		8082A		1	09/10/21 21:51	D1I0091	DI10708
Aroclor 1242	ND (0.2)		8082A		1	09/10/21 21:51	D1I0091	DI10708
Aroclor 1248	ND (0.2)		8082A		1	09/10/21 21:51	D1I0091	DI10708
Aroclor 1254 [2C]	**0.7** (0.2)		8082A		1	09/10/21 21:51	D1I0091	DI10708
Aroclor 1260	ND (0.2)		8082A		1	09/10/21 21:51	D1I0091	DI10708
Aroclor 1262	**0.4** (0.2)		8082A		1	09/10/21 21:51	D1I0091	DI10708
Aroclor 1268	ND (0.2)		8082A		1	09/10/21 21:51	D1I0091	DI10708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*39 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*48 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 028A
Date Sampled: 09/01/21 11:28
Percent Solids: N/A
Initial Volume: 2.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0143
ESS Laboratory Sample ID: 21I0143-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/10/21 22:10	D1I0091	DI10708
Aroclor 1221	ND (0.2)		8082A		1	09/10/21 22:10	D1I0091	DI10708
Aroclor 1232	ND (0.2)		8082A		1	09/10/21 22:10	D1I0091	DI10708
Aroclor 1242	ND (0.2)		8082A		1	09/10/21 22:10	D1I0091	DI10708
Aroclor 1248	ND (0.2)		8082A		1	09/10/21 22:10	D1I0091	DI10708
Aroclor 1254 [2C]	**0.5** (0.2)		8082A		1	09/10/21 22:10	D1I0091	DI10708
Aroclor 1260	ND (0.2)		8082A		1	09/10/21 22:10	D1I0091	DI10708
Aroclor 1262	ND (0.2)		8082A		1	09/10/21 22:10	D1I0091	DI10708
Aroclor 1268	ND (0.2)		8082A		1	09/10/21 22:10	D1I0091	DI10708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*101 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 028B
Date Sampled: 09/01/21 11:35
Percent Solids: N/A
Initial Volume: 2.22
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0143
ESS Laboratory Sample ID: 21I0143-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/10/21 22:30	D1I0091	DI10708
Aroclor 1221	ND (0.2)		8082A		1	09/10/21 22:30	D1I0091	DI10708
Aroclor 1232	ND (0.2)		8082A		1	09/10/21 22:30	D1I0091	DI10708
Aroclor 1242	ND (0.2)		8082A		1	09/10/21 22:30	D1I0091	DI10708
Aroclor 1248	ND (0.2)		8082A		1	09/10/21 22:30	D1I0091	DI10708
Aroclor 1254	**0.6** (0.2)		8082A		1	09/10/21 22:30	D1I0091	DI10708
Aroclor 1260 [2C]	ND (0.2)		8082A		1	09/10/21 22:30	D1I0091	DI10708
Aroclor 1262	ND (0.2)		8082A		1	09/10/21 22:30	D1I0091	DI10708
Aroclor 1268	ND (0.2)		8082A		1	09/10/21 22:30	D1I0091	DI10708

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 1009A
Date Sampled: 09/01/21 11:40
Percent Solids: N/A
Initial Volume: 2.29
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0143
ESS Laboratory Sample ID: 21I0143-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/10/21 22:49	D1I0091	DI10708
Aroclor 1221	ND (0.2)		8082A		1	09/10/21 22:49	D1I0091	DI10708
Aroclor 1232	ND (0.2)		8082A		1	09/10/21 22:49	D1I0091	DI10708
Aroclor 1242	ND (0.2)		8082A		1	09/10/21 22:49	D1I0091	DI10708
Aroclor 1248	ND (0.2)		8082A		1	09/10/21 22:49	D1I0091	DI10708
Aroclor 1254 [2C]	**3.7** (0.2)		8082A		1	09/10/21 22:49	D1I0091	DI10708
Aroclor 1260	ND (0.2)		8082A		1	09/10/21 22:49	D1I0091	DI10708
Aroclor 1262	**0.4** (0.2)		8082A		1	09/10/21 22:49	D1I0091	DI10708
Aroclor 1268	ND (0.2)		8082A		1	09/10/21 22:49	D1I0091	DI10708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 1010A
Date Sampled: 09/01/21 11:45
Percent Solids: N/A
Initial Volume: 0.63
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0143
ESS Laboratory Sample ID: 21I0143-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.8)		8082A		1	09/10/21 23:09	D1I0091	DI10708
Aroclor 1221	ND (0.8)		8082A		1	09/10/21 23:09	D1I0091	DI10708
Aroclor 1232	ND (0.8)		8082A		1	09/10/21 23:09	D1I0091	DI10708
Aroclor 1242	ND (0.8)		8082A		1	09/10/21 23:09	D1I0091	DI10708
Aroclor 1248	ND (0.8)		8082A		1	09/10/21 23:09	D1I0091	DI10708
Aroclor 1254 [2C]	**10.0** (0.8)		8082A		1	09/10/21 23:09	D1I0091	DI10708
Aroclor 1260 [2C]	**2.6** (0.8)		8082A		1	09/10/21 23:09	D1I0091	DI10708
Aroclor 1262	ND (0.8)		8082A		1	09/10/21 23:09	D1I0091	DI10708
Aroclor 1268	ND (0.8)		8082A		1	09/10/21 23:09	D1I0091	DI10708

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*104 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 1010B
Date Sampled: 09/01/21 11:48
Percent Solids: N/A
Initial Volume: 0.89
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0143
ESS Laboratory Sample ID: 21I0143-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.6)		8082A		1	09/10/21 23:29	D1I0091	DI10708
Aroclor 1221	ND (0.6)		8082A		1	09/10/21 23:29	D1I0091	DI10708
Aroclor 1232	ND (0.6)		8082A		1	09/10/21 23:29	D1I0091	DI10708
Aroclor 1242	ND (0.6)		8082A		1	09/10/21 23:29	D1I0091	DI10708
Aroclor 1248	ND (0.6)		8082A		1	09/10/21 23:29	D1I0091	DI10708
Aroclor 1254 [2C]	**11.1** (0.6)		8082A		1	09/10/21 23:29	D1I0091	DI10708
Aroclor 1260	**3.0** (0.6)		8082A		1	09/10/21 23:29	D1I0091	DI10708
Aroclor 1262	ND (0.6)		8082A		1	09/10/21 23:29	D1I0091	DI10708
Aroclor 1268	ND (0.6)		8082A		1	09/10/21 23:29	D1I0091	DI10708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 1013A
Date Sampled: 09/01/21 12:15
Percent Solids: N/A
Initial Volume: 2.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0143
ESS Laboratory Sample ID: 21I0143-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/10/21 23:49	D1I0091	DI10708
Aroclor 1221	ND (0.2)		8082A		1	09/10/21 23:49	D1I0091	DI10708
Aroclor 1232	ND (0.2)		8082A		1	09/10/21 23:49	D1I0091	DI10708
Aroclor 1242	ND (0.2)		8082A		1	09/10/21 23:49	D1I0091	DI10708
Aroclor 1248	ND (0.2)		8082A		1	09/10/21 23:49	D1I0091	DI10708
Aroclor 1254 [2C]	**1.3** (0.2)		8082A		1	09/10/21 23:49	D1I0091	DI10708
Aroclor 1260	ND (0.2)		8082A		1	09/10/21 23:49	D1I0091	DI10708
Aroclor 1262	ND (0.2)		8082A		1	09/10/21 23:49	D1I0091	DI10708
Aroclor 1268	ND (0.2)		8082A		1	09/10/21 23:49	D1I0091	DI10708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*63 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*71 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 1024A
Date Sampled: 09/01/21 12:22
Percent Solids: N/A
Initial Volume: 2.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0143
ESS Laboratory Sample ID: 21I0143-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/11/21 0:09	D1I0091	DI10708
Aroclor 1221	ND (0.2)		8082A		1	09/11/21 0:09	D1I0091	DI10708
Aroclor 1232	ND (0.2)		8082A		1	09/11/21 0:09	D1I0091	DI10708
Aroclor 1242	ND (0.2)		8082A		1	09/11/21 0:09	D1I0091	DI10708
Aroclor 1248	ND (0.2)		8082A		1	09/11/21 0:09	D1I0091	DI10708
Aroclor 1254 [2C]	**26.8** (2.5)		8082A		5	09/12/21 12:44	D1I0091	DI10708
Aroclor 1260	ND (0.2)		8082A		1	09/11/21 0:09	D1I0091	DI10708
Aroclor 1262	ND (0.2)		8082A		1	09/11/21 0:09	D1I0091	DI10708
Aroclor 1268	ND (0.2)		8082A		1	09/11/21 0:09	D1I0091	DI10708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*33 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: 1026A
Date Sampled: 09/01/21 12:30
Percent Solids: N/A
Initial Volume: 2.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21I0143
ESS Laboratory Sample ID: 21I0143-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: MJV
Prepared: 9/7/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	09/13/21 16:18	D1I0160	DI10708
Aroclor 1221	ND (0.2)		8082A		1	09/13/21 16:18	D1I0160	DI10708
Aroclor 1232	ND (0.2)		8082A		1	09/13/21 16:18	D1I0160	DI10708
Aroclor 1242	ND (0.2)		8082A		1	09/13/21 16:18	D1I0160	DI10708
Aroclor 1248	ND (0.2)		8082A		1	09/13/21 16:18	D1I0160	DI10708
Aroclor 1254 [2C]	**2.1** (0.2)		8082A		1	09/13/21 16:18	D1I0160	DI10708
Aroclor 1260 [2C]	**5.2** (0.2)		8082A		1	09/13/21 16:18	D1I0160	DI10708
Aroclor 1262	ND (0.2)		8082A		1	09/13/21 16:18	D1I0160	DI10708
Aroclor 1268	ND (0.2)		8082A		1	09/13/21 16:18	D1I0160	DI10708

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*64 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0143

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI10707 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		95	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		91	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		97	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		94	40-140			
Surrogate: Decachlorobiphenyl	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		85	40-140	11	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		83	40-140	9	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		88	40-140	10	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140	9	30	
Surrogate: Decachlorobiphenyl	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
Batch DI10708 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0143

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DI10708 - 3540C										
Blank										
Aroclor 1016	ND	0.02	mg/kg wet							
Aroclor 1016 [2C]	ND	0.02	mg/kg wet							
Aroclor 1221	ND	0.02	mg/kg wet							
Aroclor 1221 [2C]	ND	0.02	mg/kg wet							
Aroclor 1232	ND	0.02	mg/kg wet							
Aroclor 1232 [2C]	ND	0.02	mg/kg wet							
Aroclor 1242	ND	0.02	mg/kg wet							
Aroclor 1242 [2C]	ND	0.02	mg/kg wet							
Aroclor 1248	ND	0.02	mg/kg wet							
Aroclor 1248 [2C]	ND	0.02	mg/kg wet							
Aroclor 1254	ND	0.02	mg/kg wet							
Aroclor 1254 [2C]	ND	0.02	mg/kg wet							
Aroclor 1260	ND	0.02	mg/kg wet							
Aroclor 1260 [2C]	ND	0.02	mg/kg wet							
Aroclor 1262	ND	0.02	mg/kg wet							
Aroclor 1262 [2C]	ND	0.02	mg/kg wet							
Aroclor 1268	ND	0.02	mg/kg wet							
Aroclor 1268 [2C]	ND	0.02	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0189*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS										
Aroclor 1016	0.5	0.02	mg/kg wet	0.5000		92	40-140			
Aroclor 1016 [2C]	0.5	0.02	mg/kg wet	0.5000		92	40-140			
Aroclor 1260	0.5	0.02	mg/kg wet	0.5000		96	40-140			
Aroclor 1260 [2C]	0.5	0.02	mg/kg wet	0.5000		96	40-140			
Surrogate: Decachlorobiphenyl	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0241*		mg/kg wet	*0.02500*		*97*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.02	mg/kg wet	0.5000		86	40-140	7	30	
Aroclor 1016 [2C]	0.4	0.02	mg/kg wet	0.5000		86	40-140	7	30	
Aroclor 1260	0.4	0.02	mg/kg wet	0.5000		90	40-140	6	30	
Aroclor 1260 [2C]	0.4	0.02	mg/kg wet	0.5000		90	40-140	7	30	
Surrogate: Decachlorobiphenyl	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0208*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0143

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21I0143

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21I0143
Date Received: 9/3/2021
Project Due Date: 9/13/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 4.1 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	204232	Yes	N/A	Yes	8 oz jar	NP	
2	204233	Yes	N/A	Yes	8 oz jar	NP	
3	204234	Yes	N/A	Yes	8 oz jar	NP	
4	204235	Yes	N/A	Yes	8 oz jar	NP	
5	204236	Yes	N/A	Yes	8 oz jar	NP	
6	204237	Yes	N/A	Yes	8 oz jar	NP	
7	204238	Yes	N/A	Yes	8 oz jar	NP	
8	204239	Yes	N/A	Yes	8 oz jar	NP	
9	204240	Yes	N/A	Yes	8 oz jar	NP	
10	204241	Yes	N/A	Yes	8 oz jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials KL
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / (NA)
Are all Hex Chrome stickers attached? Yes / No / (NA)
Are all QC stickers attached? Yes / No / (NA)

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 2110143

Date Received: 9/3/2021

Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: [signature] Date & Time: 9-3-21 18:41

Reviewed By: [signature] Date & Time: 9/3/21 1906

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21I0143

Turn Time 5-Day **Rush**
Regulatory State Rhode Island
Is this project for any of the following?: ○ CT RCP ○ MA MCP ○ RGP

Reporting Limits <0.5 mg/kg

Electonic Deliverables ☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name	Project #	Project Name
Coneco Engineers & Scientists	5675.F.101.004	Pawtucket Control House, 6 Thorton Ave, Pawtucket, RI

Contact Person	Address
Mark Zoller	4 First Street

City	State	Zip Code	PO #
Bridgewater	Massachusetts	02324	5675.F.101.004

Telephone Number	FAX Number	Email Address
(508) 697-3191		Jaevaelis, Mzoller, Kloftus, cmacuch@coneco.com

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by 8082
01	9/1/2021	11:15 am	Grab	Solid	022A	X
02	9/1/2021	11:18 am	Grab	Solid	022B	X
03	9/1/2021	11:28 am	Grab	Solid	028A	X
04	9/1/2021	11:35 am	Grab	Solid	028B	X
05	9/1/2021	11:40 am	Grab	Solid	1009A	X
06	9/1/2021	11:45 am	Grab	Solid	1010A	X
07	9/1/2021	11:48 am	Grab	Solid	1010B	X
08	9/1/2021	12:15 pm	Grab	Solid	1013A	X
09	9/1/2021	12:22 pm	Grab	Solid	1024A	X
10	9/1/2021	12:30 pm	Grab	Solid	1026A	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 10
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: YES
Seals Intact:
Cooler Temperature: 4.1 °C IR

Sampled by : KML

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, Report Dry Weight, 11=ice
TSCA Requirements, Provide Full Data Package

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
	9/3/21 10:38	9/3/21 16:42	9-3-21 16:42
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 19J0013

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 3:31 pm, Oct 09, 2019

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0013

SAMPLE RECEIPT

The following samples were received on October 01, 2019 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
19J0013-01	WS-03-01	Wipe	8082A
19J0013-02	WS-03-02	Wipe	8082A
19J0013-03	WS-02-01	Wipe	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0013

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0013

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-03-01
Date Sampled: 09/26/19 09:40
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0013
ESS Laboratory Sample ID: 19J0013-01
Sample Matrix: Wipe
Units: ug/Wipe
Analyst: MJV
Prepared: 10/4/19 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	10/07/19 22:24		CJ90410
Aroclor 1221	ND (0.5)		8082A		1	10/07/19 22:24		CJ90410
Aroclor 1232	ND (0.5)		8082A		1	10/07/19 22:24		CJ90410
Aroclor 1242	ND (0.5)		8082A		1	10/07/19 22:24		CJ90410
Aroclor 1248	ND (0.5)		8082A		1	10/07/19 22:24		CJ90410
Aroclor 1254	ND (0.5)		8082A		1	10/07/19 22:24		CJ90410
Aroclor 1260	ND (0.5)		8082A		1	10/07/19 22:24		CJ90410
Aroclor 1262	ND (0.5)		8082A		1	10/07/19 22:24		CJ90410
Aroclor 1268	ND (0.5)		8082A		1	10/07/19 22:24		CJ90410

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*84 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-03-02
Date Sampled: 09/26/19 09:50
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0013
ESS Laboratory Sample ID: 19J0013-02
Sample Matrix: Wipe
Units: ug/Wipe
Analyst: MJV
Prepared: 10/4/19 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	10/07/19 22:43		CJ90410
Aroclor 1221	ND (0.5)		8082A		1	10/07/19 22:43		CJ90410
Aroclor 1232	ND (0.5)		8082A		1	10/07/19 22:43		CJ90410
Aroclor 1242	ND (0.5)		8082A		1	10/07/19 22:43		CJ90410
Aroclor 1248	ND (0.5)		8082A		1	10/07/19 22:43		CJ90410
Aroclor 1254	ND (0.5)		8082A		1	10/07/19 22:43		CJ90410
Aroclor 1260	ND (0.5)		8082A		1	10/07/19 22:43		CJ90410
Aroclor 1262	ND (0.5)		8082A		1	10/07/19 22:43		CJ90410
Aroclor 1268	ND (0.5)		8082A		1	10/07/19 22:43		CJ90410

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-02-01
Date Sampled: 09/26/19 09:20
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 19J0013
ESS Laboratory Sample ID: 19J0013-03
Sample Matrix: Wipe
Units: ug/Wipe
Analyst: MJV
Prepared: 10/4/19 15:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	10/07/19 23:03		CJ90410
Aroclor 1221	ND (0.5)		8082A		1	10/07/19 23:03		CJ90410
Aroclor 1232	ND (0.5)		8082A		1	10/07/19 23:03		CJ90410
Aroclor 1242	ND (0.5)		8082A		1	10/07/19 23:03		CJ90410
Aroclor 1248	ND (0.5)		8082A		1	10/07/19 23:03		CJ90410
Aroclor 1254	ND (0.5)		8082A		1	10/07/19 23:03		CJ90410
Aroclor 1260	ND (0.5)		8082A		1	10/07/19 23:03		CJ90410
Aroclor 1262	ND (0.5)		8082A		1	10/07/19 23:03		CJ90410
Aroclor 1268	ND (0.5)		8082A		1	10/07/19 23:03		CJ90410

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0013

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CJ90410 - 3540C										
Blank										
Aroclor 1016	ND	0.5	ug/Wipe							
Aroclor 1016 [2C]	ND	0.5	ug/Wipe							
Aroclor 1221	ND	0.5	ug/Wipe							
Aroclor 1221 [2C]	ND	0.5	ug/Wipe							
Aroclor 1232	ND	0.5	ug/Wipe							
Aroclor 1232 [2C]	ND	0.5	ug/Wipe							
Aroclor 1242	ND	0.5	ug/Wipe							
Aroclor 1242 [2C]	ND	0.5	ug/Wipe							
Aroclor 1248	ND	0.5	ug/Wipe							
Aroclor 1248 [2C]	ND	0.5	ug/Wipe							
Aroclor 1254	ND	0.5	ug/Wipe							
Aroclor 1254 [2C]	ND	0.5	ug/Wipe							
Aroclor 1260	ND	0.5	ug/Wipe							
Aroclor 1260 [2C]	ND	0.5	ug/Wipe							
Aroclor 1262	ND	0.5	ug/Wipe							
Aroclor 1262 [2C]	ND	0.5	ug/Wipe							
Aroclor 1268	ND	0.5	ug/Wipe							
Aroclor 1268 [2C]	ND	0.5	ug/Wipe							
Surrogate: Decachlorobiphenyl	*0.383*		ug/Wipe	*0.5000*		*77*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.363*		ug/Wipe	*0.5000*		*73*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.337*		ug/Wipe	*0.5000*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.366*		ug/Wipe	*0.5000*		*73*	*30-150*			
LCS										
Aroclor 1016	7.8	0.5	ug/Wipe	10.00		78	40-140			
Aroclor 1016 [2C]	8.3	0.5	ug/Wipe	10.00		83	40-140			
Aroclor 1260	8.4	0.5	ug/Wipe	10.00		84	40-140			
Aroclor 1260 [2C]	9.4	0.5	ug/Wipe	10.00		94	40-140			
Surrogate: Decachlorobiphenyl	*0.379*		ug/Wipe	*0.5000*		*76*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.362*		ug/Wipe	*0.5000*		*72*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.335*		ug/Wipe	*0.5000*		*67*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.345*		ug/Wipe	*0.5000*		*69*	*30-150*			
LCS Dup										
Aroclor 1016	7.9	0.5	ug/Wipe	10.00		79	40-140	2	30	
Aroclor 1016 [2C]	8.6	0.5	ug/Wipe	10.00		86	40-140	3	30	
Aroclor 1260	8.7	0.5	ug/Wipe	10.00		87	40-140	3	30	
Aroclor 1260 [2C]	9.8	0.5	ug/Wipe	10.00		98	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.398*		ug/Wipe	*0.5000*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.385*		ug/Wipe	*0.5000*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.343*		ug/Wipe	*0.5000*		*69*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.352*		ug/Wipe	*0.5000*		*70*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0013

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 19J0013

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 19J0013
Date Received: 10/1/2019
Project Due Date: 10/8/2019
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 0.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	393616	Yes	NA	Yes	4 oz. Jar - Hexane	Hexane	
02	393615	Yes	NA	Yes	4 oz. Jar - Hexane	Hexane	
03	393614	Yes	NA	Yes	4 oz. Jar - Hexane	Hexane	

2nd Review
Were all containers scanned into storage/lab? Initials
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / (NA)
Are all Hex Chrome stickers attached? Yes / No / (NA)
Are all QC stickers attached? Yes / No / (NA)
Are VOA stickers attached if bubbles noted? Yes / No / (NA)

Completed By: Date & Time: 10/1/19 1918
Reviewed By: Date & Time: 10/1/19 1914
Delivered By: 10/1/19 1914

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1950013

Turn Time	5-Day Rush
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	< 10ug/100cm2
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name Coneco Engineers and Scientists	**Project #** 5675.F	**Project Name** Pawtucket 1 Control House, 6 Thornton Ave, Pawtucket RI	
Contact Person Mark Zoller		**Address** 4 First Street	
City Bridgewater	**State** MA	**Zip Code** 02324	**PO #** 5675.F
Telephone Number 508-697-3191	**FAX Number**	**Email Address** jaevazalis,mzoller,kloftus,ddfrancesco@coneco.co	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs 8082
01	9/26/19	9:40 am	Grab	Wipe	WS-03-01	X
02	9/26/19	9:50 am	Grab	Wipe	WS-03-02	X
03	9/26/19	09:20 am	Grab	Wipe	WS-02-01	X

Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial	AG
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*	9
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*	11
	Number of Containers per Sample:	1

Laboratory Use Only

Cooler Present: ✓
Seals Intact: NA
Cooler Temperature: °C Icetemp: 0.4

Sampled by : KML

Comments: Please specify "Other" preservative and containers types in this space

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, homogenize sample, TSCA Requirements, Full Data Package, Hexane Preserved, Wipe Area 100cm2

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
	10/1/19 12:36	10/1/19 16:37	10/1/19 1637
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Mark Zoller
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 20A0096

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 1:59 pm, Jan 14, 2020

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0096

SAMPLE RECEIPT

The following samples were received on January 07, 2020 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
20A0096-01	WS-01-01	Wipe	8082A
20A0096-02	WS-02-02	Wipe	8082A
20A0096-03	WS-04-01	Wipe	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0096

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

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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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0096

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-01-01
Date Sampled: 01/03/20 13:30
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0096
ESS Laboratory Sample ID: 20A0096-01
Sample Matrix: Wipe
Units: ug/Wipe
Analyst: MJV
Prepared: 1/9/20 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	01/11/20 2:12	C0A0205	CA00915
Aroclor 1221	ND (0.5)		8082A		1	01/11/20 2:12	C0A0205	CA00915
Aroclor 1232	ND (0.5)		8082A		1	01/11/20 2:12	C0A0205	CA00915
Aroclor 1242	ND (0.5)		8082A		1	01/11/20 2:12	C0A0205	CA00915
Aroclor 1248	ND (0.5)		8082A		1	01/11/20 2:12	C0A0205	CA00915
Aroclor 1254	ND (0.5)		8082A		1	01/11/20 2:12	C0A0205	CA00915
Aroclor 1260	ND (0.5)		8082A		1	01/11/20 2:12	C0A0205	CA00915
Aroclor 1262	ND (0.5)		8082A		1	01/11/20 2:12	C0A0205	CA00915
Aroclor 1268	ND (0.5)		8082A		1	01/11/20 2:12	C0A0205	CA00915

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*105 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-02-02
Date Sampled: 01/03/20 13:45
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0096
ESS Laboratory Sample ID: 20A0096-02
Sample Matrix: Wipe
Units: ug/Wipe
Analyst: MJV
Prepared: 1/9/20 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	01/11/20 2:31	C0A0205	CA00915
Aroclor 1221	ND (0.5)		8082A		1	01/11/20 2:31	C0A0205	CA00915
Aroclor 1232	ND (0.5)		8082A		1	01/11/20 2:31	C0A0205	CA00915
Aroclor 1242	ND (0.5)		8082A		1	01/11/20 2:31	C0A0205	CA00915
Aroclor 1248	ND (0.5)		8082A		1	01/11/20 2:31	C0A0205	CA00915
Aroclor 1254	ND (0.5)		8082A		1	01/11/20 2:31	C0A0205	CA00915
Aroclor 1260	**5.8** (0.5)		8082A		1	01/11/20 2:31	C0A0205	CA00915
Aroclor 1262	ND (0.5)		8082A		1	01/11/20 2:31	C0A0205	CA00915
Aroclor 1268	ND (0.5)		8082A		1	01/11/20 2:31	C0A0205	CA00915

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-04-01
Date Sampled: 01/03/20 14:00
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20A0096
ESS Laboratory Sample ID: 20A0096-03
Sample Matrix: Wipe
Units: ug/Wipe
Analyst: MJV
Prepared: 1/9/20 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	01/11/20 2:50	C0A0205	CA00915
Aroclor 1221	ND (0.5)		8082A		1	01/11/20 2:50	C0A0205	CA00915
Aroclor 1232	ND (0.5)		8082A		1	01/11/20 2:50	C0A0205	CA00915
Aroclor 1242	ND (0.5)		8082A		1	01/11/20 2:50	C0A0205	CA00915
Aroclor 1248	ND (0.5)		8082A		1	01/11/20 2:50	C0A0205	CA00915
Aroclor 1254	ND (0.5)		8082A		1	01/11/20 2:50	C0A0205	CA00915
Aroclor 1260 [2C]	**1.4** (0.5)		8082A		1	01/11/20 2:50	C0A0205	CA00915
Aroclor 1262	ND (0.5)		8082A		1	01/11/20 2:50	C0A0205	CA00915
Aroclor 1268	ND (0.5)		8082A		1	01/11/20 2:50	C0A0205	CA00915

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*103 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*106 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*104 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0096

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CA00915 - 3540C										
Blank										
Aroclor 1016	ND	0.5	ug/Wipe							
Aroclor 1016 [2C]	ND	0.5	ug/Wipe							
Aroclor 1221	ND	0.5	ug/Wipe							
Aroclor 1221 [2C]	ND	0.5	ug/Wipe							
Aroclor 1232	ND	0.5	ug/Wipe							
Aroclor 1232 [2C]	ND	0.5	ug/Wipe							
Aroclor 1242	ND	0.5	ug/Wipe							
Aroclor 1242 [2C]	ND	0.5	ug/Wipe							
Aroclor 1248	ND	0.5	ug/Wipe							
Aroclor 1248 [2C]	ND	0.5	ug/Wipe							
Aroclor 1254	ND	0.5	ug/Wipe							
Aroclor 1254 [2C]	ND	0.5	ug/Wipe							
Aroclor 1260	ND	0.5	ug/Wipe							
Aroclor 1260 [2C]	ND	0.5	ug/Wipe							
Aroclor 1262	ND	0.5	ug/Wipe							
Aroclor 1262 [2C]	ND	0.5	ug/Wipe							
Aroclor 1268	ND	0.5	ug/Wipe							
Aroclor 1268 [2C]	ND	0.5	ug/Wipe							
Surrogate: Decachlorobiphenyl	*0.511*		ug/Wipe	*0.5000*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.547*		ug/Wipe	*0.5000*		*109*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.408*		ug/Wipe	*0.5000*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.469*		ug/Wipe	*0.5000*		*94*	*30-150*			
LCS										
Aroclor 1016	9.4	0.5	ug/Wipe	10.00		94	40-140			
Aroclor 1016 [2C]	9.5	0.5	ug/Wipe	10.00		95	40-140			
Aroclor 1260	9.3	0.5	ug/Wipe	10.00		93	40-140			
Aroclor 1260 [2C]	9.7	0.5	ug/Wipe	10.00		97	40-140			
Surrogate: Decachlorobiphenyl	*0.511*		ug/Wipe	*0.5000*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.529*		ug/Wipe	*0.5000*		*106*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.440*		ug/Wipe	*0.5000*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.479*		ug/Wipe	*0.5000*		*96*	*30-150*			
LCS Dup										
Aroclor 1016	9.3	0.5	ug/Wipe	10.00		93	40-140	0.6	30	
Aroclor 1016 [2C]	9.5	0.5	ug/Wipe	10.00		95	40-140	0.4	30	
Aroclor 1260	9.3	0.5	ug/Wipe	10.00		93	40-140	0.09	30	
Aroclor 1260 [2C]	9.8	0.5	ug/Wipe	10.00		98	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.510*		ug/Wipe	*0.5000*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.534*		ug/Wipe	*0.5000*		*107*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.449*		ug/Wipe	*0.5000*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.477*		ug/Wipe	*0.5000*		*95*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0096

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20A0096

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 20A0096
Date Received: 1/7/2020
Project Due Date: 1/13/2020
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.5 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? (Yes) No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	764	Yes	N/A	Yes	4 oz. Jar	Hexane	
2	765	Yes	N/A	Yes	4 oz. Jar	Hexane	
3	766	Yes	N/A	Yes	4 oz. Jar	Hexane	

2nd Review
Were all containers scanned into storage/lab? Initials
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / (NA)
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Date & Time: 1/7/20 2020
Reviewed By: Date & Time: 1/7/20 2035
Delivered By: 1/7/20 2035

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20A0096

Turn Time	5-Day **Rush**
Regulatory State	Rhode Island
Is this project for any of the following?:	○ CT RCP ○ MA MCP ○ RGP
Reporting Limits	< 10µg/100cm²
Electonic Deliverables	☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name Coneco Engineers & Scientists	**Project #** 5675.F	**Project Name** Pawtucket Control House, 6 Thorton Ave, Pawtucket, RI	
Contact Person Mark Zoller		**Address** 4 First Street	
City Bridgewater	**State** Massachusetts	**Zip Code** 02324	**PO #** 5675.F
Telephone Number (508) 697-3191	**FAX Number**	**Email Address** Jaevaelis, Mzoller, Kloftus, Ddifrancesco@coneco.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by 8082														
01	1/3/2020	1:30 p.m.	Grab	Solid	WS-01-01	X														
02	1/3/2020	1:45 p.m.	Grab	Solid	WS-02-02	X														
03	1/3/2020	2:00 p.m.	Grab	Solid	WS-04-01	X														

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Number of Containers per Sample: 1

Laboratory Use Only

Cooler Present: ✓
Seals Intact: ✓
Cooler Temperature: 3.5 °C

Sampled by : DJD

Comments: **Please specify "Other" preservative and containers types in this space**

National Grid Project, Use Manual Soxhlet Extraction per EPA Method 3540, 11=ice/hexane
Homogenize Sample TSCA Requirements, Provide Full Data Package, wipe area 100cm²

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
1/6/2020	11:20 1/7	1/7 1505	1/7/20 1509
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F)
ESS Laboratory Work Order Number: 20F0221

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 5:59 pm, Jun 11, 2020

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0221

SAMPLE RECEIPT

The following samples were received on June 04, 2020 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
20F0221-01	WS-02-03	Wipe	8082A
20F0221-02	WS-02-04	Wipe	8082A
20F0221-03	WS-03-03	Wipe	8082A
20F0221-04	WS-03-04	Wipe	8082A
20F0221-05	WS-05-01	Wipe	8082A
20F0221-06	WS-05-02	Wipe	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0221

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0221

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-02-03
Date Sampled: 05/29/20 10:00
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0221
ESS Laboratory Sample ID: 20F0221-01
Sample Matrix: Wipe
Units: ug/Wipe
Analyst: DMC
Prepared: 6/8/20 19:50

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	06/09/20 19:46	D0F0172	DF00813
Aroclor 1221	ND (1.0)		8082A		1	06/09/20 19:46	D0F0172	DF00813
Aroclor 1232	ND (1.0)		8082A		1	06/09/20 19:46	D0F0172	DF00813
Aroclor 1242	ND (1.0)		8082A		1	06/09/20 19:46	D0F0172	DF00813
Aroclor 1248	ND (1.0)		8082A		1	06/09/20 19:46	D0F0172	DF00813
Aroclor 1254	ND (1.0)		8082A		1	06/09/20 19:46	D0F0172	DF00813
Aroclor 1260	ND (1.0)		8082A		1	06/09/20 19:46	D0F0172	DF00813
Aroclor 1262	ND (1.0)		8082A		1	06/09/20 19:46	D0F0172	DF00813
Aroclor 1268	ND (1.0)		8082A		1	06/09/20 19:46	D0F0172	DF00813

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*110 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-02-04
Date Sampled: 05/29/20 10:05
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0221
ESS Laboratory Sample ID: 20F0221-02
Sample Matrix: Wipe
Units: ug/Wipe
Analyst: DMC
Prepared: 6/8/20 19:50

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	06/09/20 20:05	D0F0172	DF00813
Aroclor 1221	ND (1.0)		8082A		1	06/09/20 20:05	D0F0172	DF00813
Aroclor 1232	ND (1.0)		8082A		1	06/09/20 20:05	D0F0172	DF00813
Aroclor 1242	ND (1.0)		8082A		1	06/09/20 20:05	D0F0172	DF00813
Aroclor 1248	ND (1.0)		8082A		1	06/09/20 20:05	D0F0172	DF00813
Aroclor 1254	ND (1.0)		8082A		1	06/09/20 20:05	D0F0172	DF00813
Aroclor 1260	ND (1.0)		8082A		1	06/09/20 20:05	D0F0172	DF00813
Aroclor 1262	ND (1.0)		8082A		1	06/09/20 20:05	D0F0172	DF00813
Aroclor 1268	ND (1.0)		8082A		1	06/09/20 20:05	D0F0172	DF00813

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*108 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-03-03
Date Sampled: 05/29/20 10:10
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0221
ESS Laboratory Sample ID: 20F0221-03
Sample Matrix: Wipe
Units: ug/Wipe
Analyst: DMC
Prepared: 6/8/20 19:50

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	06/09/20 20:24	D0F0172	DF00813
Aroclor 1221	ND (1.0)		8082A		1	06/09/20 20:24	D0F0172	DF00813
Aroclor 1232	ND (1.0)		8082A		1	06/09/20 20:24	D0F0172	DF00813
Aroclor 1242	ND (1.0)		8082A		1	06/09/20 20:24	D0F0172	DF00813
Aroclor 1248	ND (1.0)		8082A		1	06/09/20 20:24	D0F0172	DF00813
Aroclor 1254	ND (1.0)		8082A		1	06/09/20 20:24	D0F0172	DF00813
Aroclor 1260	ND (1.0)		8082A		1	06/09/20 20:24	D0F0172	DF00813
Aroclor 1262	ND (1.0)		8082A		1	06/09/20 20:24	D0F0172	DF00813
Aroclor 1268	ND (1.0)		8082A		1	06/09/20 20:24	D0F0172	DF00813

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*107 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-03-04
Date Sampled: 05/29/20 10:15
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0221
ESS Laboratory Sample ID: 20F0221-04
Sample Matrix: Wipe
Units: ug/Wipe
Analyst: DMC
Prepared: 6/8/20 19:50

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	06/09/20 20:43	D0F0172	DF00813
Aroclor 1221	ND (1.0)		8082A		1	06/09/20 20:43	D0F0172	DF00813
Aroclor 1232	ND (1.0)		8082A		1	06/09/20 20:43	D0F0172	DF00813
Aroclor 1242	ND (1.0)		8082A		1	06/09/20 20:43	D0F0172	DF00813
Aroclor 1248	ND (1.0)		8082A		1	06/09/20 20:43	D0F0172	DF00813
Aroclor 1254	ND (1.0)		8082A		1	06/09/20 20:43	D0F0172	DF00813
Aroclor 1260	ND (1.0)		8082A		1	06/09/20 20:43	D0F0172	DF00813
Aroclor 1262	ND (1.0)		8082A		1	06/09/20 20:43	D0F0172	DF00813
Aroclor 1268	ND (1.0)		8082A		1	06/09/20 20:43	D0F0172	DF00813

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*109 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-05-01
Date Sampled: 05/29/20 10:20
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0221
ESS Laboratory Sample ID: 20F0221-05
Sample Matrix: Wipe
Units: ug/Wipe
Analyst: DMC
Prepared: 6/8/20 19:50

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	06/09/20 21:02	D0F0172	DF00813
Aroclor 1221	ND (1.0)		8082A		1	06/09/20 21:02	D0F0172	DF00813
Aroclor 1232	ND (1.0)		8082A		1	06/09/20 21:02	D0F0172	DF00813
Aroclor 1242	ND (1.0)		8082A		1	06/09/20 21:02	D0F0172	DF00813
Aroclor 1248	ND (1.0)		8082A		1	06/09/20 21:02	D0F0172	DF00813
Aroclor 1254	ND (1.0)		8082A		1	06/09/20 21:02	D0F0172	DF00813
Aroclor 1260	ND (1.0)		8082A		1	06/09/20 21:02	D0F0172	DF00813
Aroclor 1262	ND (1.0)		8082A		1	06/09/20 21:02	D0F0172	DF00813
Aroclor 1268	ND (1.0)		8082A		1	06/09/20 21:02	D0F0172	DF00813

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*104 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*91 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-05-02
Date Sampled: 05/29/20 10:25
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 20F0221
ESS Laboratory Sample ID: 20F0221-06
Sample Matrix: Wipe
Units: ug/Wipe
Analyst: DMC
Prepared: 6/8/20 19:50

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	06/09/20 21:21	D0F0172	DF00813
Aroclor 1221	ND (1.0)		8082A		1	06/09/20 21:21	D0F0172	DF00813
Aroclor 1232	ND (1.0)		8082A		1	06/09/20 21:21	D0F0172	DF00813
Aroclor 1242	ND (1.0)		8082A		1	06/09/20 21:21	D0F0172	DF00813
Aroclor 1248	ND (1.0)		8082A		1	06/09/20 21:21	D0F0172	DF00813
Aroclor 1254	ND (1.0)		8082A		1	06/09/20 21:21	D0F0172	DF00813
Aroclor 1260	ND (1.0)		8082A		1	06/09/20 21:21	D0F0172	DF00813
Aroclor 1262	ND (1.0)		8082A		1	06/09/20 21:21	D0F0172	DF00813
Aroclor 1268	ND (1.0)		8082A		1	06/09/20 21:21	D0F0172	DF00813

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*107 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0221

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DF00813 - 3540C										
Blank										
Aroclor 1016	ND	1.0	ug/Wipe							
Aroclor 1016 [2C]	ND	1.0	ug/Wipe							
Aroclor 1221	ND	1.0	ug/Wipe							
Aroclor 1221 [2C]	ND	1.0	ug/Wipe							
Aroclor 1232	ND	1.0	ug/Wipe							
Aroclor 1232 [2C]	ND	1.0	ug/Wipe							
Aroclor 1242	ND	1.0	ug/Wipe							
Aroclor 1242 [2C]	ND	1.0	ug/Wipe							
Aroclor 1248	ND	1.0	ug/Wipe							
Aroclor 1248 [2C]	ND	1.0	ug/Wipe							
Aroclor 1254	ND	1.0	ug/Wipe							
Aroclor 1254 [2C]	ND	1.0	ug/Wipe							
Aroclor 1260	ND	1.0	ug/Wipe							
Aroclor 1260 [2C]	ND	1.0	ug/Wipe							
Aroclor 1262	ND	1.0	ug/Wipe							
Aroclor 1262 [2C]	ND	1.0	ug/Wipe							
Aroclor 1268	ND	1.0	ug/Wipe							
Aroclor 1268 [2C]	ND	1.0	ug/Wipe							
Surrogate: Decachlorobiphenyl	*0.533*		ug/Wipe	*0.5000*		*107*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.459*		ug/Wipe	*0.5000*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.433*		ug/Wipe	*0.5000*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.450*		ug/Wipe	*0.5000*		*90*	*30-150*			
LCS										
Aroclor 1016	10.2	1.0	ug/Wipe	10.00		102	40-140			
Aroclor 1016 [2C]	8.6	1.0	ug/Wipe	10.00		86	40-140			
Aroclor 1260	10.2	1.0	ug/Wipe	10.00		102	40-140			
Aroclor 1260 [2C]	8.8	1.0	ug/Wipe	10.00		88	40-140			
Surrogate: Decachlorobiphenyl	*0.544*		ug/Wipe	*0.5000*		*109*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.465*		ug/Wipe	*0.5000*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.454*		ug/Wipe	*0.5000*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.442*		ug/Wipe	*0.5000*		*88*	*30-150*			
LCS Dup										
Aroclor 1016	10.2	1.0	ug/Wipe	10.00		102	40-140	0.7	30	
Aroclor 1016 [2C]	8.5	1.0	ug/Wipe	10.00		85	40-140	0.4	30	
Aroclor 1260	10.2	1.0	ug/Wipe	10.00		102	40-140	0.2	30	
Aroclor 1260 [2C]	9.0	1.0	ug/Wipe	10.00		90	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.540*		ug/Wipe	*0.5000*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.472*		ug/Wipe	*0.5000*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.446*		ug/Wipe	*0.5000*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.440*		ug/Wipe	*0.5000*		*88*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0221

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 20F0221

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 20F0221
Date Received: 6/4/2020
Project Due Date: 6/11/2020
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	49873	Yes	N/A	Yes	2 oz. Jar	Hexane	
2	49874	Yes	N/A	Yes	2 oz. Jar	Hexane	
3	49875	Yes	N/A	Yes	2 oz. Jar	Hexane	
4	49876	Yes	N/A	Yes	2 oz. Jar	Hexane	
5	49877	Yes	N/A	Yes	2 oz. Jar	Hexane	
6	49878	Yes	N/A	Yes	2 oz. Jar	Hexane	

2nd Review
Were all containers scanned into storage/lab? Initials Yes / No
Are barcode labels on correct containers? Yes / No / NA
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Date & Time: 6/4/20 1917
Reviewed By: Date & Time: 6/4/20 2008

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 20F0221

Turn Time: 5-Day (circled) Rush
Regulatory State: Rhode Island
Is this project for any of the following?: ○ CT RCP ○ MA MCP ○ RGP
Reporting Limits: 2.05 mg/kg
Electonic Deliverables: ☐ Limit Checker ☐ Standard Excel ☑ Other (Please Specify →) PDF

Company Name: Conecto Engineers and Scientists	Project #: 5675.F	Project Name: Pawtucket Central Rivers, 1 Thompson Ave	
Contact Person: Katie Loftus	Address: 4 First Street	Pawtucket, RI	
City: Bridgewater	State: Massachusetts	Zip Code: 02324	PO #: 5675.F
Telephone Number: 508-697-3191	FAX Number:	Email Address: Javazelis, MZoller, Hayden, Kloftus, DDiFrancesco@Conecto.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Analysis: PCBs by 8082
1	5/29/20	10:00 am	Grab	Wipe	WS-02-03	X
2		10:05 am			WS-02-04	X
3		10:10 am			WS-03-03	X
4		10:15 am			WS-03-04	X
5		10:20 am			WS-05-01	X
6	↓	10:25 am	↓	↓	WS-05-02	X

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G-Glass O-Other P-Poly S-Sterile V-Vial — A6
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 8
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11
Number of Containers per Sample: 1

Laboratory Use Only
Cooler Present: _____
Seals Intact: _____
Cooler Temperature: -0.1/1.2 °C

Sampled by: DJD/LGG Hexane Preserved, Wipe Area 100 cm²

Comments: Please specify "Other" preservative and containers types in this space
National Grid Project, Use Manual Soxhlet extraction per EPA Method 3540. ~~Report dry weight~~ (D), homogenize sample, TSCA Requirements, Full Data Package 1 1/2 Cl

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
Dani D'Amman 6/4/20 1440	[signature] 6/4/20 1440	[signature] 6/4/20 1541	[signature] 6/4/20 1541
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

CERTIFICATE OF ANALYSIS

Katie Loftus
Coneco Engineers, Scientists & Surveyors
4 First Street
Bridgewater, MA 02324

RE: Pawtucket 1 Control House 6 Thorton Ave Pawtucket (5675.F.101.4)
ESS Laboratory Work Order Number: 21J0812

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 5:42 pm, Oct 29, 2021

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 TNI and relative state standards, 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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0812

SAMPLE RECEIPT

The following samples were received on October 22, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
21J0812-01	WS-01-02	Wipe	8082A
21J0812-02	WS-01-03	Wipe	8082A
21J0812-03	WS-02-05	Wipe	8082A
21J0812-04	WS-02-06	Wipe	8082A
21J0812-05	WS-03-05	Wipe	8082A
21J0812-06	WS-03-06	Wipe	8082A
21J0812-07	WS-04-02	Wipe	8082A
21J0812-08	WS-04-03	Wipe	8082A
21J0812-09	WS-04-04	Wipe	8082A
21J0812-10	WS-05-03	Wipe	8082A
21J0812-11	WS-05-04	Wipe	8082A
21J0812-12	WS-05-05	Wipe	8082A

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0812

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

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: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0812

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
MADEP 18-2.1 - 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
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-01-02
Date Sampled: 10/21/21 09:54
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0812
ESS Laboratory Sample ID: 21J0812-01
Sample Matrix: Wipe
Units: ug/100cm²
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	10/27/21 4:33	D1J0420	DJ12508
Aroclor 1221	ND (1.0)		8082A		1	10/27/21 4:33	D1J0420	DJ12508
Aroclor 1232	ND (1.0)		8082A		1	10/27/21 4:33	D1J0420	DJ12508
Aroclor 1242	ND (1.0)		8082A		1	10/27/21 4:33	D1J0420	DJ12508
Aroclor 1248	ND (1.0)		8082A		1	10/27/21 4:33	D1J0420	DJ12508
Aroclor 1254	ND (1.0)		8082A		1	10/27/21 4:33	D1J0420	DJ12508
Aroclor 1260	ND (1.0)		8082A		1	10/27/21 4:33	D1J0420	DJ12508
Aroclor 1262	ND (1.0)		8082A		1	10/27/21 4:33	D1J0420	DJ12508
Aroclor 1268	ND (1.0)		8082A		1	10/27/21 4:33	D1J0420	DJ12508

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-01-03
Date Sampled: 10/21/21 11:18
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0812
ESS Laboratory Sample ID: 21J0812-02
Sample Matrix: Wipe
Units: ug/100cm²
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	10/27/21 4:52	D1J0420	DJ12508
Aroclor 1221	ND (1.0)		8082A		1	10/27/21 4:52	D1J0420	DJ12508
Aroclor 1232	ND (1.0)		8082A		1	10/27/21 4:52	D1J0420	DJ12508
Aroclor 1242	ND (1.0)		8082A		1	10/27/21 4:52	D1J0420	DJ12508
Aroclor 1248	ND (1.0)		8082A		1	10/27/21 4:52	D1J0420	DJ12508
Aroclor 1254	ND (1.0)		8082A		1	10/27/21 4:52	D1J0420	DJ12508
Aroclor 1260	ND (1.0)		8082A		1	10/27/21 4:52	D1J0420	DJ12508
Aroclor 1262	ND (1.0)		8082A		1	10/27/21 4:52	D1J0420	DJ12508
Aroclor 1268	ND (1.0)		8082A		1	10/27/21 4:52	D1J0420	DJ12508

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-02-05
Date Sampled: 10/21/21 10:06
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0812
ESS Laboratory Sample ID: 21J0812-03
Sample Matrix: Wipe
Units: ug/100cm²
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	10/27/21 5:11	D1J0420	DJ12508
Aroclor 1221	ND (1.0)		8082A		1	10/27/21 5:11	D1J0420	DJ12508
Aroclor 1232	ND (1.0)		8082A		1	10/27/21 5:11	D1J0420	DJ12508
Aroclor 1242	ND (1.0)		8082A		1	10/27/21 5:11	D1J0420	DJ12508
Aroclor 1248	ND (1.0)		8082A		1	10/27/21 5:11	D1J0420	DJ12508
Aroclor 1254	ND (1.0)		8082A		1	10/27/21 5:11	D1J0420	DJ12508
Aroclor 1260	ND (1.0)		8082A		1	10/27/21 5:11	D1J0420	DJ12508
Aroclor 1262	ND (1.0)		8082A		1	10/27/21 5:11	D1J0420	DJ12508
Aroclor 1268	ND (1.0)		8082A		1	10/27/21 5:11	D1J0420	DJ12508

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-02-06
Date Sampled: 10/21/21 10:52
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0812
ESS Laboratory Sample ID: 21J0812-04
Sample Matrix: Wipe
Units: ug/100cm²
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	10/27/21 5:31	D1J0420	DJ12508
Aroclor 1221	ND (1.0)		8082A		1	10/27/21 5:31	D1J0420	DJ12508
Aroclor 1232	ND (1.0)		8082A		1	10/27/21 5:31	D1J0420	DJ12508
Aroclor 1242	ND (1.0)		8082A		1	10/27/21 5:31	D1J0420	DJ12508
Aroclor 1248	ND (1.0)		8082A		1	10/27/21 5:31	D1J0420	DJ12508
Aroclor 1254	ND (1.0)		8082A		1	10/27/21 5:31	D1J0420	DJ12508
Aroclor 1260	ND (1.0)		8082A		1	10/27/21 5:31	D1J0420	DJ12508
Aroclor 1262	ND (1.0)		8082A		1	10/27/21 5:31	D1J0420	DJ12508
Aroclor 1268	ND (1.0)		8082A		1	10/27/21 5:31	D1J0420	DJ12508

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-03-05
Date Sampled: 10/21/21 10:29
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0812
ESS Laboratory Sample ID: 21J0812-05
Sample Matrix: Wipe
Units: ug/100cm²
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	10/27/21 5:50	D1J0420	DJ12508
Aroclor 1221	ND (1.0)		8082A		1	10/27/21 5:50	D1J0420	DJ12508
Aroclor 1232	ND (1.0)		8082A		1	10/27/21 5:50	D1J0420	DJ12508
Aroclor 1242	ND (1.0)		8082A		1	10/27/21 5:50	D1J0420	DJ12508
Aroclor 1248	ND (1.0)		8082A		1	10/27/21 5:50	D1J0420	DJ12508
Aroclor 1254	ND (1.0)		8082A		1	10/27/21 5:50	D1J0420	DJ12508
Aroclor 1260	ND (1.0)		8082A		1	10/27/21 5:50	D1J0420	DJ12508
Aroclor 1262	ND (1.0)		8082A		1	10/27/21 5:50	D1J0420	DJ12508
Aroclor 1268	ND (1.0)		8082A		1	10/27/21 5:50	D1J0420	DJ12508

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*93 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*101 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*103 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-03-06
Date Sampled: 10/21/21 10:34
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0812
ESS Laboratory Sample ID: 21J0812-06
Sample Matrix: Wipe
Units: ug/100cm²
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	10/27/21 6:09	D1J0420	DJ12508
Aroclor 1221	ND (1.0)		8082A		1	10/27/21 6:09	D1J0420	DJ12508
Aroclor 1232	ND (1.0)		8082A		1	10/27/21 6:09	D1J0420	DJ12508
Aroclor 1242	ND (1.0)		8082A		1	10/27/21 6:09	D1J0420	DJ12508
Aroclor 1248	ND (1.0)		8082A		1	10/27/21 6:09	D1J0420	DJ12508
Aroclor 1254	ND (1.0)		8082A		1	10/27/21 6:09	D1J0420	DJ12508
Aroclor 1260	ND (1.0)		8082A		1	10/27/21 6:09	D1J0420	DJ12508
Aroclor 1262	ND (1.0)		8082A		1	10/27/21 6:09	D1J0420	DJ12508
Aroclor 1268	ND (1.0)		8082A		1	10/27/21 6:09	D1J0420	DJ12508

	%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]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-04-02
Date Sampled: 10/21/21 10:10
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0812
ESS Laboratory Sample ID: 21J0812-07
Sample Matrix: Wipe
Units: ug/100cm²
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	10/27/21 6:29	D1J0420	DJ12508
Aroclor 1221	ND (1.0)		8082A		1	10/27/21 6:29	D1J0420	DJ12508
Aroclor 1232	ND (1.0)		8082A		1	10/27/21 6:29	D1J0420	DJ12508
Aroclor 1242	ND (1.0)		8082A		1	10/27/21 6:29	D1J0420	DJ12508
Aroclor 1248	ND (1.0)		8082A		1	10/27/21 6:29	D1J0420	DJ12508
Aroclor 1254	ND (1.0)		8082A		1	10/27/21 6:29	D1J0420	DJ12508
Aroclor 1260	ND (1.0)		8082A		1	10/27/21 6:29	D1J0420	DJ12508
Aroclor 1262	ND (1.0)		8082A		1	10/27/21 6:29	D1J0420	DJ12508
Aroclor 1268	ND (1.0)		8082A		1	10/27/21 6:29	D1J0420	DJ12508

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*94 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-04-03
Date Sampled: 10/21/21 10:40
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0812
ESS Laboratory Sample ID: 21J0812-08
Sample Matrix: Wipe
Units: ug/100cm²
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	10/27/21 6:48	D1J0420	DJ12508
Aroclor 1221	ND (1.0)		8082A		1	10/27/21 6:48	D1J0420	DJ12508
Aroclor 1232	ND (1.0)		8082A		1	10/27/21 6:48	D1J0420	DJ12508
Aroclor 1242	ND (1.0)		8082A		1	10/27/21 6:48	D1J0420	DJ12508
Aroclor 1248	ND (1.0)		8082A		1	10/27/21 6:48	D1J0420	DJ12508
Aroclor 1254	ND (1.0)		8082A		1	10/27/21 6:48	D1J0420	DJ12508
Aroclor 1260	ND (1.0)		8082A		1	10/27/21 6:48	D1J0420	DJ12508
Aroclor 1262	ND (1.0)		8082A		1	10/27/21 6:48	D1J0420	DJ12508
Aroclor 1268	ND (1.0)		8082A		1	10/27/21 6:48	D1J0420	DJ12508

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-04-04
Date Sampled: 10/21/21 11:02
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0812
ESS Laboratory Sample ID: 21J0812-09
Sample Matrix: Wipe
Units: ug/100cm²
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	10/27/21 7:08	D1J0420	DJ12508
Aroclor 1221	ND (1.0)		8082A		1	10/27/21 7:08	D1J0420	DJ12508
Aroclor 1232	ND (1.0)		8082A		1	10/27/21 7:08	D1J0420	DJ12508
Aroclor 1242	ND (1.0)		8082A		1	10/27/21 7:08	D1J0420	DJ12508
Aroclor 1248	ND (1.0)		8082A		1	10/27/21 7:08	D1J0420	DJ12508
Aroclor 1254	ND (1.0)		8082A		1	10/27/21 7:08	D1J0420	DJ12508
Aroclor 1260	ND (1.0)		8082A		1	10/27/21 7:08	D1J0420	DJ12508
Aroclor 1262	ND (1.0)		8082A		1	10/27/21 7:08	D1J0420	DJ12508
Aroclor 1268	ND (1.0)		8082A		1	10/27/21 7:08	D1J0420	DJ12508

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-05-03
Date Sampled: 10/21/21 10:18
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0812
ESS Laboratory Sample ID: 21J0812-10
Sample Matrix: Wipe
Units: ug/100cm²
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	10/27/21 7:27	D1J0420	DJ12508
Aroclor 1221	ND (1.0)		8082A		1	10/27/21 7:27	D1J0420	DJ12508
Aroclor 1232	ND (1.0)		8082A		1	10/27/21 7:27	D1J0420	DJ12508
Aroclor 1242	ND (1.0)		8082A		1	10/27/21 7:27	D1J0420	DJ12508
Aroclor 1248	ND (1.0)		8082A		1	10/27/21 7:27	D1J0420	DJ12508
Aroclor 1254	ND (1.0)		8082A		1	10/27/21 7:27	D1J0420	DJ12508
Aroclor 1260	ND (1.0)		8082A		1	10/27/21 7:27	D1J0420	DJ12508
Aroclor 1262	ND (1.0)		8082A		1	10/27/21 7:27	D1J0420	DJ12508
Aroclor 1268	ND (1.0)		8082A		1	10/27/21 7:27	D1J0420	DJ12508

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*102 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-05-04
Date Sampled: 10/21/21 10:20
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0812
ESS Laboratory Sample ID: 21J0812-11
Sample Matrix: Wipe
Units: ug/100cm²
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	10/27/21 7:46	D1J0420	DJ12508
Aroclor 1221	ND (1.0)		8082A		1	10/27/21 7:46	D1J0420	DJ12508
Aroclor 1232	ND (1.0)		8082A		1	10/27/21 7:46	D1J0420	DJ12508
Aroclor 1242	ND (1.0)		8082A		1	10/27/21 7:46	D1J0420	DJ12508
Aroclor 1248	ND (1.0)		8082A		1	10/27/21 7:46	D1J0420	DJ12508
Aroclor 1254	ND (1.0)		8082A		1	10/27/21 7:46	D1J0420	DJ12508
Aroclor 1260	ND (1.0)		8082A		1	10/27/21 7:46	D1J0420	DJ12508
Aroclor 1262	ND (1.0)		8082A		1	10/27/21 7:46	D1J0420	DJ12508
Aroclor 1268	ND (1.0)		8082A		1	10/27/21 7:46	D1J0420	DJ12508

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*89 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*97 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket
Client Sample ID: WS-05-05
Date Sampled: 10/21/21 11:07
Percent Solids: N/A
Initial Volume: 1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 21J0812
ESS Laboratory Sample ID: 21J0812-12
Sample Matrix: Wipe
Units: ug/100cm²
Analyst: JLG
Prepared: 10/25/21 14:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.0)		8082A		1	10/27/21 8:06	D1J0420	DJ12508
Aroclor 1221	ND (1.0)		8082A		1	10/27/21 8:06	D1J0420	DJ12508
Aroclor 1232	ND (1.0)		8082A		1	10/27/21 8:06	D1J0420	DJ12508
Aroclor 1242	ND (1.0)		8082A		1	10/27/21 8:06	D1J0420	DJ12508
Aroclor 1248	ND (1.0)		8082A		1	10/27/21 8:06	D1J0420	DJ12508
Aroclor 1254	ND (1.0)		8082A		1	10/27/21 8:06	D1J0420	DJ12508
Aroclor 1260	ND (1.0)		8082A		1	10/27/21 8:06	D1J0420	DJ12508
Aroclor 1262	ND (1.0)		8082A		1	10/27/21 8:06	D1J0420	DJ12508
Aroclor 1268	ND (1.0)		8082A		1	10/27/21 8:06	D1J0420	DJ12508

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*84 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0812

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch DJ12508 - 3540C										
Blank										
Aroclor 1016	ND	1.0	ug/100cm²							
Aroclor 1016 [2C]	ND	1.0	ug/100cm²							
Aroclor 1221	ND	1.0	ug/100cm²							
Aroclor 1221 [2C]	ND	1.0	ug/100cm²							
Aroclor 1232	ND	1.0	ug/100cm²							
Aroclor 1232 [2C]	ND	1.0	ug/100cm²							
Aroclor 1242	ND	1.0	ug/100cm²							
Aroclor 1242 [2C]	ND	1.0	ug/100cm²							
Aroclor 1248	ND	1.0	ug/100cm²							
Aroclor 1248 [2C]	ND	1.0	ug/100cm²							
Aroclor 1254	ND	1.0	ug/100cm²							
Aroclor 1254 [2C]	ND	1.0	ug/100cm²							
Aroclor 1260	ND	1.0	ug/100cm²							
Aroclor 1260 [2C]	ND	1.0	ug/100cm²							
Aroclor 1262	ND	1.0	ug/100cm²							
Aroclor 1262 [2C]	ND	1.0	ug/100cm²							
Aroclor 1268	ND	1.0	ug/100cm²							
Aroclor 1268 [2C]	ND	1.0	ug/100cm²							
Surrogate: Decachlorobiphenyl	*0.474*		ug/100cm²	*0.5000*		*95*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.453*		ug/100cm²	*0.5000*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.490*		ug/100cm²	*0.5000*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.499*		ug/100cm²	*0.5000*		*100*	*30-150*			
LCS										
Aroclor 1016	8.9	1.0	ug/100cm²	10.00		89	40-140			
Aroclor 1016 [2C]	8.6	1.0	ug/100cm²	10.00		86	40-140			
Aroclor 1260	9.6	1.0	ug/100cm²	10.00		96	40-140			
Aroclor 1260 [2C]	8.6	1.0	ug/100cm²	10.00		86	40-140			
Surrogate: Decachlorobiphenyl	*0.463*		ug/100cm²	*0.5000*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.439*		ug/100cm²	*0.5000*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.469*		ug/100cm²	*0.5000*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.458*		ug/100cm²	*0.5000*		*92*	*30-150*			
LCS Dup										
Aroclor 1016	9.3	1.0	ug/100cm²	10.00		93	40-140	4	30	
Aroclor 1016 [2C]	9.0	1.0	ug/100cm²	10.00		90	40-140	5	30	
Aroclor 1260	9.9	1.0	ug/100cm²	10.00		99	40-140	4	30	
Aroclor 1260 [2C]	9.0	1.0	ug/100cm²	10.00		90	40-140	5	30	
Surrogate: Decachlorobiphenyl	*0.483*		ug/100cm²	*0.5000*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.467*		ug/100cm²	*0.5000*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.488*		ug/100cm²	*0.5000*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.477*		ug/100cm²	*0.5000*		*95*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0812

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
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probable Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Coneco Engineers, Scientists & Surveyors
Client Project ID: Pawtucket 1 Control House 6 Thorton Ave Pawtucket ESS Laboratory Work Order: 21J0812

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

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: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

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

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21J0812
Date Received: 10/22/2021
Project Due Date: 10/29/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 2.1 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	221469	Yes	N/A	Yes	2 oz. Jar	Hexane	
2	221470	Yes	N/A	Yes	2 oz. Jar	Hexane	
3	221471	Yes	N/A	Yes	2 oz. Jar	Hexane	
4	221472	Yes	N/A	Yes	2 oz. Jar	Hexane	
5	221473	Yes	N/A	Yes	2 oz. Jar	Hexane	
6	221474	Yes	N/A	Yes	2 oz. Jar	Hexane	
7	221475	Yes	N/A	Yes	2 oz. Jar	Hexane	
8	221476	Yes	N/A	Yes	2 oz. Jar	Hexane	
9	221477	Yes	N/A	Yes	2 oz. Jar	Hexane	
10	221478	Yes	N/A	Yes	2 oz. Jar	Hexane	
11	221479	Yes	N/A	Yes	2 oz. Jar	Hexane	
12	221480	Yes	N/A	Yes	2 oz. Jar	Hexane	

2nd Review
Were all containers scanned into storage/lab? Initials MM
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Coneco Engineers, Scientists & Surv - KPB/TB

ESS Project ID: 21J0812

Date Received: 10/22/2021

Are all Hex Chrome stickers attached? Yes / No / NA

Are all QC stickers attached? Yes / No / NA

Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: _____ Date & Time: 10/22/21 1626

Reviewed By: Taylor Davis Date & Time: 10/22/21 1638

185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 2130812 | Page 1 of 2

Turn Time (Days) ☐>5 ☑5 ☐4 ☐3 ☐2 ☐1 ☐ Same Day

Regulatory State: RI **Criteria:** <0.5 mg/kg

Is this project for any of the following?:

☐CT RCP ☐MA MCP ☐RGP ☐Permit ☐401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☑ Limit Checker ☐ State Forms ☐ EQuIS
☑ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☐ Other (Specify) →

CLIENT INFORMATION

Client: Coneco Engineers & Scientists, Inc
Address: 4 First Street
Bridgewater, Massachusetts 02324
Phone: 508-697-3191

Email Distribution List: dkearney, cmacuch, kloftus, jaevazelis@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket Control House
Project Location: 6 Thorton Street, Pawtucket, RI
Project Number: 5675.F.101.4
Project Manager: Katie Loftus
Bill to: Environmental AP
PO#: 5675.F.101.4
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by EPA 8082	Total Number of Bottles
1	10/21/2021	0954	Grab	Wipe	WS-01-02	X	1
2	10/21/2021	1118	Grab	Wipe	WS-01-03	X	1
3	10/21/2021	1006	Grab	Wipe	WS-02-05	X	1
4	10/21/2021	1052	Grab	Wipe	WS-02-06	X	1
5	10/21/2021	1029	Grab	Wipe	WS-03-05	X	1
6	10/21/2021	1034	Grab	Wipe	WS-03-06	X	1
7	10/21/2021	1010	Grab	Wipe	WS-04-02	X	1
8	10/21/2021	1040	Grab	Wipe	WS-04-03	X	1
9	10/21/2021	1102	Grab	Wipe	WS-04-04	X	1
10	10/21/2021	1018	Grab	Wipe	WS-05-03	X	1
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial					AG	10
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					8 DCK	
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					11	

Sampled by : DCK

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only

Cooler Temperature (°C): 2.1 / 1 Ca

Comments: * Please specify "Other" preservative and containers types in this space

National Grid Project Preservation code 11 = ice Homogenize samples
Use manual soxhlet extraction per EPA Method 3540 TSCA Requirements
Please provide full data package Hexane preserved, wipe area = 100 cm^2

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration

☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
	10/21/21	1400	10/22/21 11:52		10/22/21	16:05	
Relinquished by (Signature)	**Date**	**Time**	**Received by (Signature)**	**Relinquished by (Signature)**	**Date**	**Time**	**Received by (Signature)**

185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 2130812 | Page 2 of 2

Turn Time ☐>5 ☑5 ☐4 ☐3 ☐2 ☐1 ☐Same Day

Regulatory State: RI **Criteria:** <0.5 mg/kg

Is this project for any of the following?:

☐CT RCP ☐MA MCP ☐RGP ☐Permit ☐401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☑ Limit Checker ☐ State Forms ☐ EQuIS
☑ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☐ Other (Specify) →

CLIENT INFORMATION

Client: Coneco Engineers & Scientists, Inc
Address: 4 First Street
Phone: 508-697-3191
Email Distribution List: dkearney, cmacuch, kloftus, jaevazelis@coneco.com

PROJECT INFORMATION

Project Name: Pawtucket Control House
Project Location: 6 Thorton Street, Pawtucket, RI
Project Number: 5675.F.101.4
Project Manager: Katie Loftus
Bill to: Environmental AP
PO#: 5675.F.101.4
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PCBs by EPA 8082	Total Number of Bottles
11	10/21/2021	1020	Grab	Wipe	WS-05-04	X	1
12	10/21/2021	1107	Grab	Wipe	WS-05-05	X	1

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 8 (DCK) — 2

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 11

Sampled by : DCK

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only

Cooler Temperature (°C): 2.1 / 1.0

Comments: * Please specify "Other" preservative and containers types in this space

National Grid Project Preservation code 11 = ice Homogenize samples
Use manual soxhlet extraction per EPA Method 3540 TSCA Requirements
Please provide full data package Hexane preserved, wipe area = 100 cm2

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration

☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
	10/21/21	1400	10/22/21 11:52		10/22/21	10:03	
Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)