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August 4, 2022

Ms. Katherine Woodward
EPA-New England, Region 1
5 Post Office Square, Suite 100
Boston, MA 02109

**Re: Notification of TSCA Risk-Based
Clean-up of PCB's
Hampden Dining Commons (Roofing Replacement)
UMASS - Amherst**

Dear Ms. Woodward:

On behalf of the University of Massachusetts in Amherst, (UMASS), Atlas Technical Consultants, LLC (ATLAS) is submitting the attached "Notification of TSCA Risk-Based Clean-Up of PCB's" for the Hampden Dining Commons Roof Replacement Project. This Notification has been developed in conjunction with the forthcoming Roof Replacement Project scheduled to start in September, 2022.

If you have any questions regarding this Notification, please feel free to call me directly at (413) 664-6687.

ATLAS TECHNICAL CONSULTANTS, LLC

A handwritten signature in black ink, appearing to read "Derrick Wissman".

Derrick Wissman
Senior Project Manager
Direct Line 413-664-6687
derrick.wissman@oneatlas.com

A handwritten signature in black ink, appearing to read "Brian Williams".

Brian Williams
Area Manager
Direct Line 413-504-1653
brian.williams@oneatlas.com

cc: Theresa Wolejko – UMASS EH&S



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Notification of TSCA
“Risk-Based Clean-up of PCBs”
Hampden Dining Commons – Roofing Replacement
University of Massachusetts
Amherst, Massachusetts

August 4, 2022

Prepared For:

University of Massachusetts
Environmental Health and Safety
40 Campus Center Way
117 Draper Hall
Amherst, MA 01003
Attention: Theresa Wolejko
Email: twolejko@ehs.umass.edu

Prepared by:

Atlas Technical Consultants, LLC
73 William Franks Drive
West Springfield, MA 01089
Attention: Derrick Wissman
Email: derrick.wissman@oneatlas.com



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1. INTRODUCTION

Atlas Technical Consultants, LLC (ATLAS) has prepared this Notification of a "Risk-Based Clean-up" of polychlorinated biphenyls (PCBs) under the Toxic Substances Control Act (TSCA), for the Hampden Dining Commons Roofing Replacement Project located at the University of Massachusetts in Amherst.

Hampden Dining Hall, located in the Southwest Residential Area of the UMASS Campus is a three (3) story brick and masonry building previously used for food preparation and dining services for students. Due to code issues, the building was closed in 2020 and UMASS has been evaluating the extent of renovations required to reopen the building.

UMASS recently awarded a construction project to W.J. Mountford Company out of South Windsor, Connecticut to remove and replace the roof on the building along with select interior renovations for ADA compliance. As part of that work, PCB containing sealants located on the roof parapet walls, exterior building fascia, exterior concrete pad on the chiller unit and entry doors into the Penthouse will be removed and disposed. The subcontractor retained by W.J. Mountford Company to perform the abatement is Compass Restoration Services LLC out of Ludlow, Massachusetts.

It is the intent of this plan to:

- a) Remove and dispose of the exterior caulking located in the joints of the parapet walls on the roof and the fascia/soffit around the building (120 LF).
- b) Remove and dispose of the exterior roofing material (i.e. membrane, felts, insulation board, tar, mastics, mop coat, stained wood/blocking, etc.) from the vertical face of the parapet walls down to the roof deck (855 SF).
- c) Remove and dispose of the exterior caulking within the joint located at the front portion of the concrete pad under the Chiller Unit (15 LF).
- d) Remove and dispose of the caulking located around metal door frames and thresholds located inside the Penthouse which lead to the exterior Chiller Unit and Exhaust Spaces (3 doors, 54 LF of caulking).
- e) Application of an epoxy coating on adjacent porous PCB impacted surfaces to remain such as concrete and CMU.

2. NATURE OF THE CONTAMINATION

ATLAS performed sampling to evaluate for the presence of polychlorinated biphenyls (PCB) located in the caulking/sealants at areas that would be subject to disturbance from roof replacement work. Suspect sealants were observed to be present at the following locations:

- Exterior caulking at seams of metal flashing at Penthouse roof
- Exterior caulking at expansion joint on CMU walls at the Chiller Unit area



- Exterior caulking at metal access doors/panel on the Chiller Unit
- Exterior caulking at metal flanges/channels on Chiller Unit
- Exterior caulking at front joint of the concrete pad under the Chiller Unit
- Interior caulking at metal door frame leading from Penthouse into the Chiller Unit area
- Interior caulking at metal door frames leading from Penthouse into the Exhaust Spaces
- Exterior caulking at the metal door frame from the Chiller Unit Area leading into the Penthouse
- Exterior caulking at the metal door frames from the Exhaust Spaces leading into the Penthouse
- Interior caulking at metal threshold at door in Penthouse leading into the Chiller Unit area
- Interior caulking at metal threshold at two (2) doors in Penthouse leading into Exhaust Spaces
- Exterior caulking at joints on top of concrete parapet walls at the Main Roof
- Exterior caulking at over-lap seams of silver roof membrane at the Main Roof

A total of fifteen (15) samples were collected and analyzed for PCBs. All samples collected were transported under strict chain-of-custody protocol to Con-Test Laboratory located in East Longmeadow, Massachusetts. The samples were extracted in accordance with Environmental Protection Agency (EPA) Method 3540C and then analyzed in accordance with EPA Method 8082.

Refer to **Attachment A** (Table 1.0) for a tabulated summary of the PCB source sampling results and **Attachment C** for the PCB laboratory analytical results.

Laboratory results indicated the following materials to contain PCBs at or above the associated TSCA defined level of 50 ppm:

LOCATION	MATERIAL	RESULT (PPM)
Chiller Unit	Exterior caulking at front joint of concrete pad under Chiller Unit	82,000
Chiller Unit	Exterior caulking at metal door frame leading into Penthouse	58
Exhaust Spaces	Exterior caulking at metal door frames leading into Penthouse	76
Penthouse	Caulking at metal threshold from Penthouse leading into the Chiller Unit	32,000
Penthouse	Caulking at metal thresholds from Penthouse leading into Exhaust Spaces	35,000
Parapet Wall	Exterior caulking at joints on top of concrete parapet walls and fascia/soffit	340,000



Note: The caulk joints located on concrete parapet walls extends down the front side of the building fascia/soffit. This material was not accessible for sampling and was assumed to contain PCB's >50 ppm at this time.

ATLAS reviewed the laboratory narratives associated with the samples collected for the source sampling and concludes that all data is usable. ATLAS reviewed detection limits and surrogate recoveries for each sample and all samples were within acceptable target ranges.

3. CHARACTERIZATION – POROUS SUBSTRATES

To evaluate if the PCB caulking has impacted adjacent porous concrete surfaces, ATLAS collected bulk samples from the concrete and/or CMU at the following locations:

- Penthouse - Concrete wall below the door thresholds leading into the two (2) Exhaust Spaces
- Penthouse – Concrete wall below the door threshold leading into the Chiller Unit
- Chiller Unit – Concrete pad at the East side under Chiller Unit
- Chiller Unit – CMU adjacent to door frames leading from the Chiller Unit/Exhaust Space into the Penthouse
- Parapet Wall at Roof – Concrete cap on top of parapet wall.

A total of twenty-seven (27) samples were collected using standard EPA methods, including drilling a hole in the building material to a maximum depth of 1/2-inch and collecting the resulting dust/debris. All sampling tools, including the hammer drill bit and hand tools, were decontaminated between sample locations using hexane. The samples were placed in laboratory-supplied sample jars and submitted to Con-Test Analytical Laboratories of East Longmeadow, Massachusetts (Con-Test) on a chain-of-custody for extraction in accordance with EPA Method 3540C (soxhlet) followed by analysis in accordance with EPA Method 8082 (Aroclors).

Refer to **Attachment B** (Table 2.0) for a tabulated summary of the PCB substrate sampling results and **Attachment D** for the PCB laboratory analytical results.

The following summarizes the limits of impacted CMU and/or concrete where >50 ppm PCB caulking was located:

LOCATION	SUBSTRATE	DISTANCE IMPACTED BY PCBs
Penthouse – Door Leading Into Chiller Unit	Concrete Wall Below Door Threshold	< 6 Inches



LOCATION	SUBSTRATE	DISTANCE IMPACTED BY PCBs
Penthouse – Two (2) Doors Leading into Exhaust Spaces	Concrete Wall Below Door Thresholds	< 12 Inches
Chiller Unit	Concrete Pad Under Chiller Unit	< 6 Inches
Chiller Unit & Exhaust Spaces	CMU Walls Adjacent to Metal Door Frames	< 1 inch
Roof Parapet Wall Cap	Concrete Cap on Top of Parapet Wall	> 12 Inches

ATLAS reviewed the laboratory narratives associated with the samples collected for the substrate sampling and concludes that all data is usable. ATLAS reviewed detection limits and surrogate recoveries for each sample and all samples were within acceptable target ranges.

4. REMEDIATION PLAN

The following outlines the scope of remediation of identified PCBs >50 ppm and PCB impacted porous surfaces:

LOCATION	MATERIAL	QUANTITY	REMEDIATION SCOPE
Exterior Chiller Unit	Concrete Pad	15 LF	<ul style="list-style-type: none"> Remove and dispose of the caulking located in the joint at the East side of the concrete pad as PCB Bulk Product Waste. Concrete pad to be cut out 6” from each side of joint and disposed of as PCB Bulk Product Waste
Chiller Area and 2 Exhaust Spaces	Exterior Metal Door Frames	54 LF	<ul style="list-style-type: none"> Remove and dispose of the caulking located between the metal door frames and CMU as PCB Bulk Product Waste. Metal door frames to be removed and disposed of as PCB Bulk Product Waste. CMU around the door frames to be coated within 1” of the former caulk joint with epoxy paint.



LOCATION	MATERIAL	QUANTITY	REMEDIATION SCOPE
Penthouse	Metal Thresholds at Doors to Chiller Unit and Exhaust Spaces	12 LF	<ul style="list-style-type: none"> Remove and dispose of the caulking located on the thresholds as PCB Bulk Product Waste. Metal thresholds to be removed and disposed of as PCB Bulk Product Waste. Concrete walls from the thresholds down to the floor shall be coated with epoxy paint.
Concrete Cap at Top of Roof Parapet Walls	Caulk at Seams of Concrete Parapet and Fascia/Soffit	120 LF	<ul style="list-style-type: none"> Remove and dispose of the caulking within the joints on the cap of the Parapet Wall and fascia/soffit as PCB Bulk Product Waste. Concrete cap at the top of the Parapet Wall to be coated in its entirety with epoxy. Concrete fascia/soffit to be coated 24" to each side of the caulk joint with epoxy paint.

NOTES:

- Results for the concrete cap at the top of the Parapet wall indicated >1 ppm PCB's to be present at 12" away from the joint. For note, the scope for the new roof will include installation of a metal flashing/cap at the top of the parapet wall which will enclose it in its entirety. Therefore, the concrete cap will be coated with epoxy prior to installation of the new metal flashing/cap on the parapet. Additionally, as previously noted, the fascia/soffit area was not accessible for sampling due to safety issues and the caulking was assumed to be PCBs >50 ppm. Additional testing will be performed during construction when staging is installed around the building and the fascia/soffit can be safely accessed. It is anticipated that the limits of impacted concrete to be coated will be less than 24 inches from the caulk joints.
- Areas to be encapsulated with epoxy paint shall be coated with Sikagard 62, Sikagard 670W or an equivalent product.

4.1. Site Preparation and Controls

Prior to initiating the removal of PCB caulking and/or PCB impacted porous surfaces, the following site controls will be implemented:



- A Health and Safety Plan will be developed specific to the work activities. All workers will follow applicable Federal and State regulations regarding the work activities, including but not limited to OSHA regulations, fall protection standards, respiratory protection, ladder safety, personal protective equipment, etc.
- Since the PCB caulking also contains asbestos, all work shall be subject to compliance with both Massachusetts Department of Environmental Protection (MADEP) 310 CMR 7.15 and Massachusetts Department of Labor Standards (MADLS) 454 CMR 28.00 Regulations.

4.2. Removal Procedures

The following summarizes the activities to be conducted as part of the removal task:

a. Door Frames (To be Demolished)

- Mini-containments under negative pressure with a 3-stage decontamination unit shall be used to remove the door slabs and framework in their entirety down to the rough opening.
- All removed caulking/sealant, backer rod, door units, thresholds, flashing and associated materials shall be disposed of as asbestos and >50 ppm PCB waste.

b. Concrete Pad at Chiller Unit (To be Demolished)

- Containment under negative pressure and a 3-stage decontamination unit shall be used to remove the caulking and backer-rod from the joint and saw-cutting of the 12" section of concrete slab.
- All removed caulking/sealant, backer rod, concrete and associated materials shall be disposed of as asbestos and >50 ppm PCB waste.

c. Caulking at Joints of Parapet Walls (Main Roof)

- A regulated area consisting of caution tape and asbestos/PCB signs shall be established at the parapet walls.
- A remote 3-stage decontamination unit shall be established directly adjacent to the regulated area.
- The caulking and backer rod shall be removed from the joints utilizing hand tools.
- All removed caulking/sealant, backer rod and associated materials shall be disposed of as asbestos and >50 ppm PCB waste.



d. Surface Preparation & Encapsulant/Coating of Concrete & CMU:

- Surface preparation will be required on the concrete and/or CMU surfaces to remain where caulking/sealants were removed in order for two coats of an encapsulant coating (i.e. Sikagard 62, Sikagard 670W or equivalent product) to be applied to the substrates.
- All wash water, brushes, rags, etc., or other chemical components used to clean/etch the surfaces prior to coating shall be properly collected and disposed of as asbestos and >50 ppm PCB Waste.
- The following Table summarizes the surfaces to be coated:

ENCAPSULANT/COATING LOCATION	ENCAPSULANT/COATING REQUIREMENTS
Door Unit to Chiller Unit	<ul style="list-style-type: none">• Coat concrete/CMU at the location where the caulking/sealant was abated around the door frame. At least one (1) inch to each side of the former caulk joint shall be coated.• Coat concrete/CMU from the exterior edge of concrete curb down to the interior floor surface.
Door Units to Exhaust Spaces	<ul style="list-style-type: none">• Coat concrete/CMU at the location where the caulking/sealant was abated around the door frame. At least one (1) inch to each side of the former caulk joint shall be coated.• Coat concrete/CMU from the exterior edge of concrete curb down to the interior floor surface.
Parapet Walls	<ul style="list-style-type: none">• Coat the concrete cap on the parapet wall in its entirety.
Fascia/Soffit at Building	<ul style="list-style-type: none">• Coat concrete 24" out from former caulk joints around the perimeter of the building.

e. Asbestos/PCB Waste Packaging:

- All waste shall be sealed in two (2) layers of six mil polyethylene sheeting, double six mil disposal bags and/or placed in 55 gallon drums and properly labeled as asbestos and PCB waste.



- Containerized waste will be removed from the work area and then transported to the on-site enclosed storage container. The storage container shall also be properly labeled and stored in accordance with 40 CFR 761.40 and 761.65.
- All tools and equipment will be removed from the work area and decontaminated in the decontamination chamber. All tools and equipment to be reused shall be decontaminated in accordance with 40 CFR 761.79, Subpart S.
- Cloth, mops and other cleaning aids, absorbent materials, disposable PPE, etc. will be disposed of as asbestos and PCB waste material in accordance with 40 CFR 761.79(g).

4.3. Confirmatory Sampling – Post Abatement

a. Asbestos – Final Visual Inspection/Air Clearance Testing

- Post-abatement Clearance Air Monitoring: For each asbestos abatement area, post abatement clearance air samples will be taken when a visual inspection by ATLAS's Project Monitor detects no visible debris, and surfaces are encapsulated and dry.
- Phase Contrast Microscopy (PCM) clearance testing will be performed to confirm the completion of asbestos removal. All clearance testing shall be performed in accordance with state of Massachusetts 454 CMR 28.00 Regulations. The work areas shall be considered complete if the containments cleared and samples analyzed by Phase Contrast Microscopy (PCM) indicate a maximum airborne fiber concentration of <0.01 fibers per cubic centimeter.

b. PCB Wipe Sampling

To confirm that the epoxy coating systems are adequately sealing residual PCBs in concrete/CMU surfaces, ATLAS will perform confirmatory surface wipe sampling of the coating on these masonry surfaces, at the following location(s):

- 3 wipe samples on the interior coated concrete located below the door thresholds leading from the Penthouse into the Chiller Unit and 2 Exhaust Spaces.
- 3 wipe samples on the exterior coated CMU walls around the door frames at the Chiller Unit and 2 Exhaust Spaces.
- 3 wipe samples on the parapet concrete cap and 3 wiper samples at the soffit/fascia on the building.
- 1 duplicate and 1 blank wipe sample for QA/QC.



The samples will be collected after encapsulants have been applied and allowed to cure. The sample wipe area at each location will be conservatively placed as close as possible to the location of the former caulk joint where underlying residual PCBs in concrete would be expected to be the highest.

The wipe samples will be collected in accordance with 40 CFR 761.123, per standard wipe test protocols identified in Wipe Sampling and Double Wash/Rinse Cleanup as recommended by the Environmental Protection Agency PCB Spill Cleanup Policy (June 23, 1987, Revised and Clarified on April 18, 1991).

The samples will be submitted to a certified laboratory for analysis using Soxhlet extraction and analysis for PCB Aroclors using EPA Method 8082.

The target PCB concentration in wipe samples considered acceptable will be 10 ug/100 cm², which is the cleanup standard for non-porous surfaces outlined in TSCA for high-occupancy areas.

4.4. Waste Disposal

The following activities will be completed with regard to the proper disposal of the asbestos and PCB wastes:

- (1) **Asbestos and >50 PCB Bulk Product Waste** – Includes caulking, backer rod, door units (slab, framework, threshold, etc.), concrete and associated components.
- (2) **Asbestos and >50 PPM PCB Remediation Hazardous Waste** – Includes all other materials not specified above under Item (1) including, but not limited to PPE, polyethylene sheeting, rags, waste water, vacuum dust, HEPA filters, disposable tools, etc.

Upon completion of the work, the PCB bulk product waste and PCB remediation waste will be transported off-site for disposal, under a uniform hazardous waste manifest, as follows:

Transporter: Red Technologies LLC
173 Pickering Street
Portland, CT 06480
EPA #CTR 000505958

Disposal Site: Wayne Disposal, Inc.
49350 North I-94 Service Drive
Belleville, Michigan 48111
EPA #MID 048 090 633



- Copies of all manifests, waste shipment records, and certificates of disposal will be collected and provided as part of the final report to EPA.

5. LONG TERM MONITORING AND MAINTENANCE

UMASS shall include this site with the UMASS Campus Wide "Long-Term Monitoring and Maintenance Implementation Plan"(MMIP) to prevent human exposure to polychlorinated biphenyls (PCB) that might be associated with residual PCB levels associated with the roof replacement project. The MMIP shall apply to all maintenance workers and any person that conducts work that could impact the encapsulant.

The monitoring program's overall objective is to ensure that the encapsulant continues to perform as required. This objective will be met through visual inspections by representatives from UMASS or a Designated Representative. The encapsulated caulk joints shall be visually inspected on an annual basis. The first inspection will be performed one year after completion of the project with subsequent inspections every year thereafter.

Inspections will check the encapsulant for signs of wear, cracking, peeling, flaking or other signs of deterioration. If inspections or other information indicate that the coating is worn or damaged, corrective action (i.e., recoating) will be performed. Activities detailed in the MMIP shall continue until such time that plan modifications are proposed by UMASS and approved by the EPA.

6. RECORDKEEPING AND DOCUMENTATION

Following completion of the work activities, records and documents required by 40 CFR 761 will be generated and maintained at the following location:

Environmental Safety & Health
UMASS Amherst
40 Campus Center Way
117 Draper Hall
Amherst, MA 01003
Att: Theresa Wolejko
Email: twolejko@ehs.umass.edu

These documents will be made available to USEPA upon request.

A final report, documenting the completion of the work activities and including but not limited to a description of the work activities, confirmatory sample analytical results, volumes of disposed materials, and waste disposal documentation, will be prepared and submitted to USEPA Region 1 office within 60 days after completion of the project.



August 4, 2022
ATTACHMENT A
Notification of "Risk-Base Clean-Up of PCBs
Hampden Dinning Commons (Roofing Replacement)
University of Massachusetts
Amherst, Massachusetts

ATTACHMENT A

PCB Source Sampling (Table 1.0)



**TABLE 1.0
 HAMPDEN DINING HALL (ROOF REPLACEMENT)
 SUMMARY OF PCB SOURCE SAMPLING**

SAMPLE NO	MATERIAL	LOCATION	RESULT (PPM)	AROCLORS	DETECTION LIMIT (PPM)
HD-01A	Exterior Caulking	Seams of Metal Flashing at Penthouse Roof	None Detect		0.79
HD-02A	Exterior Caulking	Expansion Joints on CMU Walls at Chiller Unit Area	None Detect		0.68
HD-03A	Exterior Caulking	Metal Access Door/Panel on Chiller Unit	2.8	1254	0.77
HD-03B	Exterior Caulking	Metal Access Door/Panel on Chiller Unit	2.82	1254, 1260	0.19
HD-04A	Exterior Caulking	Metal Flanges/Channels on Chiller Unit	1.9	1254	0.80
HD-05A	Exterior Caulking	Joint at Front of Concrete Pad Under the Chiller Unit	82,000	1254	2,000
HD-06A	Interior Caulking	Metal Door Frame Leading into Chiller Unit Area	5.0	1254	3.4
HD-06B	Interior Caulking	Metal Door Frames Leading into Exhaust Spaces	15.7	1254, 1260	0.96
HD-07A	Exterior Caulking	Metal Door Frame from the Chiller Unit Leading into the Penthouse	58	1254	10.0
HD-07B	Exterior Caulking	Metal Door Frames from the Exhaust Spaces Leading into the Penthouse	76	1254	9.8



TABLE 1.0 – (Continued)
HAMPDEN DINING HALL (ROOF REPLACEMENT)
SUMMARY OF PCB SOURCE SAMPLING

SAMPLE NO	MATERIAL	LOCATION	RESULT (PPM)	AROCLORS	DETECTION LIMIT (PPM)
HD-08A	Interior Caulking	Metal Door Threshold from Penthouse into Chiller Unit Area	32,000	1254	900
HD-08B	Interior Caulking	Metal Door Thresholds from Penthouse into Exhaust Spaces	35,000	1254	1900
HD-09A	Exterior Caulking	Joints on Top of Concrete Parapet Walls	340,000	1254	17,000
HD-10A	Exterior Caulking	Over-Lap Seams of Silver Roof Membrane	1.2	1254	0.73
HD-10B	Exterior Caulking	Over-Lap Seams of Silver Roof Membrane	0.53	1254	0.19



ATTACHMENT B

PCB Substrate Sampling (Table 2.0)

TABLE 2.0
HAMPEN DINING (ROOF REPLACEMENT)
SUMMARY OF PCB SUBSTRATE SAMPLING

August 4, 2022

SAMPLE #	SAMPLE DESCRIPTION/LOCATION	SUBSTRATE	1"	6"	12"	NOTES/COMMENTS
HDH-01A (1")	Interior Door Threshold to Exhaust Area 302	Concrete	240 ppm			At concrete below the Door threshold
HDH-02A (6")	Interior Door Threshold to Exhaust Area 302	Concrete		1.6 ppm		At concrete below the Door threshold
HDH-03A (12")	Interior Door Threshold to Exhaust Area 302	Concrete			0.85	At concrete below the Door threshold
HDH-01C (1")	Interior Door Threshold to Exhaust Area 304	Concrete	0.1 ppm			At concrete below the Door threshold
HDH-02C (6")	Interior Door Threshold to Exhaust Area 304	Concrete		0.37 ppm		At concrete below the Door threshold
HDH-03C (12")	Interior Door Threshold to Exhaust Area 304	Concrete			N/A	At concrete below the Door threshold
HDH-01B (1")	Interior Door Threshold to Chiller Area 303	Concrete	5.8 ppm			At concrete below the Door threshold
HDH-02B (6")	Interior Door Threshold to Chiller Area 303	Concrete		0.67 ppm		At concrete below the Door threshold
HDH-03B (12")	Interior Door Threshold to Chiller Area 303	Concrete			N/A	At concrete below the Door threshold
HDH-05A-1 (1")	Exterior Chiller Unit - Concrete Pad	Concrete	3.7 ppm			Edge of concrete pad - Northeast side
HDH-05B-1 (6")	Exterior Chiller Unit - Concrete Pad	Concrete		ND		Edge of concrete pad - Northeast side
HDH-05C-1 (12")	Exterior Chiller Unit - Concrete Pad	Concrete			N/A	Edge of concrete pad - Northeast side
HDH-05A-2 (6")	Exterior Chiller Unit - Concrete Pad	Concrete	5.3 ppm			Edge of concrete pad - Southeast side
HDH-05B-2 (6")	Exterior Chiller Unit - Concrete Pad	Concrete		0.71 ppm		Edge of concrete pad - Southeast side
HDH-05C-2 (12")	Exterior Chiller Unit - Concrete Pad	Concrete			N/A	Edge of concrete pad - Southeast side
HDH-06A-1 (1")	Chiller Area - Exterior Door Frame Leading Into Penthouse	CMU	0.1			Same caulking at door frames of Chiller Area and Exhaust Spaces
HDH-06B-1 (6")	Chiller Area - Exterior Door Frame Leading Into Penthouse	CMU		ND		Same caulking at door frames of Chiller Area and Exhaust Spaces
HDH-06C-1 (12")	Chiller Area - Exterior Door Frame Leading Into Penthouse	CMU			N/A	Same caulking at door frames of Chiller Area and Exhaust Spaces
SAMPLE #	AREA	SUBSTRATE	4"	8"	12"	NOTES/COMMENTS
HDH01A (4")	Parapet Wall Cap - West Side	Concrete	4"	8"	12"	Adjacent to joints in concrete cap on parapet walls
HDH01B (8")	Parapet Wall Cap - West Side	Concrete	5.9	3.7		Adjacent to joints in concrete cap on parapet walls
HDH01C (12")	Parapet Wall Cap - West Side	Concrete			0.59	Adjacent to joints in concrete cap on parapet walls
HDH02A (4")	Parapet Wall Cap - East Side	Concrete	1.7			Adjacent to joints in concrete cap on parapet walls
HDH02B (8")	Parapet Wall Cap - East Side	Concrete		0.11		Adjacent to joints in concrete cap on parapet walls
HDH02C (12")	Parapet Wall Cap - East Side	Concrete			0.29	Adjacent to joints in concrete cap on parapet walls
HDH03A (4")	Parapet Wall Cap - South Side	Concrete	4.9			Adjacent to joints in concrete cap on parapet walls
HDH03B (8")	Parapet Wall Cap - South Side	Concrete		0.46		Adjacent to joints in concrete cap on parapet walls
HDH-03C (12")	Parapet Wall Cap - South Side	Concrete			1.2	Adjacent to joints in concrete cap on parapet walls

N/A = Not Analyzed

Exceeds 1.0 ppm

Acceptable



August 4, 2022
ATTACHMENT C
Notification of "Risk-Base Clean-Up of PCBs
Hampden Dinning Commons (Roofing Replacement)
University of Massachusetts
Amherst, Massachusetts

ATTACHMENT C

PCB Laboratory Report – Source Sampling



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

July 17, 2020

Derrick Wissman
ATC Group Services LLC - West Springfield
73 Williams Franks Drive
West Springfield, MA 01089

Project Location: Amherst, MA
Client Job Number:
Project Number: 183DW20064
Laboratory Work Order Number: 20G0333

Enclosed are results of analyses for samples received by the laboratory on July 8, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Michelle Koch". The signature is written in a cursive, flowing style.

Michelle M. Koch
Project Manager

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ATC Group Services LLC - West Springfield
 73 Williams Franks Drive
 West Springfield, MA 01089
 ATTN: Derrick Wissman

REPORT DATE: 7/17/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 183DW20064

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20G0333

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

PROJECT LOCATION: Amherst, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
HD-01A	20G0333-01	Caulk		SW-846 8082A	
HD-02A	20G0333-02	Caulk		SW-846 8082A	
HD-03A	20G0333-03	Caulk		SW-846 8082A	
HD-04A	20G0333-04	Caulk		SW-846 8082A	
HD-05A	20G0333-05	Caulk		SW-846 8082A	
HD-06A	20G0333-06	Caulk		SW-846 8082A	
HD-07A	20G0333-07	Caulk		SW-846 8082A	
HD-08A	20G0333-08	Caulk		SW-846 8082A	
HD-09A	20G0333-09	Caulk		SW-846 8082A	
HD-10A	20G0333-10	Caulk		SW-846 8082A	



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CASE NARRATIVE SUMMARY

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

SW-846 8082A

Qualifications:

O-32

A dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

20G0333-01[HD-01A], 20G0333-02[HD-02A]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Decachlorobiphenyl

20G0333-05[HD-05A], 20G0333-07[HD-07A], 20G0333-08[HD-08A], 20G0333-09[HD-09A]

Decachlorobiphenyl [2C]

20G0333-05[HD-05A], 20G0333-07[HD-07A], 20G0333-08[HD-08A], 20G0333-09[HD-09A]

Tetrachloro-m-xylene

20G0333-05[HD-05A], 20G0333-07[HD-07A], 20G0333-08[HD-08A], 20G0333-09[HD-09A]

Tetrachloro-m-xylene [2C]

20G0333-05[HD-05A], 20G0333-07[HD-07A], 20G0333-08[HD-08A], 20G0333-09[HD-09A]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington

Technical Representative



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Project Location: Amherst, MA

Sample Description:

Work Order: 20G0333

Date Received: 7/8/2020

Field Sample #: HD-01A

Sampled: 7/7/2020 09:00

Sample ID: 20G0333-01

Sample Matrix: Caulk

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:02	JMB
Aroclor-1221 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:02	JMB
Aroclor-1232 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:02	JMB
Aroclor-1242 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:02	JMB
Aroclor-1248 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:02	JMB
Aroclor-1254 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:02	JMB
Aroclor-1260 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:02	JMB
Aroclor-1262 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:02	JMB
Aroclor-1268 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:02	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		134	30-150					7/16/20 16:02	
Decachlorobiphenyl [2]		128	30-150					7/16/20 16:02	
Tetrachloro-m-xylene [1]		93.4	30-150					7/16/20 16:02	
Tetrachloro-m-xylene [2]		104	30-150					7/16/20 16:02	



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Project Location: Amherst, MA

Sample Description:

Work Order: 20G0333

Date Received: 7/8/2020

Field Sample #: HD-02A

Sampled: 7/7/2020 09:20

Sample ID: 20G0333-02

Sample Matrix: Caulk

Sample Flags: O-32

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.68	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:20	JMB
Aroclor-1221 [1]	ND	0.68	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:20	JMB
Aroclor-1232 [1]	ND	0.68	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:20	JMB
Aroclor-1242 [1]	ND	0.68	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:20	JMB
Aroclor-1248 [1]	ND	0.68	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:20	JMB
Aroclor-1254 [1]	ND	0.68	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:20	JMB
Aroclor-1260 [1]	ND	0.68	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:20	JMB
Aroclor-1262 [1]	ND	0.68	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:20	JMB
Aroclor-1268 [1]	ND	0.68	mg/Kg	4		SW-846 8082A	7/14/20	7/16/20 16:20	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		126	30-150					7/16/20 16:20	
Decachlorobiphenyl [2]		122	30-150					7/16/20 16:20	
Tetrachloro-m-xylene [1]		88.4	30-150					7/16/20 16:20	
Tetrachloro-m-xylene [2]		98.8	30-150					7/16/20 16:20	

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Project Location: Amherst, MA

Sample Description:

Work Order: 20G0333

Date Received: 7/8/2020

Field Sample #: HD-03A

Sampled: 7/7/2020 09:30

Sample ID: 20G0333-03

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.77	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:18	JMB
Aroclor-1221 [1]	ND	0.77	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:18	JMB
Aroclor-1232 [1]	ND	0.77	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:18	JMB
Aroclor-1242 [1]	ND	0.77	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:18	JMB
Aroclor-1248 [1]	ND	0.77	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:18	JMB
Aroclor-1254 [2]	2.8	0.77	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:18	JMB
Aroclor-1260 [1]	ND	0.77	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:18	JMB
Aroclor-1262 [1]	ND	0.77	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:18	JMB
Aroclor-1268 [1]	ND	0.77	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:18	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	124		30-150				7/15/20 14:18		
Decachlorobiphenyl [2]	124		30-150				7/15/20 14:18		
Tetrachloro-m-xylene [1]	94.4		30-150				7/15/20 14:18		
Tetrachloro-m-xylene [2]	105		30-150				7/15/20 14:18		



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Project Location: Amherst, MA

Sample Description:

Work Order: 20G0333

Date Received: 7/8/2020

Field Sample #: HD-04A

Sampled: 7/7/2020 09:42

Sample ID: 20G0333-04

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.80	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:35	JMB
Aroclor-1221 [1]	ND	0.80	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:35	JMB
Aroclor-1232 [1]	ND	0.80	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:35	JMB
Aroclor-1242 [1]	ND	0.80	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:35	JMB
Aroclor-1248 [1]	ND	0.80	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:35	JMB
Aroclor-1254 [2]	1.9	0.80	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:35	JMB
Aroclor-1260 [1]	ND	0.80	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:35	JMB
Aroclor-1262 [1]	ND	0.80	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:35	JMB
Aroclor-1268 [1]	ND	0.80	mg/Kg	4		SW-846 8082A	7/11/20	7/15/20 14:35	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	122		30-150			7/15/20 14:35			
Decachlorobiphenyl [2]	121		30-150			7/15/20 14:35			
Tetrachloro-m-xylene [1]	90.4		30-150			7/15/20 14:35			
Tetrachloro-m-xylene [2]	94.3		30-150			7/15/20 14:35			



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Project Location: Amherst, MA

Sample Description:

Work Order: 20G0333

Date Received: 7/8/2020

Field Sample #: HD-05A

Sampled: 7/7/2020 09:50

Sample ID: 20G0333-05

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	2000	mg/Kg	10000		SW-846 8082A	7/11/20	7/15/20 14:53	JMB
Aroclor-1221 [1]	ND	2000	mg/Kg	10000		SW-846 8082A	7/11/20	7/15/20 14:53	JMB
Aroclor-1232 [1]	ND	2000	mg/Kg	10000		SW-846 8082A	7/11/20	7/15/20 14:53	JMB
Aroclor-1242 [1]	ND	2000	mg/Kg	10000		SW-846 8082A	7/11/20	7/15/20 14:53	JMB
Aroclor-1248 [1]	ND	2000	mg/Kg	10000		SW-846 8082A	7/11/20	7/15/20 14:53	JMB
Aroclor-1254 [2]	82000	2000	mg/Kg	10000		SW-846 8082A	7/11/20	7/15/20 14:53	JMB
Aroclor-1260 [1]	ND	2000	mg/Kg	10000		SW-846 8082A	7/11/20	7/15/20 14:53	JMB
Aroclor-1262 [1]	ND	2000	mg/Kg	10000		SW-846 8082A	7/11/20	7/15/20 14:53	JMB
Aroclor-1268 [1]	ND	2000	mg/Kg	10000		SW-846 8082A	7/11/20	7/15/20 14:53	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		*	30-150		S-01			7/15/20 14:53	
Decachlorobiphenyl [2]		*	30-150		S-01			7/15/20 14:53	
Tetrachloro-m-xylene [1]		*	30-150		S-01			7/15/20 14:53	
Tetrachloro-m-xylene [2]		*	30-150		S-01			7/15/20 14:53	



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Project Location: Amherst, MA

Sample Description:

Work Order: 20G0333

Date Received: 7/8/2020

Field Sample #: HD-06A

Sampled: 7/7/2020 10:00

Sample ID: 20G0333-06

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	3.4	mg/Kg	20		SW-846 8082A	7/11/20	7/15/20 15:11	JMB
Aroclor-1221 [1]	ND	3.4	mg/Kg	20		SW-846 8082A	7/11/20	7/15/20 15:11	JMB
Aroclor-1232 [1]	ND	3.4	mg/Kg	20		SW-846 8082A	7/11/20	7/15/20 15:11	JMB
Aroclor-1242 [1]	ND	3.4	mg/Kg	20		SW-846 8082A	7/11/20	7/15/20 15:11	JMB
Aroclor-1248 [1]	ND	3.4	mg/Kg	20		SW-846 8082A	7/11/20	7/15/20 15:11	JMB
Aroclor-1254 [2]	5.0	3.4	mg/Kg	20		SW-846 8082A	7/11/20	7/15/20 15:11	JMB
Aroclor-1260 [1]	ND	3.4	mg/Kg	20		SW-846 8082A	7/11/20	7/15/20 15:11	JMB
Aroclor-1262 [1]	ND	3.4	mg/Kg	20		SW-846 8082A	7/11/20	7/15/20 15:11	JMB
Aroclor-1268 [1]	ND	3.4	mg/Kg	20		SW-846 8082A	7/11/20	7/15/20 15:11	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	136		30-150				7/15/20 15:11		
Decachlorobiphenyl [2]	139		30-150				7/15/20 15:11		
Tetrachloro-m-xylene [1]	99.5		30-150				7/15/20 15:11		
Tetrachloro-m-xylene [2]	109		30-150				7/15/20 15:11		



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Project Location: Amherst, MA

Sample Description:

Work Order: 20G0333

Date Received: 7/8/2020

Field Sample #: HD-07A

Sampled: 7/7/2020 10:10

Sample ID: 20G0333-07

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	10	mg/Kg	50		SW-846 8082A	7/11/20	7/15/20 15:28	JMB
Aroclor-1221 [1]	ND	10	mg/Kg	50		SW-846 8082A	7/11/20	7/15/20 15:28	JMB
Aroclor-1232 [1]	ND	10	mg/Kg	50		SW-846 8082A	7/11/20	7/15/20 15:28	JMB
Aroclor-1242 [1]	ND	10	mg/Kg	50		SW-846 8082A	7/11/20	7/15/20 15:28	JMB
Aroclor-1248 [1]	ND	10	mg/Kg	50		SW-846 8082A	7/11/20	7/15/20 15:28	JMB
Aroclor-1254 [2]	58	10	mg/Kg	50		SW-846 8082A	7/11/20	7/15/20 15:28	JMB
Aroclor-1260 [1]	ND	10	mg/Kg	50		SW-846 8082A	7/11/20	7/15/20 15:28	JMB
Aroclor-1262 [1]	ND	10	mg/Kg	50		SW-846 8082A	7/11/20	7/15/20 15:28	JMB
Aroclor-1268 [1]	ND	10	mg/Kg	50		SW-846 8082A	7/11/20	7/15/20 15:28	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	*		30-150		S-01		7/15/20 15:28		
Decachlorobiphenyl [2]	*		30-150		S-01		7/15/20 15:28		
Tetrachloro-m-xylene [1]	*		30-150		S-01		7/15/20 15:28		
Tetrachloro-m-xylene [2]	*		30-150		S-01		7/15/20 15:28		



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Project Location: Amherst, MA

Sample Description:

Work Order: 20G0333

Date Received: 7/8/2020

Field Sample #: HD-08A

Sampled: 7/7/2020 10:17

Sample ID: 20G0333-08

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	900	mg/Kg	5000		SW-846 8082A	7/11/20	7/15/20 15:46	JMB
Aroclor-1221 [1]	ND	900	mg/Kg	5000		SW-846 8082A	7/11/20	7/15/20 15:46	JMB
Aroclor-1232 [1]	ND	900	mg/Kg	5000		SW-846 8082A	7/11/20	7/15/20 15:46	JMB
Aroclor-1242 [1]	ND	900	mg/Kg	5000		SW-846 8082A	7/11/20	7/15/20 15:46	JMB
Aroclor-1248 [1]	ND	900	mg/Kg	5000		SW-846 8082A	7/11/20	7/15/20 15:46	JMB
Aroclor-1254 [2]	32000	900	mg/Kg	5000		SW-846 8082A	7/11/20	7/15/20 15:46	JMB
Aroclor-1260 [1]	ND	900	mg/Kg	5000		SW-846 8082A	7/11/20	7/15/20 15:46	JMB
Aroclor-1262 [1]	ND	900	mg/Kg	5000		SW-846 8082A	7/11/20	7/15/20 15:46	JMB
Aroclor-1268 [1]	ND	900	mg/Kg	5000		SW-846 8082A	7/11/20	7/15/20 15:46	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		*	30-150		S-01			7/15/20 15:46	
Decachlorobiphenyl [2]		*	30-150		S-01			7/15/20 15:46	
Tetrachloro-m-xylene [1]		*	30-150		S-01			7/15/20 15:46	
Tetrachloro-m-xylene [2]		*	30-150		S-01			7/15/20 15:46	

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Project Location: Amherst, MA

Sample Description:

Work Order: 20G0333

Date Received: 7/8/2020

Field Sample #: HD-09A

Sampled: 7/7/2020 10:20

Sample ID: 20G0333-09

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	17000	mg/Kg	100000		SW-846 8082A	7/11/20	7/16/20 3:59	JMB
Aroclor-1221 [1]	ND	17000	mg/Kg	100000		SW-846 8082A	7/11/20	7/16/20 3:59	JMB
Aroclor-1232 [1]	ND	17000	mg/Kg	100000		SW-846 8082A	7/11/20	7/16/20 3:59	JMB
Aroclor-1242 [1]	ND	17000	mg/Kg	100000		SW-846 8082A	7/11/20	7/16/20 3:59	JMB
Aroclor-1248 [1]	ND	17000	mg/Kg	100000		SW-846 8082A	7/11/20	7/16/20 3:59	JMB
Aroclor-1254 [1]	340000	17000	mg/Kg	100000		SW-846 8082A	7/11/20	7/16/20 3:59	JMB
Aroclor-1260 [1]	ND	17000	mg/Kg	100000		SW-846 8082A	7/11/20	7/16/20 3:59	JMB
Aroclor-1262 [1]	ND	17000	mg/Kg	100000		SW-846 8082A	7/11/20	7/16/20 3:59	JMB
Aroclor-1268 [1]	ND	17000	mg/Kg	100000		SW-846 8082A	7/11/20	7/16/20 3:59	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	*		30-150		S-01		7/16/20 3:59		
Decachlorobiphenyl [2]	*		30-150		S-01		7/16/20 3:59		
Tetrachloro-m-xylene [1]	*		30-150		S-01		7/16/20 3:59		
Tetrachloro-m-xylene [2]	*		30-150		S-01		7/16/20 3:59		



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Project Location: Amherst, MA

Sample Description:

Work Order: 20G0333

Date Received: 7/8/2020

Field Sample #: HD-10A

Sampled: 7/7/2020 11:00

Sample ID: 20G0333-10

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.73	mg/Kg	4		SW-846 8082A	7/11/20	7/16/20 4:17	JMB
Aroclor-1221 [1]	ND	0.73	mg/Kg	4		SW-846 8082A	7/11/20	7/16/20 4:17	JMB
Aroclor-1232 [1]	ND	0.73	mg/Kg	4		SW-846 8082A	7/11/20	7/16/20 4:17	JMB
Aroclor-1242 [1]	ND	0.73	mg/Kg	4		SW-846 8082A	7/11/20	7/16/20 4:17	JMB
Aroclor-1248 [1]	ND	0.73	mg/Kg	4		SW-846 8082A	7/11/20	7/16/20 4:17	JMB
Aroclor-1254 [2]	1.2	0.73	mg/Kg	4		SW-846 8082A	7/11/20	7/16/20 4:17	JMB
Aroclor-1260 [1]	ND	0.73	mg/Kg	4		SW-846 8082A	7/11/20	7/16/20 4:17	JMB
Aroclor-1262 [1]	ND	0.73	mg/Kg	4		SW-846 8082A	7/11/20	7/16/20 4:17	JMB
Aroclor-1268 [1]	ND	0.73	mg/Kg	4		SW-846 8082A	7/11/20	7/16/20 4:17	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		115	30-150					7/16/20 4:17	
Decachlorobiphenyl [2]		110	30-150					7/16/20 4:17	
Tetrachloro-m-xylene [1]		89.4	30-150					7/16/20 4:17	
Tetrachloro-m-xylene [2]		92.8	30-150					7/16/20 4:17	



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Sample Extraction Data

Prep Method: SW-846 3540C Analytical Method: SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20G0333-03 [HD-03A]	B261734	0.518	10.0	07/11/20
20G0333-04 [HD-04A]	B261734	0.501	10.0	07/11/20
20G0333-05 [HD-05A]	B261734	0.508	10.0	07/11/20
20G0333-06 [HD-06A]	B261734	0.587	10.0	07/11/20
20G0333-07 [HD-07A]	B261734	0.502	10.0	07/11/20
20G0333-08 [HD-08A]	B261734	0.555	10.0	07/11/20
20G0333-09 [HD-09A]	B261734	0.585	10.0	07/11/20
20G0333-10 [HD-10A]	B261734	0.546	10.0	07/11/20

Prep Method: SW-846 3540C Analytical Method: SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20G0333-01 [HD-01A]	B261912	0.506	10.0	07/14/20
20G0333-02 [HD-02A]	B261912	0.585	10.0	07/14/20

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B261734 - SW-846 3540C										
Blank (B261734-BLK1)										
					Prepared: 07/11/20 Analyzed: 07/15/20					
Aroclor-1016	ND	0.20	mg/Kg							
Aroclor-1016 [2C]	ND	0.20	mg/Kg							
Aroclor-1221	ND	0.20	mg/Kg							
Aroclor-1221 [2C]	ND	0.20	mg/Kg							
Aroclor-1232	ND	0.20	mg/Kg							
Aroclor-1232 [2C]	ND	0.20	mg/Kg							
Aroclor-1242	ND	0.20	mg/Kg							
Aroclor-1242 [2C]	ND	0.20	mg/Kg							
Aroclor-1248	ND	0.20	mg/Kg							
Aroclor-1248 [2C]	ND	0.20	mg/Kg							
Aroclor-1254	ND	0.20	mg/Kg							
Aroclor-1254 [2C]	ND	0.20	mg/Kg							
Aroclor-1260	ND	0.20	mg/Kg							
Aroclor-1260 [2C]	ND	0.20	mg/Kg							
Aroclor-1262	ND	0.20	mg/Kg							
Aroclor-1262 [2C]	ND	0.20	mg/Kg							
Aroclor-1268	ND	0.20	mg/Kg							
Aroclor-1268 [2C]	ND	0.20	mg/Kg							
Surrogate: Decachlorobiphenyl	4.82		mg/Kg	4.00		120	30-150			
Surrogate: Decachlorobiphenyl [2C]	4.53		mg/Kg	4.00		113	30-150			
Surrogate: Tetrachloro-m-xylene	3.61		mg/Kg	4.00		90.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	3.82		mg/Kg	4.00		95.5	30-150			
LCS (B261734-BS1)										
					Prepared: 07/11/20 Analyzed: 07/15/20					
Aroclor-1016	3.5	0.20	mg/Kg	4.00		87.1	40-140			
Aroclor-1016 [2C]	3.8	0.20	mg/Kg	4.00		94.8	40-140			
Aroclor-1260	3.4	0.20	mg/Kg	4.00		86.2	40-140			
Aroclor-1260 [2C]	3.7	0.20	mg/Kg	4.00		92.0	40-140			
Surrogate: Decachlorobiphenyl	4.74		mg/Kg	4.00		119	30-150			
Surrogate: Decachlorobiphenyl [2C]	4.54		mg/Kg	4.00		113	30-150			
Surrogate: Tetrachloro-m-xylene	3.45		mg/Kg	4.00		86.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	3.67		mg/Kg	4.00		91.8	30-150			
LCS Dup (B261734-BSD1)										
					Prepared: 07/11/20 Analyzed: 07/15/20					
Aroclor-1016	3.6	0.20	mg/Kg	4.00		89.6	40-140	2.86	30	
Aroclor-1016 [2C]	3.9	0.20	mg/Kg	4.00		98.6	40-140	3.97	30	
Aroclor-1260	3.5	0.20	mg/Kg	4.00		87.2	40-140	1.12	30	
Aroclor-1260 [2C]	3.8	0.20	mg/Kg	4.00		95.7	40-140	3.99	30	
Surrogate: Decachlorobiphenyl	4.85		mg/Kg	4.00		121	30-150			
Surrogate: Decachlorobiphenyl [2C]	4.80		mg/Kg	4.00		120	30-150			
Surrogate: Tetrachloro-m-xylene	3.63		mg/Kg	4.00		90.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	3.90		mg/Kg	4.00		97.5	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B261912 - SW-846 3540C										
Blank (B261912-BLK1)										
Prepared: 07/14/20 Analyzed: 07/16/20										
Aroclor-1016	ND	0.20	mg/Kg							
Aroclor-1016 [2C]	ND	0.20	mg/Kg							
Aroclor-1221	ND	0.20	mg/Kg							
Aroclor-1221 [2C]	ND	0.20	mg/Kg							
Aroclor-1232	ND	0.20	mg/Kg							
Aroclor-1232 [2C]	ND	0.20	mg/Kg							
Aroclor-1242	ND	0.20	mg/Kg							
Aroclor-1242 [2C]	ND	0.20	mg/Kg							
Aroclor-1248	ND	0.20	mg/Kg							
Aroclor-1248 [2C]	ND	0.20	mg/Kg							
Aroclor-1254	ND	0.20	mg/Kg							
Aroclor-1254 [2C]	ND	0.20	mg/Kg							
Aroclor-1260	ND	0.20	mg/Kg							
Aroclor-1260 [2C]	ND	0.20	mg/Kg							
Aroclor-1262	ND	0.20	mg/Kg							
Aroclor-1262 [2C]	ND	0.20	mg/Kg							
Aroclor-1268	ND	0.20	mg/Kg							
Aroclor-1268 [2C]	ND	0.20	mg/Kg							
Surrogate: Decachlorobiphenyl	5.17		mg/Kg	4.00		129	30-150			
Surrogate: Decachlorobiphenyl [2C]	4.80		mg/Kg	4.00		120	30-150			
Surrogate: Tetrachloro-m-xylene	3.62		mg/Kg	4.00		90.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	3.85		mg/Kg	4.00		96.4	30-150			
LCS (B261912-BS1)										
Prepared: 07/14/20 Analyzed: 07/16/20										
Aroclor-1016	3.8	0.20	mg/Kg	4.00		94.3	40-140			
Aroclor-1016 [2C]	4.1	0.20	mg/Kg	4.00		104	40-140			
Aroclor-1260	3.8	0.20	mg/Kg	4.00		93.9	40-140			
Aroclor-1260 [2C]	4.0	0.20	mg/Kg	4.00		99.0	40-140			
Surrogate: Decachlorobiphenyl	5.29		mg/Kg	4.00		132	30-150			
Surrogate: Decachlorobiphenyl [2C]	4.95		mg/Kg	4.00		124	30-150			
Surrogate: Tetrachloro-m-xylene	3.78		mg/Kg	4.00		94.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	4.03		mg/Kg	4.00		101	30-150			
LCS Dup (B261912-BSD1)										
Prepared: 07/14/20 Analyzed: 07/16/20										
Aroclor-1016	3.6	0.20	mg/Kg	4.00		90.6	40-140	3.95	30	
Aroclor-1016 [2C]	3.9	0.20	mg/Kg	4.00		98.3	40-140	5.26	30	
Aroclor-1260	3.6	0.20	mg/Kg	4.00		89.7	40-140	4.56	30	
Aroclor-1260 [2C]	3.9	0.20	mg/Kg	4.00		97.4	40-140	1.68	30	
Surrogate: Decachlorobiphenyl	5.06		mg/Kg	4.00		127	30-150			
Surrogate: Decachlorobiphenyl [2C]	4.82		mg/Kg	4.00		120	30-150			
Surrogate: Tetrachloro-m-xylene	3.54		mg/Kg	4.00		88.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	3.78		mg/Kg	4.00		94.5	30-150			



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HD-03A

SW-846 8082A

Lab Sample ID: 20G0333-03 Date(s) Analyzed: 07/15/2020 07/15/2020

Instrument ID (1): ECD4 Instrument ID (2): ECD4

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	2.2	
	2	0.000	0.000	0.000	2.8	24.0



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HD-04A

SW-846 8082A

Lab Sample ID: 20G0333-04 Date(s) Analyzed: 07/15/2020 07/15/2020

Instrument ID (1): ECD4 Instrument ID (2): ECD4

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	1.7	
	2	0.000	0.000	0.000	1.9	11.1



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HD-05A

SW-846 8082A

Lab Sample ID: 20G0333-05 Date(s) Analyzed: 07/15/2020 07/15/2020

Instrument ID (1): ECD4 Instrument ID (2): ECD4

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	78000	
	2	0.000	0.000	0.000	82000	3.7



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HD-06A

SW-846 8082A

Lab Sample ID: 20G0333-06 Date(s) Analyzed: 07/15/2020 07/15/2020

Instrument ID (1): ECD4 Instrument ID (2): ECD4

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	4.8	
	2	0.000	0.000	0.000	5.0	4.1



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HD-07A

SW-846 8082A

Lab Sample ID: 20G0333-07 Date(s) Analyzed: 07/15/2020 07/15/2020

Instrument ID (1): ECD4 Instrument ID (2): ECD4

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	53	
	2	0.000	0.000	0.000	58	9.0



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HD-08A

SW-846 8082A

Lab Sample ID: 20G0333-08 Date(s) Analyzed: 07/15/2020 07/15/2020

Instrument ID (1): ECD4 Instrument ID (2): ECD4

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	28000	
	2	0.000	0.000	0.000	32000	13.3



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HD-09A

SW-846 8082A

Lab Sample ID: 20G0333-09 Date(s) Analyzed: 07/16/2020 07/16/2020

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: _____ (mm) GC Column (2): ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	340000	
	2	0.000	0.000	0.000	390000	13.7



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HD-10A

SW-846 8082A

Lab Sample ID: 20G0333-10 Date(s) Analyzed: 07/16/2020 07/16/2020

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: _____ (mm) GC Column (2): ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	0.95	
	2	0.000	0.000	0.000	1.2	23.3



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

LCS

SW-846 8082A

Lab Sample ID: B261734-BS1 Date(s) Analyzed: 07/15/2020 07/15/2020

Instrument ID (1): ECD4 Instrument ID (2): ECD4

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	3.5	
	2	0.000	0.000	0.000	3.8	8.2
Aroclor-1260	1	0.000	0.000	0.000	3.4	
	2	0.000	0.000	0.000	3.7	5.6



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

SW-846 8082A

LCS Dup

Lab Sample ID: B261734-BSD1 Date(s) Analyzed: 07/15/2020 07/15/2020

Instrument ID (1): ECD4 Instrument ID (2): ECD4

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	3.6	
	2	0.000	0.000	0.000	3.9	8.0
Aroclor-1260	1	0.000	0.000	0.000	3.5	
	2	0.000	0.000	0.000	3.8	8.2



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

LCS

SW-846 8082A

Lab Sample ID: B261912-BS1 Date(s) Analyzed: 07/16/2020 07/16/2020

Instrument ID (1): ECD4 Instrument ID (2): ECD4

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	3.8	
	2	0.000	0.000	0.000	4.1	7.6
Aroclor-1260	1	0.000	0.000	0.000	3.8	
	2	0.000	0.000	0.000	4.0	5.1



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

SW-846 8082A

LCS Dup

Lab Sample ID: B261912-BSD1 Date(s) Analyzed: 07/16/2020 07/16/2020

Instrument ID (1): ECD4 Instrument ID (2): ECD4

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	3.6	
	2	0.000	0.000	0.000	3.9	8.0
Aroclor-1260	1	0.000	0.000	0.000	3.6	
	2	0.000	0.000	0.000	3.9	8.0



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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
O-32	A dilution was performed as part of the standard analytical procedure.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.



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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8082A in Soil</i>	
Aroclor-1016	CT,NH,NY,ME,NC,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1262	NY,NC,VA,PA
Aroclor-1262 [2C]	NY,NC,VA,PA
Aroclor-1268	NY,NC,VA,PA
Aroclor-1268 [2C]	NY,NC,VA,PA

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2021
CT	Connecticut Department of Public Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2021
FL	Florida Department of Health	E871027 NELAP	06/30/2021
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2021
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2021
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2021

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East Longmeadow, MA 01028

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Client: **ATC Group Services**
Address: **23 William Francis Dr. W. Springfield**
Phone: **413-781-0070**
Project Location: **Onas Handen Dining Hall**
Project Number: **Amherst, MA**
Project Manager: **03DW20069**
Con-Test Quote Name/Number: **Delovick & SSMAN@ATCS.COM**

Invoice Recipient:
Sampled By:

7-Day Due Date: 10-Day
Due Date: 3-Day 4-Day
Format: PDF EXCEL
Other:
CLP Like Data Pkg Required:
Email To: _____
Fax To #: _____

of Containers: _____
Preservation Code: _____
Container Code: _____
Dissolved Metals Samples
 Field Filtered
 Lab to Filter
Orthophosphate Samples
 Field Filtered
 Lab to Filter

1 Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

2 Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

3 Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Con-Test Work Order	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code	ANALYSIS REQUESTED
1	HD-01A Cask	07/07/20 09:00 AM		✓	0	0	A	
2	HD-02A Cask	07/07/20 09:20		✓	0	0	A	
3	HD-03A Cask	07/07/20 09:30		✓	0	0	A	
4	HD-04A Cask	07/07/20 09:42		✓	0	0	A	
5	HD-05A Cask	07/07/20 09:50		✓	0	0	A	
6	HD-06A Cask	07/07/20 10:00		✓	0	0	A	
7	HD-07A Cask	07/07/20 10:10		✓	0	0	A	
8	HD-08A Cask	07/07/20 10:17		✓	0	0	A	
9	HD-09A Cask	07/07/20 10:20		✓	0	0	A	
10	HD-10A Cask	07/07/20 11:00		✓	0	0	A	

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Comments: 7/14/2020 - notified client -01/17-02 need to be reduced in size and will incur a pulverizing fee mmk

Relinquished by: (signature) *[Signature]* Date/Time: 07/08/20 16:31
 Received by: (signature) *[Signature]* Date/Time: 07/08/20 16:31
 Relinquished by: (signature) *[Signature]* Date/Time: 07/08/20 16:31

con-test
ANALYTICAL LABORATORY
www.contestlabs.com

Special Requirements:
 MA MCP Required
 MCP Certification Form Required
 CT RCP Required
 RCP Certification Form Required
 MA State DW Required

PWSID # _____

Project Entity:
 Government
 Federal
 City
 Municipality
 21 J
 Brownfield
 MWRA
 School
 MBTA
 WRTA
 Chromatogram
 AIFA-LAP, LLC

Other: PCB ONLY
 Soxhlet
 Non Soxhlet

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples _____



con-test
ANALYTICAL LABORATORY

Doc# 277 Rev. 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client ATC
 Received By [Signature] Date 2/8/20 Time 1631

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____
 Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 5 Actual Temp -2.6
 By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? [Signature] Were Samples Tampered with? n/a
 Was COC Relinquished? F Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T
 Did COC include all pertinent information? Client F Analysis T Sampler Name F
 Project F ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T
 Are there Lab to Filters? F Who was notified? _____
 Are there Rushes? F Who was notified? _____
 Are there Short Holds? F Who was notified? _____

Is there enough Volume? F
 Is there Headspace where applicable? n/a MS/MSD? F
 Proper Media/Containers Used? T Is splitting samples required? F
 Were trip blanks received? F On COC? F
 Do all samples have the proper pH? Acid n/a Base n/a

Vials	#	Containers	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic	16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic	8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-		Flashpoint		Col./Bacteria	2oz Amb/Clear
DI-		Other Glass		Other Plastic	Encore
Thiosulfate-		SOC Kit		Plastic Bag	Frozen:
Sulfuric-		Perchlorate		Ziplock	

Unused Media

Vials	#	Containers	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic	16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic	8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint	2oz Amb/Clear
DI-		Other Plastic		Other Glass	Encore
Thiosulfate-		SOC Kit		Plastic Bag	Frozen:
Sulfuric-		Perchlorate		Ziplock	

Comments:

August 19, 2020

Derrick Wissman
ATC Group Services LLC - West Springfield
73 Williams Franks Drive
West Springfield, MA 01089

Project Location: Amherst, MA
Client Job Number:
Project Number: 183DW20064
Laboratory Work Order Number: 20H0309

Enclosed are results of analyses for samples received by the laboratory on August 6, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Michelle Koch". The signature is written in a cursive style with a large, prominent "M" and "K".

Michelle M. Koch
Project Manager

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

ATC Group Services LLC - West Springfield
 73 Williams Franks Drive
 West Springfield, MA 01089
 ATTN: Derrick Wissman

REPORT DATE: 8/19/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 183DW20064

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20H0309

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

PROJECT LOCATION: Amherst, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
DH-03B Caulk	20H0309-01	Caulk		SW-846 8082A	
DH-06B Caulk	20H0309-02	Caulk		SW-846 8082A	
DH-07B Caulk	20H0309-03	Caulk		SW-846 8082A	
DH-08B Caulk	20H0309-04	Caulk		SW-846 8082A	
DH- 10BCaulk	20H0309-05	Caulk		SW-846 8082A	

CASE NARRATIVE SUMMARY

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

SW-846 8082A

Qualifications:

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Sample(s) Qualified:

Decachlorobiphenyl

20H0309-03[DH-07B Caulk], 20H0309-04[DH-08B Caulk]

Decachlorobiphenyl [2C]

20H0309-03[DH-07B Caulk], 20H0309-04[DH-08B Caulk]

Tetrachloro-m-xylene

20H0309-03[DH-07B Caulk], 20H0309-04[DH-08B Caulk]

Tetrachloro-m-xylene [2C]

20H0309-03[DH-07B Caulk], 20H0309-04[DH-08B Caulk]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington

Technical Representative

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

Project Location: Amherst, MA

Sample Description:

Work Order: 20H0309

Date Received: 8/6/2020

Field Sample #: DH-03B Caulk

Sampled: 7/7/2020 09:35

Sample ID: 20H0309-01

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/18/20 13:33	TG
Aroclor-1221 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/18/20 13:33	TG
Aroclor-1232 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/18/20 13:33	TG
Aroclor-1242 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/18/20 13:33	TG
Aroclor-1248 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/18/20 13:33	TG
Aroclor-1254 [2]	2.4	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/18/20 13:33	TG
Aroclor-1260 [2]	0.42	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/18/20 13:33	TG
Aroclor-1262 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/18/20 13:33	TG
Aroclor-1268 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/18/20 13:33	TG
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	102		30-150				8/18/20 13:33		
Decachlorobiphenyl [2]	101		30-150				8/18/20 13:33		
Tetrachloro-m-xylene [1]	85.9		30-150				8/18/20 13:33		
Tetrachloro-m-xylene [2]	90.7		30-150				8/18/20 13:33		

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

Project Location: Amherst, MA

Sample Description:

Work Order: 20H0309

Date Received: 8/6/2020

Field Sample #: DH-06B Caulk

Sampled: 7/7/2020 01:05

Sample ID: 20H0309-02

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.96	mg/Kg	5		SW-846 8082A	8/9/20	8/18/20 16:12	TG
Aroclor-1221 [1]	ND	0.96	mg/Kg	5		SW-846 8082A	8/9/20	8/18/20 16:12	TG
Aroclor-1232 [1]	ND	0.96	mg/Kg	5		SW-846 8082A	8/9/20	8/18/20 16:12	TG
Aroclor-1242 [1]	ND	0.96	mg/Kg	5		SW-846 8082A	8/9/20	8/18/20 16:12	TG
Aroclor-1248 [1]	ND	0.96	mg/Kg	5		SW-846 8082A	8/9/20	8/18/20 16:12	TG
Aroclor-1254 [2]	14	0.96	mg/Kg	5		SW-846 8082A	8/9/20	8/18/20 16:12	TG
Aroclor-1260 [2]	1.7	0.96	mg/Kg	5		SW-846 8082A	8/9/20	8/18/20 16:12	TG
Aroclor-1262 [1]	ND	0.96	mg/Kg	5		SW-846 8082A	8/9/20	8/18/20 16:12	TG
Aroclor-1268 [1]	ND	0.96	mg/Kg	5		SW-846 8082A	8/9/20	8/18/20 16:12	TG
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	105		30-150			8/18/20 16:12			
Decachlorobiphenyl [2]	109		30-150			8/18/20 16:12			
Tetrachloro-m-xylene [1]	94.8		30-150			8/18/20 16:12			
Tetrachloro-m-xylene [2]	98.6		30-150			8/18/20 16:12			

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Project Location: Amherst, MA

Sample Description:

Work Order: 20H0309

Date Received: 8/6/2020

Field Sample #: DH-07B Caulk

Sampled: 7/7/2020 10:15

Sample ID: 20H0309-03

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	9.8	mg/Kg	50		SW-846 8082A	8/9/20	8/18/20 14:08	TG
Aroclor-1221 [1]	ND	9.8	mg/Kg	50		SW-846 8082A	8/9/20	8/18/20 14:08	TG
Aroclor-1232 [1]	ND	9.8	mg/Kg	50		SW-846 8082A	8/9/20	8/18/20 14:08	TG
Aroclor-1242 [1]	ND	9.8	mg/Kg	50		SW-846 8082A	8/9/20	8/18/20 14:08	TG
Aroclor-1248 [1]	ND	9.8	mg/Kg	50		SW-846 8082A	8/9/20	8/18/20 14:08	TG
Aroclor-1254 [2]	76	9.8	mg/Kg	50		SW-846 8082A	8/9/20	8/18/20 14:08	TG
Aroclor-1260 [1]	ND	9.8	mg/Kg	50		SW-846 8082A	8/9/20	8/18/20 14:08	TG
Aroclor-1262 [1]	ND	9.8	mg/Kg	50		SW-846 8082A	8/9/20	8/18/20 14:08	TG
Aroclor-1268 [1]	ND	9.8	mg/Kg	50		SW-846 8082A	8/9/20	8/18/20 14:08	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		*	30-150		S-01			8/18/20 14:08	
Decachlorobiphenyl [2]		*	30-150		S-01			8/18/20 14:08	
Tetrachloro-m-xylene [1]		*	30-150		S-01			8/18/20 14:08	
Tetrachloro-m-xylene [2]		*	30-150		S-01			8/18/20 14:08	

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Project Location: Amherst, MA

Sample Description:

Work Order: 20H0309

Date Received: 8/6/2020

Field Sample #: DH-08B Caulk

Sampled: 7/7/2020 10:18

Sample ID: 20H0309-04

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	1900	mg/Kg	10000		SW-846 8082A	8/9/20	8/18/20 16:29	TG
Aroclor-1221 [1]	ND	1900	mg/Kg	10000		SW-846 8082A	8/9/20	8/18/20 16:29	TG
Aroclor-1232 [1]	ND	1900	mg/Kg	10000		SW-846 8082A	8/9/20	8/18/20 16:29	TG
Aroclor-1242 [1]	ND	1900	mg/Kg	10000		SW-846 8082A	8/9/20	8/18/20 16:29	TG
Aroclor-1248 [1]	ND	1900	mg/Kg	10000		SW-846 8082A	8/9/20	8/18/20 16:29	TG
Aroclor-1254 [2]	35000	1900	mg/Kg	10000		SW-846 8082A	8/9/20	8/18/20 16:29	TG
Aroclor-1260 [1]	ND	1900	mg/Kg	10000		SW-846 8082A	8/9/20	8/18/20 16:29	TG
Aroclor-1262 [1]	ND	1900	mg/Kg	10000		SW-846 8082A	8/9/20	8/18/20 16:29	TG
Aroclor-1268 [1]	ND	1900	mg/Kg	10000		SW-846 8082A	8/9/20	8/18/20 16:29	TG
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]	*	30-150			S-01			8/18/20 16:29	
Decachlorobiphenyl [2]	*	30-150			S-01			8/18/20 16:29	
Tetrachloro-m-xylene [1]	*	30-150			S-01			8/18/20 16:29	
Tetrachloro-m-xylene [2]	*	30-150			S-01			8/18/20 16:29	

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Project Location: Amherst, MA

Sample Description:

Work Order: 20H0309

Date Received: 8/6/2020

Field Sample #: DH- 10BCaulk

Sampled: 7/7/2020 11:05

Sample ID: 20H0309-05

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/19/20 9:05	TG
Aroclor-1221 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/19/20 9:05	TG
Aroclor-1232 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/19/20 9:05	TG
Aroclor-1242 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/19/20 9:05	TG
Aroclor-1248 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/19/20 9:05	TG
Aroclor-1254 [2]	0.53	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/19/20 9:05	TG
Aroclor-1260 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/19/20 9:05	TG
Aroclor-1262 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/19/20 9:05	TG
Aroclor-1268 [1]	ND	0.19	mg/Kg	1		SW-846 8082A	8/9/20	8/19/20 9:05	TG
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]	95.0	30-150						8/19/20 9:05	
Decachlorobiphenyl [2]	102	30-150						8/19/20 9:05	
Tetrachloro-m-xylene [1]	84.3	30-150						8/19/20 9:05	
Tetrachloro-m-xylene [2]	89.8	30-150						8/19/20 9:05	

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Sample Extraction Data

Prep Method: SW-846 3540C Analytical Method: SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20H0309-01 [DH-03B Caulk]	B263854	0.519	10.0	08/09/20
20H0309-02 [DH-06B Caulk]	B263854	0.519	10.0	08/09/20
20H0309-03 [DH-07B Caulk]	B263854	0.510	10.0	08/09/20
20H0309-04 [DH-08B Caulk]	B263854	0.520	10.0	08/09/20
20H0309-05 [DH- 10BCaulk]	B263854	0.524	10.0	08/09/20

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B263854 - SW-846 3540C										
Blank (B263854-BLK1)										
Prepared: 08/09/20 Analyzed: 08/12/20										
Aroclor-1016	ND	0.20	mg/Kg							
Aroclor-1016 [2C]	ND	0.20	mg/Kg							
Aroclor-1221	ND	0.20	mg/Kg							
Aroclor-1221 [2C]	ND	0.20	mg/Kg							
Aroclor-1232	ND	0.20	mg/Kg							
Aroclor-1232 [2C]	ND	0.20	mg/Kg							
Aroclor-1242	ND	0.20	mg/Kg							
Aroclor-1242 [2C]	ND	0.20	mg/Kg							
Aroclor-1248	ND	0.20	mg/Kg							
Aroclor-1248 [2C]	ND	0.20	mg/Kg							
Aroclor-1254	ND	0.20	mg/Kg							
Aroclor-1254 [2C]	ND	0.20	mg/Kg							
Aroclor-1260	ND	0.20	mg/Kg							
Aroclor-1260 [2C]	ND	0.20	mg/Kg							
Aroclor-1262	ND	0.20	mg/Kg							
Aroclor-1262 [2C]	ND	0.20	mg/Kg							
Aroclor-1268	ND	0.20	mg/Kg							
Aroclor-1268 [2C]	ND	0.20	mg/Kg							
Surrogate: Decachlorobiphenyl	3.54		mg/Kg	4.00		88.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	3.77		mg/Kg	4.00		94.3	30-150			
Surrogate: Tetrachloro-m-xylene	3.59		mg/Kg	4.00		89.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	3.75		mg/Kg	4.00		93.7	30-150			
LCS (B263854-BS1)										
Prepared: 08/09/20 Analyzed: 08/12/20										
Aroclor-1016	3.7	0.20	mg/Kg	4.00		92.0	40-140			
Aroclor-1016 [2C]	3.9	0.20	mg/Kg	4.00		96.8	40-140			
Aroclor-1260	3.4	0.20	mg/Kg	4.00		85.6	40-140			
Aroclor-1260 [2C]	3.5	0.20	mg/Kg	4.00		86.9	40-140			
Surrogate: Decachlorobiphenyl	3.52		mg/Kg	4.00		88.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	3.74		mg/Kg	4.00		93.6	30-150			
Surrogate: Tetrachloro-m-xylene	3.70		mg/Kg	4.00		92.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	3.85		mg/Kg	4.00		96.3	30-150			
LCS Dup (B263854-BSD1)										
Prepared: 08/09/20 Analyzed: 08/12/20										
Aroclor-1016	3.7	0.20	mg/Kg	4.00		93.3	40-140	1.46	30	
Aroclor-1016 [2C]	4.0	0.20	mg/Kg	4.00		100	40-140	3.69	30	
Aroclor-1260	3.5	0.20	mg/Kg	4.00		87.6	40-140	2.26	30	
Aroclor-1260 [2C]	3.6	0.20	mg/Kg	4.00		89.0	40-140	2.32	30	
Surrogate: Decachlorobiphenyl	3.59		mg/Kg	4.00		89.6	30-150			
Surrogate: Decachlorobiphenyl [2C]	3.82		mg/Kg	4.00		95.5	30-150			
Surrogate: Tetrachloro-m-xylene	3.84		mg/Kg	4.00		96.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	3.99		mg/Kg	4.00		99.8	30-150			

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
SW-846 8082A

DH-03B Caulk

Lab Sample ID: 20H0309-01 Date(s) Analyzed: 08/18/2020 08/18/2020

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: _____ (mm) GC Column (2): ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	2.1	
	2	0.000	0.000	0.000	2.4	13.3
Aroclor-1260	1	0.000	0.000	0.000	0.32	
	2	0.000	0.000	0.000	0.42	27.0

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
SW-846 8082A

DH-06B Caulk

Lab Sample ID: 20H0309-02 Date(s) Analyzed: 08/18/2020 08/18/2020

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	14	
	2	0.000	0.000	0.000	14	0.0
Aroclor-1260	1	0.000	0.000	0.000	1.2	
	2	0.000	0.000	0.000	1.7	34.5

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
SW-846 8082A

DH-07B Caulk

Lab Sample ID: 20H0309-03 Date(s) Analyzed: 08/18/2020 08/18/2020
 Instrument ID (1): _____ Instrument ID (2): _____
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	73	
	2	0.000	0.000	0.000	76	4.0

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

DH-08B Caulk

SW-846 8082A

Lab Sample ID: 20H0309-04 Date(s) Analyzed: 08/18/2020 08/18/2020

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: _____ (mm) GC Column (2): ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	32000	
	2	0.000	0.000	0.000	35000	9.0

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

DH- 10BCaulk

SW-846 8082A

Lab Sample ID: 20H0309-05 Date(s) Analyzed: 08/19/2020 08/19/2020
 Instrument ID (1): _____ Instrument ID (2): _____
 GC Column (1): ID: _____ (mm) GC Column (2): ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	0.46	
	2	0.000	0.000	0.000	0.53	14.1

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
---------	----------------

No certified Analyses included in this Report

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2021
CT	Connecticut Department of Public Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2021
FL	Florida Department of Health	E871027 NELAP	06/30/2021
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2021
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2021
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2021
MI	Dept. of Env, Great Lakes, and Energy	9100	10/1/2020

2040309



Phone: 413-525-2332
 Fax: 413-525-6405
 Email: info@contestlabs.com

Address: 73 William Flanks Dr.
 Phone: 413-781-0070
 Project Location: Ames Hamden Dining Hall
 Project Number: 183 DW20064
 Project Manager: Debra.Wassinger@csps.com

Con-Test Quote Name/Number:
 Invoice Recipient:
 Sampled By:

http://www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
 East Longmeadow, MA 01028

Doc # 381 Rev 1_03242017

Page ___ of ___

Retention/Compliance Time: 7-Day 10-Day

Due Date: 1-Day 3-Day 4-Day

Other: PDF EXCEL

CLP Like Data Pkg Required:

Email To: _____

Fax To #: _____

of Containers: _____

Preservation Code: _____

Container Code: _____

Field Filtered

Lab to Filter

Field Filtered

Lab to Filter

1 Matrix Codes:
 GW = Ground Water
 WW = Waste Water
 DW = Drinking Water
 A = Air
 S = Soil
 SL = Sludge
 SOL = Solid
 O = Other (please define)

2 Preservation Codes:
 I = Iced
 H = HCL
 M = Methanol
 N = Nitric Acid
 S = Sulfuric Acid
 X = Sodium Hydroxide
 T = Sodium Thiosulfate
 O = Other (please define)

3 Container Codes:
 A = Amber Glass
 G = Glass
 P = Plastic
 ST = Sterile
 V = Vial
 S = Summa Canister
 T = Tediator Bag
 O = Other (please define)

Con-Test Work Order	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Lab Code	Matrix Code	Conc Code	ANALYSIS REQUESTED
1	DH-03B Cawk	07/07/20	935	✓	0	0	A	✓
2	DH-06B Cawk	07/07/20	1003	✓	0	0	A	✓
3	DH-07B Cawk	07/07/20	1015	✓	0	0	A	✓
4	DH-08B Cawk	07/07/20	1018	✓	0	0	A	✓
5	DH-10B Cawk	07/07/20	1105	✓	0	0	A	✓

Comments: Client notified samples rcv'd past hold 8/7/2020 mmk

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
 H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) _____ Date/Time: 08/06/20 1618

Received by: (signature) _____ Date/Time: 08/06/20 1008

Relinquished by: (signature) _____ Date/Time: _____

www.contestlabs.com

Special Requirements: MA MCP Required MA State DW Required

MCP Certification Form Required CT RCP Required

RCP Certification Form Required

PWSID # _____

Project Entity: Government Federal City

Municipality: 21 J Brownfield

MWRA School MBTA

WRTA

Other: Chromatogram AIHA-LAP, LLC

PCB ONLY: Soxhlet Non Soxhlet

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples _____



con-test
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client ATC Group Ser.

Received By SA Date 8/6 Time 1618

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____
Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 1 Actual Temp - 2.1
By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? NA Were Samples Tampered with? NA

Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? F

Did COC include all pertinent Information? Client T Analysis T Sampler Name T
Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F

Are there Rushes? F

Are there Short Holds? F

Is there enough Volume? T

Is there Headspace where applicable? NA

Proper Media/Containers Used? T

Were trip blanks received? F

Do all samples have the proper pH? _____

Acid NA Base NA

Who was notified? _____
Who was notified? _____
Who was notified? _____

MS/MSD? F

Is splitting samples required? F

On COC? F

Vials	F	Containers	F	F	F	F
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear
DI-		Other Glass		Other Plastic		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

Unused Media

Vials	F	Containers	F	F	F	F
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

Comments:

* PCB pass hold



August 4, 2022

ATTACHMENT D

Notification of "Risk-Base Clean-Up of PCBs
Hampden Dinning Commons (Roofing Replacement)
University of Massachusetts
Amherst, Massachusetts

ATTACHMENT D

PCB Laboratory Report – Substrate Sampling

February 1, 2021

Derrick Wissman
ATC Group Services LLC - West Springfield
73 Williams Franks Drive
West Springfield, MA 01089

Project Location: Amherst, MA
Client Job Number:
Project Number: 183DW20064
Laboratory Work Order Number: 21A1199

Enclosed are results of analyses for samples received by the laboratory on January 27, 2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Michelle M. Koch
Project Manager

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

 ATC Group Services LLC - West Springfield
 73 Williams Franks Drive
 West Springfield, MA 01089
 ATTN: Derrick Wissman

REPORT DATE: 2/1/2021

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 183DW20064

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 21A1199

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

PROJECT LOCATION: Amherst, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
HDH-01A Cone 1"	21A1199-01	Product/Solid		SW-846 8082A	
HDH-02A Cone 6"	21A1199-02	Product/Solid		SW-846 8082A	
HDH-01B Cone 1';	21A1199-03	Product/Solid		SW-846 8082A	
HDH-02B Cone 6"	21A1199-04	Product/Solid		SW-846 8082A	
HDH-01C Cone 1"	21A1199-05	Product/Solid		SW-846 8082A	
HDH-02C Cone 6"	21A1199-06	Product/Solid		SW-846 8082A	
HDH-05A-1 Cone 1"	21A1199-07	Product/Solid		SW-846 8082A	
HDH-05B-1 Cone 1"	21A1199-08	Product/Solid		SW-846 8082A	
HDH-05A-2 Cone 6"	21A1199-09	Product/Solid		SW-846 8082A	
HDH-05B-2 Cone 6"	21A1199-10	Product/Solid		SW-846 8082A	
HDH-06A-1 1"	21A1199-11	Product/Solid		SW-846 8082A	
HDH-06B-1 6"	21A1199-12	Product/Solid		SW-846 8082A	

CASE NARRATIVE SUMMARY

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

SW-846 8082A

Qualifications:

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Decachlorobiphenyl

21A1199-01[HDH-01A Cone 1"]

Decachlorobiphenyl [2C]

21A1199-01[HDH-01A Cone 1"]

Tetrachloro-m-xylene

21A1199-01[HDH-01A Cone 1"]

Tetrachloro-m-xylene [2C]

21A1199-01[HDH-01A Cone 1"]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington

Technical Representative

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

Project Location: Amherst, MA

Sample Description:

Work Order: 21A1199

Date Received: 1/27/2021

Field Sample #: HDH-01A Cone 1''

Sampled: 1/21/2021 12:30

Sample ID: 21A1199-01

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	16	mg/Kg	200		SW-846 8082A	1/28/21	1/30/21 23:04	JMB
Aroclor-1221 [1]	ND	16	mg/Kg	200		SW-846 8082A	1/28/21	1/30/21 23:04	JMB
Aroclor-1232 [1]	ND	16	mg/Kg	200		SW-846 8082A	1/28/21	1/30/21 23:04	JMB
Aroclor-1242 [1]	ND	16	mg/Kg	200		SW-846 8082A	1/28/21	1/30/21 23:04	JMB
Aroclor-1248 [1]	ND	16	mg/Kg	200		SW-846 8082A	1/28/21	1/30/21 23:04	JMB
Aroclor-1254 [1]	240	16	mg/Kg	200		SW-846 8082A	1/28/21	1/30/21 23:04	JMB
Aroclor-1260 [1]	ND	16	mg/Kg	200		SW-846 8082A	1/28/21	1/30/21 23:04	JMB
Aroclor-1262 [1]	ND	16	mg/Kg	200		SW-846 8082A	1/28/21	1/30/21 23:04	JMB
Aroclor-1268 [1]	ND	16	mg/Kg	200		SW-846 8082A	1/28/21	1/30/21 23:04	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		*	30-150		S-01			1/30/21 23:04	
Decachlorobiphenyl [2]		*	30-150		S-01			1/30/21 23:04	
Tetrachloro-m-xylene [1]		*	30-150		S-01			1/30/21 23:04	
Tetrachloro-m-xylene [2]		*	30-150		S-01			1/30/21 23:04	

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Project Location: Amherst, MA

Sample Description:

Work Order: 21A1199

Date Received: 1/27/2021

Field Sample #: HDH-02A Conc 6''

Sampled: 1/21/2021 12:40

Sample ID: 21A1199-02

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.35	mg/Kg	4		SW-846 8082A	1/28/21	1/30/21 23:22	JMB
Aroclor-1221 [1]	ND	0.35	mg/Kg	4		SW-846 8082A	1/28/21	1/30/21 23:22	JMB
Aroclor-1232 [1]	ND	0.35	mg/Kg	4		SW-846 8082A	1/28/21	1/30/21 23:22	JMB
Aroclor-1242 [1]	ND	0.35	mg/Kg	4		SW-846 8082A	1/28/21	1/30/21 23:22	JMB
Aroclor-1248 [1]	ND	0.35	mg/Kg	4		SW-846 8082A	1/28/21	1/30/21 23:22	JMB
Aroclor-1254 [1]	1.6	0.35	mg/Kg	4		SW-846 8082A	1/28/21	1/30/21 23:22	JMB
Aroclor-1260 [1]	ND	0.35	mg/Kg	4		SW-846 8082A	1/28/21	1/30/21 23:22	JMB
Aroclor-1262 [1]	ND	0.35	mg/Kg	4		SW-846 8082A	1/28/21	1/30/21 23:22	JMB
Aroclor-1268 [1]	ND	0.35	mg/Kg	4		SW-846 8082A	1/28/21	1/30/21 23:22	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual		Date/Time Analyzed		
Decachlorobiphenyl [1]	97.3		30-150				1/30/21 23:22		
Decachlorobiphenyl [2]	99.2		30-150				1/30/21 23:22		
Tetrachloro-m-xylene [1]	88.8		30-150				1/30/21 23:22		
Tetrachloro-m-xylene [2]	88.3		30-150				1/30/21 23:22		

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

Project Location: Amherst, MA

Sample Description:

Work Order: 21A1199

Date Received: 1/27/2021

Field Sample #: HDH-01B Cone 1';

Sampled: 1/21/2021 12:50

Sample ID: 21A1199-03

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.91	mg/Kg	10		SW-846 8082A	1/28/21	1/30/21 23:40	JMB
Aroclor-1221 [1]	ND	0.91	mg/Kg	10		SW-846 8082A	1/28/21	1/30/21 23:40	JMB
Aroclor-1232 [1]	ND	0.91	mg/Kg	10		SW-846 8082A	1/28/21	1/30/21 23:40	JMB
Aroclor-1242 [1]	ND	0.91	mg/Kg	10		SW-846 8082A	1/28/21	1/30/21 23:40	JMB
Aroclor-1248 [1]	ND	0.91	mg/Kg	10		SW-846 8082A	1/28/21	1/30/21 23:40	JMB
Aroclor-1254 [1]	5.8	0.91	mg/Kg	10		SW-846 8082A	1/28/21	1/30/21 23:40	JMB
Aroclor-1260 [1]	ND	0.91	mg/Kg	10		SW-846 8082A	1/28/21	1/30/21 23:40	JMB
Aroclor-1262 [1]	ND	0.91	mg/Kg	10		SW-846 8082A	1/28/21	1/30/21 23:40	JMB
Aroclor-1268 [1]	ND	0.91	mg/Kg	10		SW-846 8082A	1/28/21	1/30/21 23:40	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	99.3		30-150				1/30/21 23:40		
Decachlorobiphenyl [2]	104		30-150				1/30/21 23:40		
Tetrachloro-m-xylene [1]	90.6		30-150				1/30/21 23:40		
Tetrachloro-m-xylene [2]	92.0		30-150				1/30/21 23:40		

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Project Location: Amherst, MA

Sample Description:

Work Order: 21A1199

Date Received: 1/27/2021

Field Sample #: HDH-02B Cone 6"

Sampled: 1/21/2021 13:00

Sample ID: 21A1199-04

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date	Date/Time	Analyst
							Prepared	Analyzed	
Aroclor-1016 [1]	ND	0.093	mg/Kg	1		SW-846 8082A	1/28/21	1/30/21 23:58	JMB
Aroclor-1221 [1]	ND	0.093	mg/Kg	1		SW-846 8082A	1/28/21	1/30/21 23:58	JMB
Aroclor-1232 [1]	ND	0.093	mg/Kg	1		SW-846 8082A	1/28/21	1/30/21 23:58	JMB
Aroclor-1242 [1]	ND	0.093	mg/Kg	1		SW-846 8082A	1/28/21	1/30/21 23:58	JMB
Aroclor-1248 [1]	ND	0.093	mg/Kg	1		SW-846 8082A	1/28/21	1/30/21 23:58	JMB
Aroclor-1254 [1]	0.67	0.093	mg/Kg	1		SW-846 8082A	1/28/21	1/30/21 23:58	JMB
Aroclor-1260 [1]	ND	0.093	mg/Kg	1		SW-846 8082A	1/28/21	1/30/21 23:58	JMB
Aroclor-1262 [1]	ND	0.093	mg/Kg	1		SW-846 8082A	1/28/21	1/30/21 23:58	JMB
Aroclor-1268 [1]	ND	0.093	mg/Kg	1		SW-846 8082A	1/28/21	1/30/21 23:58	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual		Date/Time		
Decachlorobiphenyl [1]	103		30-150				1/30/21 23:58		
Decachlorobiphenyl [2]	103		30-150				1/30/21 23:58		
Tetrachloro-m-xylene [1]	102		30-150				1/30/21 23:58		
Tetrachloro-m-xylene [2]	104		30-150				1/30/21 23:58		

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

Project Location: Amherst, MA

Sample Description:

Work Order: 21A1199

Date Received: 1/27/2021

Field Sample #: HDH-01C Cone 1''

Sampled: 1/21/2021 13:20

Sample ID: 21A1199-05

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:16	JMB
Aroclor-1221 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:16	JMB
Aroclor-1232 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:16	JMB
Aroclor-1242 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:16	JMB
Aroclor-1248 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:16	JMB
Aroclor-1254 [1]	0.10	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:16	JMB
Aroclor-1260 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:16	JMB
Aroclor-1262 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:16	JMB
Aroclor-1268 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:16	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		98.0	30-150					1/31/21 0:16	
Decachlorobiphenyl [2]		95.5	30-150					1/31/21 0:16	
Tetrachloro-m-xylene [1]		91.1	30-150					1/31/21 0:16	
Tetrachloro-m-xylene [2]		92.0	30-150					1/31/21 0:16	

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Project Location: Amherst, MA

Sample Description:

Work Order: 21A1199

Date Received: 1/27/2021

Field Sample #: HDH-02C Cone 6''

Sampled: 1/21/2021 13:25

Sample ID: 21A1199-06

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:33	JMB
Aroclor-1221 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:33	JMB
Aroclor-1232 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:33	JMB
Aroclor-1242 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:33	JMB
Aroclor-1248 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:33	JMB
Aroclor-1254 [1]	0.37	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:33	JMB
Aroclor-1260 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:33	JMB
Aroclor-1262 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:33	JMB
Aroclor-1268 [1]	ND	0.082	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 0:33	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	104		30-150			1/31/21 0:33			
Decachlorobiphenyl [2]	103		30-150			1/31/21 0:33			
Tetrachloro-m-xylene [1]	87.5		30-150			1/31/21 0:33			
Tetrachloro-m-xylene [2]	88.2		30-150			1/31/21 0:33			

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Project Location: Amherst, MA

Sample Description:

Work Order: 21A1199

Date Received: 1/27/2021

Field Sample #: HDH-05A-1 Cone 1"

Sampled: 1/26/2021 10:00

Sample ID: 21A1199-07

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 0:51	JMB
Aroclor-1221 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 0:51	JMB
Aroclor-1232 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 0:51	JMB
Aroclor-1242 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 0:51	JMB
Aroclor-1248 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 0:51	JMB
Aroclor-1254 [1]	3.7	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 0:51	JMB
Aroclor-1260 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 0:51	JMB
Aroclor-1262 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 0:51	JMB
Aroclor-1268 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 0:51	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		90.5	30-150					1/31/21 0:51	
Decachlorobiphenyl [2]		95.2	30-150					1/31/21 0:51	
Tetrachloro-m-xylene [1]		89.8	30-150					1/31/21 0:51	
Tetrachloro-m-xylene [2]		90.1	30-150					1/31/21 0:51	

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Project Location: Amherst, MA

Sample Description:

Work Order: 21A1199

Date Received: 1/27/2021

Field Sample #: HDH-05B-1 Cone 1"

Sampled: 1/26/2021 10:13

Sample ID: 21A1199-08

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.085	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:09	JMB
Aroclor-1221 [1]	ND	0.085	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:09	JMB
Aroclor-1232 [1]	ND	0.085	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:09	JMB
Aroclor-1242 [1]	ND	0.085	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:09	JMB
Aroclor-1248 [1]	ND	0.085	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:09	JMB
Aroclor-1254 [2]	ND	0.085	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:09	JMB
Aroclor-1260 [1]	ND	0.085	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:09	JMB
Aroclor-1262 [1]	ND	0.085	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:09	JMB
Aroclor-1268 [1]	ND	0.085	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:09	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		82.2	30-150					1/31/21 1:09	
Decachlorobiphenyl [2]		81.7	30-150					1/31/21 1:09	
Tetrachloro-m-xylene [1]		86.2	30-150					1/31/21 1:09	
Tetrachloro-m-xylene [2]		91.7	30-150					1/31/21 1:09	

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Project Location: Amherst, MA

Sample Description:

Work Order: 21A1199

Date Received: 1/27/2021

Field Sample #: HDH-05A-2 Cone 6''

Sampled: 1/26/2021 10:22

Sample ID: 21A1199-09

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 1:27	JMB
Aroclor-1221 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 1:27	JMB
Aroclor-1232 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 1:27	JMB
Aroclor-1242 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 1:27	JMB
Aroclor-1248 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 1:27	JMB
Aroclor-1254 [1]	5.3	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 1:27	JMB
Aroclor-1260 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 1:27	JMB
Aroclor-1262 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 1:27	JMB
Aroclor-1268 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	1/28/21	1/31/21 1:27	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	103		30-150			1/31/21 1:27			
Decachlorobiphenyl [2]	107		30-150			1/31/21 1:27			
Tetrachloro-m-xylene [1]	98.8		30-150			1/31/21 1:27			
Tetrachloro-m-xylene [2]	100		30-150			1/31/21 1:27			

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Project Location: Amherst, MA

Sample Description:

Work Order: 21A1199

Date Received: 1/27/2021

Field Sample #: HDH-05B-2 Cone 6"

Sampled: 1/26/2021 10:32

Sample ID: 21A1199-10

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.087	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:45	JMB
Aroclor-1221 [1]	ND	0.087	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:45	JMB
Aroclor-1232 [1]	ND	0.087	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:45	JMB
Aroclor-1242 [1]	ND	0.087	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:45	JMB
Aroclor-1248 [1]	ND	0.087	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:45	JMB
Aroclor-1254 [1]	0.71	0.087	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:45	JMB
Aroclor-1260 [1]	ND	0.087	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:45	JMB
Aroclor-1262 [1]	ND	0.087	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:45	JMB
Aroclor-1268 [1]	ND	0.087	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 1:45	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	86.3		30-150			1/31/21 1:45			
Decachlorobiphenyl [2]	86.0		30-150			1/31/21 1:45			
Tetrachloro-m-xylene [1]	88.6		30-150			1/31/21 1:45			
Tetrachloro-m-xylene [2]	91.8		30-150			1/31/21 1:45			

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Project Location: Amherst, MA

Sample Description:

Work Order: 21A1199

Date Received: 1/27/2021

Field Sample #: HDH-06A-1 1"

Sampled: 1/26/2021 10:55

Sample ID: 21A1199-11

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.097	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:02	JMB
Aroclor-1221 [1]	ND	0.097	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:02	JMB
Aroclor-1232 [1]	ND	0.097	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:02	JMB
Aroclor-1242 [1]	ND	0.097	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:02	JMB
Aroclor-1248 [1]	ND	0.097	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:02	JMB
Aroclor-1254 [2]	0.10	0.097	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:02	JMB
Aroclor-1260 [1]	ND	0.097	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:02	JMB
Aroclor-1262 [1]	ND	0.097	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:02	JMB
Aroclor-1268 [1]	ND	0.097	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:02	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual		Date/Time Analyzed		Analyst
Decachlorobiphenyl [1]	106		30-150				1/31/21 2:02		
Decachlorobiphenyl [2]	104		30-150				1/31/21 2:02		
Tetrachloro-m-xylene [1]	87.9		30-150				1/31/21 2:02		
Tetrachloro-m-xylene [2]	88.6		30-150				1/31/21 2:02		

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Project Location: Amherst, MA

Sample Description:

Work Order: 21A1199

Date Received: 1/27/2021

Field Sample #: HDH-06B-1 6"

Sampled: 1/26/2021 10:59

Sample ID: 21A1199-12

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.096	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:20	JMB
Aroclor-1221 [1]	ND	0.096	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:20	JMB
Aroclor-1232 [1]	ND	0.096	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:20	JMB
Aroclor-1242 [1]	ND	0.096	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:20	JMB
Aroclor-1248 [1]	ND	0.096	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:20	JMB
Aroclor-1254 [1]	ND	0.096	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:20	JMB
Aroclor-1260 [1]	ND	0.096	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:20	JMB
Aroclor-1262 [1]	ND	0.096	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:20	JMB
Aroclor-1268 [1]	ND	0.096	mg/Kg	1		SW-846 8082A	1/28/21	1/31/21 2:20	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	101		30-150			1/31/21 2:20			
Decachlorobiphenyl [2]	98.9		30-150			1/31/21 2:20			
Tetrachloro-m-xylene [1]	91.3		30-150			1/31/21 2:20			
Tetrachloro-m-xylene [2]	92.2		30-150			1/31/21 2:20			

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Sample Extraction Data

Prep Method: SW-846 3540C Analytical Method: SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21A1199-01 [HDH-01A Cone 1"]	B275516	2.43	10.0	01/28/21
21A1199-02 [HDH-02A Cone 6"]	B275516	2.30	10.0	01/28/21
21A1199-03 [HDH-01B Cone 1";]	B275516	2.19	10.0	01/28/21
21A1199-04 [HDH-02B Cone 6"]	B275516	2.16	10.0	01/28/21
21A1199-05 [HDH-01C Cone 1"]	B275516	2.45	10.0	01/28/21
21A1199-06 [HDH-02C Cone 6"]	B275516	2.45	10.0	01/28/21
21A1199-07 [HDH-05A-1 Cone 1"]	B275516	2.33	10.0	01/28/21
21A1199-08 [HDH-05B-1 Cone 1"]	B275516	2.34	10.0	01/28/21
21A1199-09 [HDH-05A-2 Cone 6"]	B275516	2.32	10.0	01/28/21
21A1199-10 [HDH-05B-2 Cone 6"]	B275516	2.30	10.0	01/28/21
21A1199-11 [HDH-06A-1 1"]	B275516	2.06	10.0	01/28/21
21A1199-12 [HDH-06B-1 6"]	B275516	2.08	10.0	01/28/21

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B275516 - SW-846 3540C										
Blank (B275516-BLK1)										
Prepared: 01/28/21 Analyzed: 01/30/21										
Aroclor-1016	ND	0.10	mg/Kg							
Aroclor-1016 [2C]	ND	0.10	mg/Kg							
Aroclor-1221	ND	0.10	mg/Kg							
Aroclor-1221 [2C]	ND	0.10	mg/Kg							
Aroclor-1232	ND	0.10	mg/Kg							
Aroclor-1232 [2C]	ND	0.10	mg/Kg							
Aroclor-1242	ND	0.10	mg/Kg							
Aroclor-1242 [2C]	ND	0.10	mg/Kg							
Aroclor-1248	ND	0.10	mg/Kg							
Aroclor-1248 [2C]	ND	0.10	mg/Kg							
Aroclor-1254	ND	0.10	mg/Kg							
Aroclor-1254 [2C]	ND	0.10	mg/Kg							
Aroclor-1260	ND	0.10	mg/Kg							
Aroclor-1260 [2C]	ND	0.10	mg/Kg							
Aroclor-1262	ND	0.10	mg/Kg							
Aroclor-1262 [2C]	ND	0.10	mg/Kg							
Aroclor-1268	ND	0.10	mg/Kg							
Aroclor-1268 [2C]	ND	0.10	mg/Kg							
Surrogate: Decachlorobiphenyl	1.03		mg/Kg	1.00		103	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.03		mg/Kg	1.00		103	30-150			
Surrogate: Tetrachloro-m-xylene	0.949		mg/Kg	1.00		94.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.935		mg/Kg	1.00		93.5	30-150			
LCS (B275516-BS1)										
Prepared: 01/28/21 Analyzed: 01/30/21										
Aroclor-1016	0.90	0.10	mg/Kg	1.00		89.9	40-140			
Aroclor-1016 [2C]	0.88	0.10	mg/Kg	1.00		88.2	40-140			
Aroclor-1260	0.90	0.10	mg/Kg	1.00		89.7	40-140			
Aroclor-1260 [2C]	0.85	0.10	mg/Kg	1.00		84.5	40-140			
Surrogate: Decachlorobiphenyl	1.01		mg/Kg	1.00		101	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.02		mg/Kg	1.00		102	30-150			
Surrogate: Tetrachloro-m-xylene	0.934		mg/Kg	1.00		93.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.941		mg/Kg	1.00		94.1	30-150			
LCS Dup (B275516-BSD1)										
Prepared: 01/28/21 Analyzed: 01/30/21										
Aroclor-1016	0.91	0.10	mg/Kg	1.00		90.5	40-140	0.711	30	
Aroclor-1016 [2C]	0.88	0.10	mg/Kg	1.00		88.3	40-140	0.101	30	
Aroclor-1260	0.90	0.10	mg/Kg	1.00		90.4	40-140	0.810	30	
Aroclor-1260 [2C]	0.86	0.10	mg/Kg	1.00		85.6	40-140	1.29	30	
Surrogate: Decachlorobiphenyl	1.03		mg/Kg	1.00		103	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.04		mg/Kg	1.00		104	30-150			
Surrogate: Tetrachloro-m-xylene	0.934		mg/Kg	1.00		93.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.938		mg/Kg	1.00		93.8	30-150			

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**IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES**
HDH-01A Cone 1"
SW-846 8082A

 Lab Sample ID: 21A1199-01 Date(s) Analyzed: 01/30/2021 01/30/2021

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	240	
	2	0.000	0.000	0.000	230	4.3

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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HDH-02A Cone 6"

SW-846 8082A

Lab Sample ID: 21A1199-02 Date(s) Analyzed: 01/30/2021 01/30/2021

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	1.6	
	2	0.000	0.000	0.000	1.5	6.5

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HDH-01B Cone 1';

SW-846 8082A

Lab Sample ID: 21A1199-03 Date(s) Analyzed: 01/30/2021 01/30/2021

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: _____ (mm) GC Column (2): ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	5.8	
	2	0.000	0.000	0.000	5.4	7.1



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HDH-02B Cone 6"

SW-846 8082A

Lab Sample ID: 21A1199-04 Date(s) Analyzed: 01/30/2021 01/30/2021

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: _____ (mm) GC Column (2): ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	0.67	
	2	0.000	0.000	0.000	0.65	3.0

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HDH-01C Cone 1"

SW-846 8082A

Lab Sample ID: 21A1199-05 Date(s) Analyzed: 01/31/2021 01/31/2021

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: _____ (mm) GC Column (2): ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	0.10	
	2	0.000	0.000	0.000	0.098	2.0

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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HDH-02C Cone 6"

SW-846 8082A

Lab Sample ID: 21A1199-06 Date(s) Analyzed: 01/31/2021 01/31/2021

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: _____ (mm) GC Column (2): ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	0.37	
	2	0.000	0.000	0.000	0.36	2.7

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**IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES**

HDH-05A-1 Cone 1"

SW-846 8082A

 Lab Sample ID: 21A1199-07 Date(s) Analyzed: 01/31/2021 01/31/2021

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: _____ (mm) GC Column (2): ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	3.7	
	2	0.000	0.000	0.000	3.4	8.5

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**IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES**
HDH-05A-2 Cone 6"
SW-846 8082A

 Lab Sample ID: 21A1199-09 Date(s) Analyzed: 01/31/2021 01/31/2021

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: _____ (mm) GC Column (2): ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	5.3	
	2	0.000	0.000	0.000	5.0	5.8

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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HDH-05B-2 Cone 6"

SW-846 8082A

Lab Sample ID: 21A1199-10 Date(s) Analyzed: 01/31/2021 01/31/2021

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	0.71	
	2	0.000	0.000	0.000	0.67	5.8

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**IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES**
LCS
SW-846 8082A

 Lab Sample ID: B275516-BS1 Date(s) Analyzed: 01/30/2021 01/30/2021

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: _____ (mm) GC Column (2): ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.90	
	2	0.000	0.000	0.000	0.88	2.3
Aroclor-1260	1	0.000	0.000	0.000	0.90	
	2	0.000	0.000	0.000	0.85	5.7

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup

SW-846 8082A

 Lab Sample ID: B275516-BSD1 Date(s) Analyzed: 01/30/2021 01/30/2021

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.91	
	2	0.000	0.000	0.000	0.88	3.4
Aroclor-1260	1	0.000	0.000	0.000	0.90	
	2	0.000	0.000	0.000	0.86	4.6

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8082A in Product/Solid</i>	
Aroclor-1016	CT,NH,NY,ME,NC,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1262	NY,NC,VA,PA
Aroclor-1262 [2C]	NY,NC,VA,PA
Aroclor-1268	NY,NC,VA,PA
Aroclor-1268 [2C]	NY,NC,VA,PA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2021
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00112	12/30/2021
NC	North Carolina Div. of Water Quality	652	12/31/2021
NJ	New Jersey DEP	MA007 NELAP	06/30/2021
FL	Florida Department of Health	E871027 NELAP	06/30/2021
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2021
ME	State of Maine	MA00100	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2021
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2021
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2021
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021

Doc # 381 Rev 1_03242017
 39 Spruce Street
 East Longmeadow, MA 01028

http://www.contestlabs.com
 CHAIN OF CUSTODY RECORD

21A1199
 Phone: 413-525-2332
 Fax: 413-525-6405



Address: ATC Ram Services
736 Main Street
413-781-0070
MASS Hampden Ding Field
Amherst MA
 Project Location: 183 Newbury
 Project Number: Denise Weston
 Project Manager: Denise Weston
 Con-Test Quote Name/Number:
 Invoice Recipient:
 Sampled By:

Requested Turnaround Time
 7-Day 10-Day
 Due Date:
 Rush Approval Required
 1-Day 3-Day
 2-Day 4-Day
 Date Delivery
 Format: PDF EXCEL
 Other:
 CLP Like Data Pkg Required:
 Email To:
 Fax To #:

of Containers
 2 Preservation Code
 3 Container Code
 Field Filtered
 Lab to Filter
 Field Filtered
 Lab to Filter

Con-Test Work Order #	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code
1	H0H-01A Conc 1"	01/21/21	1230	✓	0	0	
2	H0H-02A Conc 6"	01/21/21	1240	✓	0	0	
3	H0H-01B Conc 1"	01/21/21	1250	✓	0	0	
4	H0H-02B Conc 6"	01/21/21	1300	✓	0	0	
5	H0H-01C Conc 1"	01/21/21	1320	✓	0	0	
6	H0H-02C Conc 6"	01/21/21	1325	✓	0	0	
7	H0H-05A-1 Conc 1"	01/21/21	1000	✓	0	0	
8	H0H-05B-1 Conc 1"	01/21/21	1013	✓	0	0	
9	H0H-05A-2 Conc 6"	01/21/21	1022	✓	0	0	
10	H0H-05B-2 Conc 6"	01/21/21	1032	✓	0	0	

ANALYSIS REQUESTED

1 Matrix Codes:
 GW = Ground Water
 WW = Waste Water
 DW = Drinking Water
 A = Air
 S = Soil
 SL = Sludge
 SOL = Solid
 O = Other (please define)

2 Preservation Codes:
 I = Iced
 H = HCL
 M = Methanol
 N = Nitric Acid
 S = Sulfuric Acid
 B = Sodium Bisulfate
 X = Sodium Hydroxide
 T = Sodium Thioculfate
 O = Other (please define)

3 Container Codes:
 A = Amber Glass
 G = Glass

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
 H - High; M - Medium; L - Low; C - Clean; U - Unknown

Comments:
 Detection Limit Must Be Less Than 1 ppm

Special Requirements

MA MCP Required MA State DW Required
 MCP Certification Form Required
 CT RCP Required
 RCP Certification Form Required
 PWSD #

Project Entity

Government Municipality MMRA WRTA Other
 Federal 21 J School AHA-LAP, LLC
 City Brownfield MBTA

PCB ONLY
 Soxhlet
 Non Soxhlet

Per call with sampler for pick up - 12 samples should all be run for 8082 sox 1/26/21 mmk; notified client of ID issue with sample -03 1/28/21 mmk

Requisitioned by: (signature) Date/Time: 01-26-20 1315
 Received by: (signature) Date/Time: 1/27/21 1355
 Requisitioned by: (signature) Date/Time: 1/27/21 1432
 Received by: (signature) Date/Time: 2-5 1/27/21 1432

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 CHAIN OF CUSTODY RECORD

2A1199
 Phone: 413-525-2332
 Fax: 413-525-6405
 Email: info@contestlabs.com



Address: 23 William Fields Dr. US Office
 Phone: 413-781-0070
 Project Location: Amherst MA
 Project Number: 1830W 20064
 Project Manager: Debrah-Wissman@contests.com
 Con-Test Quote Name/Number:
 Invoice Recipient:
 Sampled By:

7-Day 10-Day
 Due Date:
 1-Day 3-Day
 2-Day 4-Day
 Format: PDF EXCEL
 Other:
 CLP Like Data Pkg Required:
 Email To:
 Fax To #:

of Containers
 Preservation Code
 Container Code
 Field Filtered
 Lab to Filter
 Field Filtered
 Lab to Filter

ANALYSIS REQUESTED

Con-Test Work Order #	Client Sample ID/Description	Sampling Date/Time	Analysis Requested	Matrix Code	Preservation Code	Container Code
11	HDA-06A-1	01/24/18	1055	0		
12	HDA-06B-1	01/26/18	1059	0		

Special Requirements

MA MCP Required	<input type="checkbox"/>
MCP Certification Form Required	<input type="checkbox"/>
CT RCP Required	<input type="checkbox"/>
RCP Certification Form Required	<input type="checkbox"/>
MA State DW Required	<input type="checkbox"/>
PWSID #	

Project Entity

Government	<input type="checkbox"/>	Municipality	<input type="checkbox"/>	MWRA	<input type="checkbox"/>	WRTA	<input type="checkbox"/>
Federal	<input type="checkbox"/>	21 J	<input type="checkbox"/>	School	<input type="checkbox"/>	AIMA-LAP, LLC	<input type="checkbox"/>
City	<input type="checkbox"/>	Brownfield	<input type="checkbox"/>	MBTA	<input type="checkbox"/>		<input type="checkbox"/>

Comments: Detection limit must be less than 100ppm

Relinquished by: (signature) [Signature] Date/Time: 01/24/18 1316
 Received by: (signature) [Signature] Date/Time: 1755
 Relinquished by: (signature) [Signature] Date/Time: 1/27/18 1932
 Received by: (signature) [Signature] Date/Time: 2.5.18 1432
 Relinquished by: (signature) [Signature] Date/Time: [Signature]

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
 H - High; M - Medium; L - Low; C - Clean; U - Unknown

con-test ANALYTICAL LABORATORY
 www.contestlabs.com

PCB ONLY
 Soxhlet
 Non Soxhlet

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples _____



con-test
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client ATC

Received By [Signature] Date 1/27/21 Time 1432

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____
Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 3 Actual Temp - 2.5
By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? na Were Samples Tampered with? na
Was COC Relinquished? T Does Chain Agree With Samples? F

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name F
Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Who was notified? _____

Are there Lab to Filters? F

Who was notified? _____

Are there Rushes? F

Who was notified? _____

Are there Short Holds? F

Is there enough Volume? T

Is there Headspace where applicable? na

MS/MSD? F

Proper Media/Containers Used? T

Is splitting samples required? F

Were trip blanks received? F

On COC? F

Do all samples have the proper pH? _____

Acid na Base na

Vials	#	Containers	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic	16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic	8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	4oz Amb Clear
Bisulfate-		Flashpoint		Col./Bacteria	2oz Amb/Clear
DI-		Other Glass		Other Plastic	Encore
Thiosulfate-		SOC Kit		Plastic Bag	Frozen:
Sulfuric-		Perchlorate		Ziplock	

Unused Media

Vials	#	Containers	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic	16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic	8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint	2oz Amb/Clear
DI-		Other Plastic		Other Glass	Encore
Thiosulfate-		SOC Kit		Plastic Bag	Frozen:
Sulfuric-		Perchlorate		Ziplock	

Comments:

Sample HDH-01B has label with wrong ID (HDH-02B), but time still matches -01B on COC.



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

February 17, 2021

Derrick Wissman
ATC Group Services LLC - West Springfield
73 Williams Franks Drive
West Springfield, MA 01089

Project Location: Amherst, MA
Client Job Number:
Project Number: 183DW20064
Laboratory Work Order Number: 21B0581

Enclosed are results of analyses for samples received by the laboratory on February 12, 2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Michelle Koch". The signature is written in a cursive, flowing style.

Michelle M. Koch
Project Manager

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ATC Group Services LLC - West Springfield
 73 Williams Franks Drive
 West Springfield, MA 01089
 ATTN: Derrick Wissman

REPORT DATE: 2/17/2021

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 183DW20064

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 21B0581

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

PROJECT LOCATION: Amherst, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
HDH-03A 12" cone	21B0581-01	Product/Solid		SW-846 8082A	



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CASE NARRATIVE SUMMARY

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

SW-846 8082A

Qualifications:

II-03

Sample received after recommended holding time was exceeded.

Analyte & Samples(s) Qualified:

21B0581-01[HDH-03A 12" cone]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Lisa A. Worthington", is written in a cursive style.

Lisa A. Worthington
Technical Representative



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

Project Location: Amherst, MA

Sample Description:

Work Order: 21B0581

Date Received: 2/12/2021

Field Sample #: HDH-03A 12" cone

Sampled: 1/21/2021 12:45

Sample ID: 21B0581-01

Sample Matrix: Product/Solid

Sample Flags: H-03

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.31	mg/Kg	4		SW-846 8082A	2/15/21	2/17/21 13:19	AYH
Aroclor-1221 [1]	ND	0.31	mg/Kg	4		SW-846 8082A	2/15/21	2/17/21 13:19	AYH
Aroclor-1232 [1]	ND	0.31	mg/Kg	4		SW-846 8082A	2/15/21	2/17/21 13:19	AYH
Aroclor-1242 [1]	ND	0.31	mg/Kg	4		SW-846 8082A	2/15/21	2/17/21 13:19	AYH
Aroclor-1248 [1]	ND	0.31	mg/Kg	4		SW-846 8082A	2/15/21	2/17/21 13:19	AYH
Aroclor-1254 [2]	0.85	0.31	mg/Kg	4		SW-846 8082A	2/15/21	2/17/21 13:19	AYH
Aroclor-1260 [1]	ND	0.31	mg/Kg	4		SW-846 8082A	2/15/21	2/17/21 13:19	AYH
Aroclor-1262 [1]	ND	0.31	mg/Kg	4		SW-846 8082A	2/15/21	2/17/21 13:19	AYH
Aroclor-1268 [1]	ND	0.31	mg/Kg	4		SW-846 8082A	2/15/21	2/17/21 13:19	AYH
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		77.7	30-150					2/17/21 13:19	
Decachlorobiphenyl [2]		87.8	30-150					2/17/21 13:19	
Tetrachloro-m-xylene [1]		92.6	30-150					2/17/21 13:19	
Tetrachloro-m-xylene [2]		99.6	30-150					2/17/21 13:19	



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Sample Extraction Data

Prep Method: SW-846 3540C Analytical Method: SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21B0581-01 [HDH-03A 12" cone]	B276471	2.61	10.0	02/15/21

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B276471 - SW-846 3540C										
Blank (B276471-BLK1)										
Prepared: 02/15/21 Analyzed: 02/17/21										
Aroclor-1016	ND	0.089	mg/Kg							
Aroclor-1016 [2C]	ND	0.089	mg/Kg							
Aroclor-1221	ND	0.089	mg/Kg							
Aroclor-1221 [2C]	ND	0.089	mg/Kg							
Aroclor-1232	ND	0.089	mg/Kg							
Aroclor-1232 [2C]	ND	0.089	mg/Kg							
Aroclor-1242	ND	0.089	mg/Kg							
Aroclor-1242 [2C]	ND	0.089	mg/Kg							
Aroclor-1248	ND	0.089	mg/Kg							
Aroclor-1248 [2C]	ND	0.089	mg/Kg							
Aroclor-1254	ND	0.089	mg/Kg							
Aroclor-1254 [2C]	ND	0.089	mg/Kg							
Aroclor-1260	ND	0.089	mg/Kg							
Aroclor-1260 [2C]	ND	0.089	mg/Kg							
Aroclor-1262	ND	0.089	mg/Kg							
Aroclor-1262 [2C]	ND	0.089	mg/Kg							
Aroclor-1268	ND	0.089	mg/Kg							
Aroclor-1268 [2C]	ND	0.089	mg/Kg							
Surrogate: Decachlorobiphenyl	0.828		mg/Kg	0.893		92.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.958		mg/Kg	0.893		107	30-150			
Surrogate: Tetrachloro-m-xylene	0.829		mg/Kg	0.893		92.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.863		mg/Kg	0.893		96.7	30-150			
LCS (B276471-BS1)										
Prepared: 02/15/21 Analyzed: 02/17/21										
Aroclor-1016	0.63	0.073	mg/Kg	0.727		86.9	40-140			
Aroclor-1016 [2C]	0.63	0.073	mg/Kg	0.727		86.3	40-140			
Aroclor-1260	0.56	0.073	mg/Kg	0.727		76.7	40-140			
Aroclor-1260 [2C]	0.57	0.073	mg/Kg	0.727		78.8	40-140			
Surrogate: Decachlorobiphenyl	0.658		mg/Kg	0.727		90.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.753		mg/Kg	0.727		104	30-150			
Surrogate: Tetrachloro-m-xylene	0.723		mg/Kg	0.727		99.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.754		mg/Kg	0.727		104	30-150			
LCS Dup (B276471-BSD1)										
Prepared: 02/15/21 Analyzed: 02/17/21										
Aroclor-1016	0.63	0.093	mg/Kg	0.935		67.3	40-140	0.540	30	
Aroclor-1016 [2C]	0.63	0.093	mg/Kg	0.935		67.8	40-140	0.899	30	
Aroclor-1260	0.56	0.093	mg/Kg	0.935		60.1	40-140	0.746	30	
Aroclor-1260 [2C]	0.58	0.093	mg/Kg	0.935		62.2	40-140	1.42	30	
Surrogate: Decachlorobiphenyl	0.639		mg/Kg	0.935		68.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.727		mg/Kg	0.935		77.8	30-150			
Surrogate: Tetrachloro-m-xylene	0.592		mg/Kg	0.935		63.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.613		mg/Kg	0.935		65.6	30-150			

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**IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES**
HDH-03A 12" cone
SW-846 8082A

Lab Sample ID: 21B0581-01 Date(s) Analyzed: 02/17/2021 02/17/2021
 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	0.81	
	2	0.000	0.000	0.000	0.85	4.8



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

LCS

SW-846 8082A

Lab Sample ID: B276471-BS1 Date(s) Analyzed: 02/17/2021 02/17/2021
 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.63	
	2	0.000	0.000	0.000	0.63	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.56	
	2	0.000	0.000	0.000	0.57	1.8



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

LCS Dup

SW-846 8082A

Lab Sample ID: B276471-BSD1 Date(s) Analyzed: 02/17/2021 02/17/2021

Instrument ID (1): ECD 9 Instrument ID (2): ECD 9

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.63	
	2	0.000	0.000	0.000	0.63	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.56	
	2	0.000	0.000	0.000	0.58	3.5



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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-03	Sample received after recommended holding time was exceeded.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8082A in Product/Solid</i>	
Aroclor-1016	CT,NH,NY,ME,NC,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1262	NY,NC,VA,PA
Aroclor-1262 [2C]	NY,NC,VA,PA
Aroclor-1268	NY,NC,VA,PA
Aroclor-1268 [2C]	NY,NC,VA,PA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2021
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00112	12/30/2021
NC	North Carolina Div. of Water Quality	652	12/31/2021
NJ	New Jersey DEP	MA007 NELAP	06/30/2021
FL	Florida Department of Health	E871027 NELAP	06/30/2021
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2021
ME	State of Maine	MA00100	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2021
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2021
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2021
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples _____



con-test
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client ATC
 Received By [Signature] Date 2/12/21 Time 1524
 How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____
 Direct from Sampling _____ Ambient _____ Melted Ice _____
 Were samples within Temperature? 2-6°C T By Gun # 3 Actual Temp - 5.4
 By Blank # _____ Actual Temp - _____
 Was Custody Seal Intact? n/a Were Samples Tampered with? n/a
 Was COC Relinquished? T Does Chain Agree With Samples? T
 Are there broken/leaking/loose caps on any samples? F
 Is COC in ink/ Legible? T Were samples received within holding time? F
 Did COC include all pertinent Information? Client T Analysis T Sampler Name T
 Project T ID's T Collection Dates/Times T
 Are Sample labels filled out and legible? T
 Are there Lab to Filters? F Who was notified? _____
 Are there Rushes? F Who was notified? _____
 Are there Short Holds? F Who was notified? _____
 Is there enough Volume? T
 Is there Headspace where applicable? n/a MS/MSD? F
 Proper Media/Containers Used? T Is splitting samples required? F
 Were trip blanks received? F On COC? F
 Do all samples have the proper pH? Acid n/a Base n/a

Vials	#	Containers	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic	16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic	8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-		Flashpoint		Col./Bacteria	2oz Amb/Clear
DI-		Other Glass		Other Plastic	Encore
Thiosulfate-		SOC Kit		Plastic Bag	Frozen:
Sulfuric-		Perchlorate		Ziplock	

Unused Media

Vials	#	Containers	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic	16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic	8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint	2oz Amb/Clear
DI-		Other Plastic		Other Glass	Encore
Thiosulfate-		SOC Kit		Plastic Bag	Frozen:
Sulfuric-		Perchlorate		Ziplock	

Comments:

received post-hold

March 2, 2021

Derrick Wissman
ATC Group Services LLC - West Springfield
73 Williams Franks Drive
West Springfield, MA 01089

Project Location: UMASS Hampden Dining Hall
Client Job Number:
Project Number: 183DW20064
Laboratory Work Order Number: 21B1188

Enclosed are results of analyses for samples received by the laboratory on February 26, 2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Michelle M. Koch
Project Manager

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ATC Group Services LLC - West Springfield
73 Williams Franks Drive
West Springfield, MA 01089
ATTN: Derrick Wissman

REPORT DATE: 3/2/2021

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 183DW20064

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 21B1188

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

PROJECT LOCATION: UMASS Hampden Dining Hall

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
HDH-01A 4" Cont	21B1188-01	Product/Solid		SW-846 8082A	
HDH-01B 8 Cont	21B1188-02	Product/Solid		SW-846 8082A	
HDH-01C 12 Cont	21B1188-03	Product/Solid		SW-846 8082A	
HDH-02A 4" Cont	21B1188-04	Product/Solid		SW-846 8082A	
HDH-02B 8 Cont	21B1188-05	Product/Solid		SW-846 8082A	
HDH-02C 12 Cont	21B1188-06	Product/Solid		SW-846 8082A	
HDH-03A 4" Cont	21B1188-07	Product/Solid		SW-846 8082A	
HDH-03B 8 Cont	21B1188-08	Product/Solid		SW-846 8082A	
HDH-03C 12 Cont	21B1188-09	Product/Solid		SW-846 8082A	

CASE NARRATIVE SUMMARY

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

SW-846 8082A

Qualifications:

MS-21

Matrix spike and/or spike duplicate recovery bias high due to contribution of other Aroclors present in the source sample.

Analyte & Samples(s) Qualified:

Aroclor-1260

B277207-MS1, B277207-MSD1

Aroclor-1260 [2C]

B277207-MS1, B277207-MSD1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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

Project Location: UMASS Hampden Dining Hall

Sample Description:

Work Order: 21B1188

Date Received: 2/26/2021

Field Sample #: HDH-01A 4" Cont

Sampled: 2/26/2021 08:10

Sample ID: 21B1188-01

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:02	TG
Aroclor-1221 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:02	TG
Aroclor-1232 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:02	TG
Aroclor-1242 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:02	TG
Aroclor-1248 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:02	TG
Aroclor-1254 [2]	5.9	0.86	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:02	TG
Aroclor-1260 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:02	TG
Aroclor-1262 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:02	TG
Aroclor-1268 [1]	ND	0.86	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:02	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		89.0	30-150					3/2/21 10:02	
Decachlorobiphenyl [2]		93.3	30-150					3/2/21 10:02	
Tetrachloro-m-xylene [1]		78.9	30-150					3/2/21 10:02	
Tetrachloro-m-xylene [2]		102	30-150					3/2/21 10:02	



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

Project Location: UMASS Hampden Dining Hall

Sample Description:

Work Order: 21B1188

Date Received: 2/26/2021

Field Sample #: HDH-01B 8 Cont

Sampled: 2/26/2021 08:12

Sample ID: 21B1188-02

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.98	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:20	TG
Aroclor-1221 [1]	ND	0.98	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:20	TG
Aroclor-1232 [1]	ND	0.98	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:20	TG
Aroclor-1242 [1]	ND	0.98	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:20	TG
Aroclor-1248 [1]	ND	0.98	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:20	TG
Aroclor-1254 [2]	3.7	0.98	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:20	TG
Aroclor-1260 [1]	ND	0.98	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:20	TG
Aroclor-1262 [1]	ND	0.98	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:20	TG
Aroclor-1268 [1]	ND	0.98	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:20	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		88.9	30-150					3/2/21 10:20	
Decachlorobiphenyl [2]		93.1	30-150					3/2/21 10:20	
Tetrachloro-m-xylene [1]		67.7	30-150					3/2/21 10:20	
Tetrachloro-m-xylene [2]		90.8	30-150					3/2/21 10:20	

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Project Location: UMASS Hampden Dining Hall

Sample Description:

Work Order: 21B1188

Date Received: 2/26/2021

Field Sample #: HDH-01C 12 Cont

Sampled: 2/26/2021 08:20

Sample ID: 21B1188-03

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 10:37	TG
Aroclor-1221 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 10:37	TG
Aroclor-1232 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 10:37	TG
Aroclor-1242 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 10:37	TG
Aroclor-1248 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 10:37	TG
Aroclor-1254 [2]	0.59	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 10:37	TG
Aroclor-1260 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 10:37	TG
Aroclor-1262 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 10:37	TG
Aroclor-1268 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 10:37	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		98.4	30-150					3/2/21 10:37	
Decachlorobiphenyl [2]		108	30-150					3/2/21 10:37	
Tetrachloro-m-xylene [1]		86.9	30-150					3/2/21 10:37	
Tetrachloro-m-xylene [2]		98.3	30-150					3/2/21 10:37	



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Project Location: UMASS Hampden Dining Hall

Sample Description:

Work Order: 21B1188

Date Received: 2/26/2021

Field Sample #: HDH-02A 4" Cont

Sampled: 2/26/2021 08:40

Sample ID: 21B1188-04

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.95	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:55	TG
Aroclor-1221 [1]	ND	0.95	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:55	TG
Aroclor-1232 [1]	ND	0.95	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:55	TG
Aroclor-1242 [1]	ND	0.95	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:55	TG
Aroclor-1248 [1]	ND	0.95	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:55	TG
Aroclor-1254 [2]	1.7	0.95	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:55	TG
Aroclor-1260 [1]	ND	0.95	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:55	TG
Aroclor-1262 [1]	ND	0.95	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:55	TG
Aroclor-1268 [1]	ND	0.95	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 10:55	TG
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	90.8		30-150			3/2/21 10:55			
Decachlorobiphenyl [2]	94.4		30-150			3/2/21 10:55			
Tetrachloro-m-xylene [1]	82.7		30-150			3/2/21 10:55			
Tetrachloro-m-xylene [2]	95.8		30-150			3/2/21 10:55			



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

Project Location: UMASS Hampden Dining Hall

Sample Description:

Work Order: 21B1188

Date Received: 2/26/2021

Field Sample #: HDH-02B 8 Cont

Sampled: 2/26/2021 08:45

Sample ID: 21B1188-05

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.089	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:12	TG
Aroclor-1221 [1]	ND	0.089	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:12	TG
Aroclor-1232 [1]	ND	0.089	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:12	TG
Aroclor-1242 [1]	ND	0.089	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:12	TG
Aroclor-1248 [1]	ND	0.089	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:12	TG
Aroclor-1254 [2]	0.11	0.089	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:12	TG
Aroclor-1260 [1]	ND	0.089	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:12	TG
Aroclor-1262 [1]	ND	0.089	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:12	TG
Aroclor-1268 [1]	ND	0.089	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:12	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		92.5	30-150					3/2/21 11:12	
Decachlorobiphenyl [2]		101	30-150					3/2/21 11:12	
Tetrachloro-m-xylene [1]		77.3	30-150					3/2/21 11:12	
Tetrachloro-m-xylene [2]		88.9	30-150					3/2/21 11:12	



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Project Location: UMASS Hampden Dining Hall

Sample Description:

Work Order: 21B1188

Date Received: 2/26/2021

Field Sample #: HDH-02C 12 Cont

Sampled: 2/26/2021 08:50

Sample ID: 21B1188-06

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:30	TG
Aroclor-1221 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:30	TG
Aroclor-1232 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:30	TG
Aroclor-1242 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:30	TG
Aroclor-1248 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:30	TG
Aroclor-1254 [2]	0.29	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:30	TG
Aroclor-1260 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:30	TG
Aroclor-1262 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:30	TG
Aroclor-1268 [1]	ND	0.088	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 11:30	TG
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	81.3		30-150			3/2/21 11:30			
Decachlorobiphenyl [2]	88.2		30-150			3/2/21 11:30			
Tetrachloro-m-xylene [1]	73.3		30-150			3/2/21 11:30			
Tetrachloro-m-xylene [2]	84.6		30-150			3/2/21 11:30			

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Project Location: UMASS Hampden Dining Hall

Sample Description:

Work Order: 21B1188

Date Received: 2/26/2021

Field Sample #: HDH-03A 4" Cont

Sampled: 2/26/2021 09:10

Sample ID: 21B1188-07

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.84	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 11:47	TG
Aroclor-1221 [1]	ND	0.84	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 11:47	TG
Aroclor-1232 [1]	ND	0.84	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 11:47	TG
Aroclor-1242 [1]	ND	0.84	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 11:47	TG
Aroclor-1248 [1]	ND	0.84	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 11:47	TG
Aroclor-1254 [2]	4.9	0.84	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 11:47	TG
Aroclor-1260 [1]	ND	0.84	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 11:47	TG
Aroclor-1262 [1]	ND	0.84	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 11:47	TG
Aroclor-1268 [1]	ND	0.84	mg/Kg	10		SW-846 8082A	2/27/21	3/2/21 11:47	TG
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	94.4		30-150			3/2/21 11:47			
Decachlorobiphenyl [2]	103		30-150			3/2/21 11:47			
Tetrachloro-m-xylene [1]	89.6		30-150			3/2/21 11:47			
Tetrachloro-m-xylene [2]	99.8		30-150			3/2/21 11:47			



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Project Location: UMASS Hampden Dining Hall

Sample Description:

Work Order: 21B1188

Date Received: 2/26/2021

Field Sample #: HDH-03B 8 Cont

Sampled: 2/26/2021 09:15

Sample ID: 21B1188-08

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.095	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 12:04	TG
Aroclor-1221 [1]	ND	0.095	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 12:04	TG
Aroclor-1232 [1]	ND	0.095	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 12:04	TG
Aroclor-1242 [1]	ND	0.095	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 12:04	TG
Aroclor-1248 [1]	ND	0.095	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 12:04	TG
Aroclor-1254 [2]	0.46	0.095	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 12:04	TG
Aroclor-1260 [1]	ND	0.095	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 12:04	TG
Aroclor-1262 [1]	ND	0.095	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 12:04	TG
Aroclor-1268 [1]	ND	0.095	mg/Kg	1		SW-846 8082A	2/27/21	3/2/21 12:04	TG
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]	95.4	30-150						3/2/21 12:04	
Decachlorobiphenyl [2]	104	30-150						3/2/21 12:04	
Tetrachloro-m-xylene [1]	82.3	30-150						3/2/21 12:04	
Tetrachloro-m-xylene [2]	92.3	30-150						3/2/21 12:04	

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Project Location: UMASS Hampden Dining Hall

Sample Description:

Work Order: 21B1188

Date Received: 2/26/2021

Field Sample #: HDH-03C 12 Cont

Sampled: 2/26/2021 09:20

Sample ID: 21B1188-09

Sample Matrix: Product/Solid

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.42	mg/Kg	5		SW-846 8082A	2/27/21	3/2/21 12:22	TG
Aroclor-1221 [1]	ND	0.42	mg/Kg	5		SW-846 8082A	2/27/21	3/2/21 12:22	TG
Aroclor-1232 [1]	ND	0.42	mg/Kg	5		SW-846 8082A	2/27/21	3/2/21 12:22	TG
Aroclor-1242 [1]	ND	0.42	mg/Kg	5		SW-846 8082A	2/27/21	3/2/21 12:22	TG
Aroclor-1248 [1]	ND	0.42	mg/Kg	5		SW-846 8082A	2/27/21	3/2/21 12:22	TG
Aroclor-1254 [2]	1.2	0.42	mg/Kg	5		SW-846 8082A	2/27/21	3/2/21 12:22	TG
Aroclor-1260 [1]	ND	0.42	mg/Kg	5		SW-846 8082A	2/27/21	3/2/21 12:22	TG
Aroclor-1262 [1]	ND	0.42	mg/Kg	5		SW-846 8082A	2/27/21	3/2/21 12:22	TG
Aroclor-1268 [1]	ND	0.42	mg/Kg	5		SW-846 8082A	2/27/21	3/2/21 12:22	TG

Surrogates	% Recovery	Recovery Limits	Flag/Qual
Decachlorobiphenyl [1]	95.1	30-150	
Decachlorobiphenyl [2]	99.5	30-150	
Tetrachloro-m-xylene [1]	88.7	30-150	
Tetrachloro-m-xylene [2]	99.8	30-150	



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Sample Extraction Data

Prep Method: SW-846 3540C Analytical Method: SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21B1188-01 [HDH-01A 4" Cont]	B277207	2.33	10.0	02/27/21
21B1188-02 [HDH-01B 8 Cont]	B277207	2.05	10.0	02/27/21
21B1188-03 [HDH-01C 12 Cont]	B277207	2.27	10.0	02/27/21
21B1188-04 [HDH-02A 4" Cont]	B277207	2.11	10.0	02/27/21
21B1188-05 [HDH-02B 8 Cont]	B277207	2.24	10.0	02/27/21
21B1188-06 [HDH-02C 12 Cont]	B277207	2.27	10.0	02/27/21
21B1188-07 [HDH-03A 4" Cont]	B277207	2.37	10.0	02/27/21
21B1188-08 [HDH-03B 8 Cont]	B277207	2.10	10.0	02/27/21
21B1188-09 [HDH-03C 12 Cont]	B277207	2.39	10.0	02/27/21

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B277207 - SW-846 3540C										
Blank (B277207-BLK1)										
Prepared: 02/27/21 Analyzed: 03/01/21										
Aroclor-1016	ND	0.10	mg/Kg							
Aroclor-1016 [2C]	ND	0.10	mg/Kg							
Aroclor-1221	ND	0.10	mg/Kg							
Aroclor-1221 [2C]	ND	0.10	mg/Kg							
Aroclor-1232	ND	0.10	mg/Kg							
Aroclor-1232 [2C]	ND	0.10	mg/Kg							
Aroclor-1242	ND	0.10	mg/Kg							
Aroclor-1242 [2C]	ND	0.10	mg/Kg							
Aroclor-1248	ND	0.10	mg/Kg							
Aroclor-1248 [2C]	ND	0.10	mg/Kg							
Aroclor-1254	ND	0.10	mg/Kg							
Aroclor-1254 [2C]	ND	0.10	mg/Kg							
Aroclor-1260	ND	0.10	mg/Kg							
Aroclor-1260 [2C]	ND	0.10	mg/Kg							
Aroclor-1262	ND	0.10	mg/Kg							
Aroclor-1262 [2C]	ND	0.10	mg/Kg							
Aroclor-1268	ND	0.10	mg/Kg							
Aroclor-1268 [2C]	ND	0.10	mg/Kg							
Surrogate: Decachlorobiphenyl	1.08		mg/Kg	1.00		108	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.12		mg/Kg	1.00		112	30-150			
Surrogate: Tetrachloro-m-xylene	0.990		mg/Kg	1.00		99.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.03		mg/Kg	1.00		103	30-150			
LCS (B277207-BS1)										
Prepared: 02/27/21 Analyzed: 03/01/21										
Aroclor-1016	0.93	0.10	mg/Kg	1.00		93.3	40-140			
Aroclor-1016 [2C]	0.97	0.10	mg/Kg	1.00		97.1	40-140			
Aroclor-1260	0.88	0.10	mg/Kg	1.00		87.7	40-140			
Aroclor-1260 [2C]	0.88	0.10	mg/Kg	1.00		87.8	40-140			
Surrogate: Decachlorobiphenyl	1.09		mg/Kg	1.00		109	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.14		mg/Kg	1.00		114	30-150			
Surrogate: Tetrachloro-m-xylene	1.01		mg/Kg	1.00		101	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.06		mg/Kg	1.00		106	30-150			
LCS Dup (B277207-BSD1)										
Prepared: 02/27/21 Analyzed: 03/01/21										
Aroclor-1016	0.91	0.10	mg/Kg	1.00		91.0	40-140	2.52	30	
Aroclor-1016 [2C]	0.95	0.10	mg/Kg	1.00		94.7	40-140	2.52	30	
Aroclor-1260	0.85	0.10	mg/Kg	1.00		84.7	40-140	3.45	30	
Aroclor-1260 [2C]	0.83	0.10	mg/Kg	1.00		83.4	40-140	5.16	30	
Surrogate: Decachlorobiphenyl	1.03		mg/Kg	1.00		103	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.09		mg/Kg	1.00		109	30-150			
Surrogate: Tetrachloro-m-xylene	0.980		mg/Kg	1.00		98.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.04		mg/Kg	1.00		104	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B277207 - SW-846 3540C										
Matrix Spike (B277207-MS1)										
		Source: 21B1188-01			Prepared: 02/27/21		Analyzed: 03/02/21			
Aroclor-1016	1.0	0.87	mg/Kg	0.873	ND	116	40-140			
Aroclor-1016 [2C]	1.0	0.87	mg/Kg	0.873	ND	120	40-140			
Aroclor-1260	1.8	0.87	mg/Kg	0.873	ND	206	* 40-140			MS-21
Aroclor-1260 [2C]	2.0	0.87	mg/Kg	0.873	ND	232	* 40-140			MS-21
Surrogate: Decachlorobiphenyl	0.810		mg/Kg	0.873		92.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.852		mg/Kg	0.873		97.6	30-150			
Surrogate: Tetrachloro-m-xylene	0.791		mg/Kg	0.873		90.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.898		mg/Kg	0.873		103	30-150			
Matrix Spike Dup (B277207-MSD1)										
		Source: 21B1188-01			Prepared: 02/27/21		Analyzed: 03/02/21			
Aroclor-1016	1.2	0.92	mg/Kg	0.922	ND	129	40-140	16.2	50	
Aroclor-1016 [2C]	0.94	0.92	mg/Kg	0.922	ND	102	40-140	10.7	50	
Aroclor-1260	1.8	0.92	mg/Kg	0.922	ND	193	* 40-140	1.51	50	MS-21
Aroclor-1260 [2C]	1.9	0.92	mg/Kg	0.922	ND	211	* 40-140	4.17	50	MS-21
Surrogate: Decachlorobiphenyl	0.749		mg/Kg	0.922		81.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.842		mg/Kg	0.922		91.4	30-150			
Surrogate: Tetrachloro-m-xylene	0.682		mg/Kg	0.922		74.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.731		mg/Kg	0.922		79.3	30-150			



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
SW-846 8082A

HDH-01A 4" Cont

Lab Sample ID: 21B1188-01 Date(s) Analyzed: 03/02/2021 03/02/2021
 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	5.4	
	2	0.000	0.000	0.000	5.9	8.9

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HDH-01B 8 Cont

SW-846 8082A

Lab Sample ID: 21B1188-02 Date(s) Analyzed: 03/02/2021 03/02/2021
 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	3.4	
	2	0.000	0.000	0.000	3.7	5.6



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HDH-01C 12 Cont

SW-846 8082A

Lab Sample ID: 21B1188-03 Date(s) Analyzed: 03/02/2021 03/02/2021
 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	0.55	
	2	0.000	0.000	0.000	0.59	7.0



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

SW-846 8082A

HDH-02A 4" Cont

Lab Sample ID: 21B1188-04 Date(s) Analyzed: 03/02/2021 03/02/2021
 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	1.5	
	2	0.000	0.000	0.000	1.7	12.5

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

IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

HDH-02B 8 Cont

Lab Sample ID: 21B1188-05 Date(s) Analyzed: 03/02/2021 03/02/2021
 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	0.11	
	2	0.000	0.000	0.000	0.11	0.0

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

IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

HDH-02C 12 Cont

SW-846 8082A

Lab Sample ID: 21B1188-06 Date(s) Analyzed: 03/02/2021 03/02/2021
 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	0.28	
	2	0.000	0.000	0.000	0.29	3.5

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

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HDH-03A 4" Cont

SW-846 8082A

Lab Sample ID: 21B1188-07 Date(s) Analyzed: 03/02/2021 03/02/2021
 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	4.5	
	2	0.000	0.000	0.000	4.9	8.5

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

**IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES**
HDH-03B 8 Cont
SW-846 8082A

 Lab Sample ID: 21B1188-08 Date(s) Analyzed: 03/02/2021 03/02/2021

 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	0.44	
	2	0.000	0.000	0.000	0.46	4.4



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

HDH-03C 12 Cont

SW-846 8082A

Lab Sample ID: 21B1188-09 Date(s) Analyzed: 03/02/2021 03/02/2021
 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	1.1	
	2	0.000	0.000	0.000	1.2	8.7



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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

LCS

SW-846 8082A

Lab Sample ID: B277207-BS1 Date(s) Analyzed: 03/01/2021 03/01/2021
 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.93	
	2	0.000	0.000	0.000	0.97	4.2
Aroclor-1260	1	0.000	0.000	0.000	0.88	
	2	0.000	0.000	0.000	0.88	0.0



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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B277207-BSD1 Date(s) Analyzed: 03/01/2021 03/01/2021

Instrument ID (1): ECD 9 Instrument ID (2): ECD 9

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.91	
	2	0.000	0.000	0.000	0.95	4.3
Aroclor-1260	1	0.000	0.000	0.000	0.85	
	2	0.000	0.000	0.000	0.83	2.4

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B277207-MS1 Date(s) Analyzed: 03/02/2021 03/02/2021
 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	1.0	
	2	0.000	0.000	0.000	1.0	0.0
Aroclor-1260	1	0.000	0.000	0.000	1.8	
	2	0.000	0.000	0.000	2.0	10.5

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike Dup

Lab Sample ID: B277207-MSD1 Date(s) Analyzed: 03/02/2021 03/02/2021
 Instrument ID (1): ECD 9 Instrument ID (2): ECD 9
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	1.2	
	2	0.000	0.000	0.000	0.94	24.3
Aroclor-1260	1	0.000	0.000	0.000	1.8	
	2	0.000	0.000	0.000	1.9	5.4

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
MS-21	Matrix spike and/or spike duplicate recovery bias high due to contribution of other Aroclors present in the source sample.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8082A in Product/Solid</i>	
Aroclor-1016	CT,NH,NY,ME,NC,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1262	NY,NC,VA,PA
Aroclor-1262 [2C]	NY,NC,VA,PA
Aroclor-1268	NY,NC,VA,PA
Aroclor-1268 [2C]	NY,NC,VA,PA
<i>SW-846 8082A in Soil</i>	
Aroclor-1016	CT,NH,NY,ME,NC,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1262	NY,NC,VA,PA
Aroclor-1262 [2C]	NY,NC,VA,PA
Aroclor-1268	NY,NC,VA,PA
Aroclor-1268 [2C]	NY,NC,VA,PA

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Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2021
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00112	12/30/2021
NC	North Carolina Div. of Water Quality	652	12/31/2021
NJ	New Jersey DEP	MA007 NELAP	06/30/2021
FL	Florida Department of Health	E871027 NELAP	06/30/2021
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2021
ME	State of Maine	MA00100	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2021
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2021
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2021
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021

Phone: 413-525-2332
Fax: 413-525-6405

Email: info@contestlabs.com



Address: 73 Willow Street
Phone: 413-781-0070
Project Location: *Amber Dining Hall UMass*
Project Number: *183DLS*
Project Manager: *183DLS20064*
Con-Test Quote Name/Number:

Invoice Recipient:
Sampled By: *Jim Caldwell*

7-Day 10-Day
Due Date:
1-Day 3-Day
2-Day 4-Day
Format: PDF EXCEL
Other:
CLP Like Data Pkg Required:
Email To:
Fax To #:

Con-Test Work Order #	Client Sample ID / Description	Sampling Date/Time	Analysis Requested	Matrix Code	Preservation Code	Container Code	# of Containers
1	H0H-01A 4" CANT	02-26-21 810	Soxhlet	A			
2	H0H-01B 8 CANT	02-26-21 812	Soxhlet	A			
3	H0H-01C 12 CANT	02-26-21 820	Soxhlet	A			
4	H0H-02A 4" CANT	02-26-21 840	Soxhlet	A			
5	H0H-02B 6 CANT	02-26-21 845	Soxhlet	A			
6	H0H-02C 12 CANT	02-26-21 850	Soxhlet	A			
7	H0H-03A 4" CANT	02-26-21 910	Soxhlet	A			
8	H0H-03B 8 CANT	02-26-21 915	Soxhlet	A			
9	H0H-03C 12" CANT	02-26-21 920	Soxhlet	A			

Comments: Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

1 Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

2 Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

3 Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Special Requirements:
MA MCP Required
MCP Certification Form Required
CT RCP Required
RCP Certification Form Required
MA State DW Required
PWSID #

Project Entity:
Government Municipality MWRA
Federal City 21 J School
City Brownfield MBTA

Other:
Chromatogram
AIHA-LAP, LLC

PCB ONLY:
Soxhlet
Non Soxhlet

Relinquished by: (signature) *[Signature]* Date/Time: 02-16-21 1504
Received by: (signature) *[Signature]* Date/Time: 02-16-21 1504
Relinquished by: (signature) *[Signature]* Date/Time: 02-16-21 1504
Received by: (signature) *[Signature]* Date/Time:
Relinquished by: (signature) *[Signature]* Date/Time:
Received by: (signature) *[Signature]* Date/Time:



I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples _____



Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client ATC
 Received By GR Date 2/26/21 Time 1504
 How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____
 Direct from Sampling _____ Ambient _____ Melted Ice _____
 Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 2.6
 By Blank # _____ Actual Temp - _____
 Was Custody Seal Intact? NA Were Samples Tampered with? NA
 Was COC Relinquished? T Does Chain Agree With Samples? T
 Are there broken/leaking/loose caps on any samples? F
 Is COC in ink/ Legible? T Were samples received within holding time? T
 Did COC include all pertinent Information? Client T Analysis T Sampler Name T
 Project T ID's T Collection Dates/Times T
 Are Sample labels filled out and legible? T
 Are there Lab to Filters? F Who was notified? _____
 Are there Rushes? F Who was notified? _____
 Are there Short Holds? F Who was notified? _____
 Is there enough Volume? T
 Is there Headspace where applicable? NA MS/MSD? F
 Proper Media/Containers Used? T Is splitting samples required? F
 Were trip blanks received? EARL JACOB AA F On COC? F
 Do all samples have the proper pH? NA Acid _____ Base _____

Vials	Containers				
Unp-	1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-	500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-	250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-	Flashpoint		Col./Bacteria		2oz Amb/Clear
DI-	Other Glass		Other Plastic		Encore
Thiosulfate-	SOC Kit		Plastic Bag		Frozen:
Sulfuric-	Perchlorate		Ziplock		

Unused Media

Vials	Containers				
Unp-	1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-	500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-	250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-	Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-	Other Plastic		Other Glass		Encore
Thiosulfate-	SOC Kit		Plastic Bag		Frozen:
Sulfuric-	Perchlorate		Ziplock		

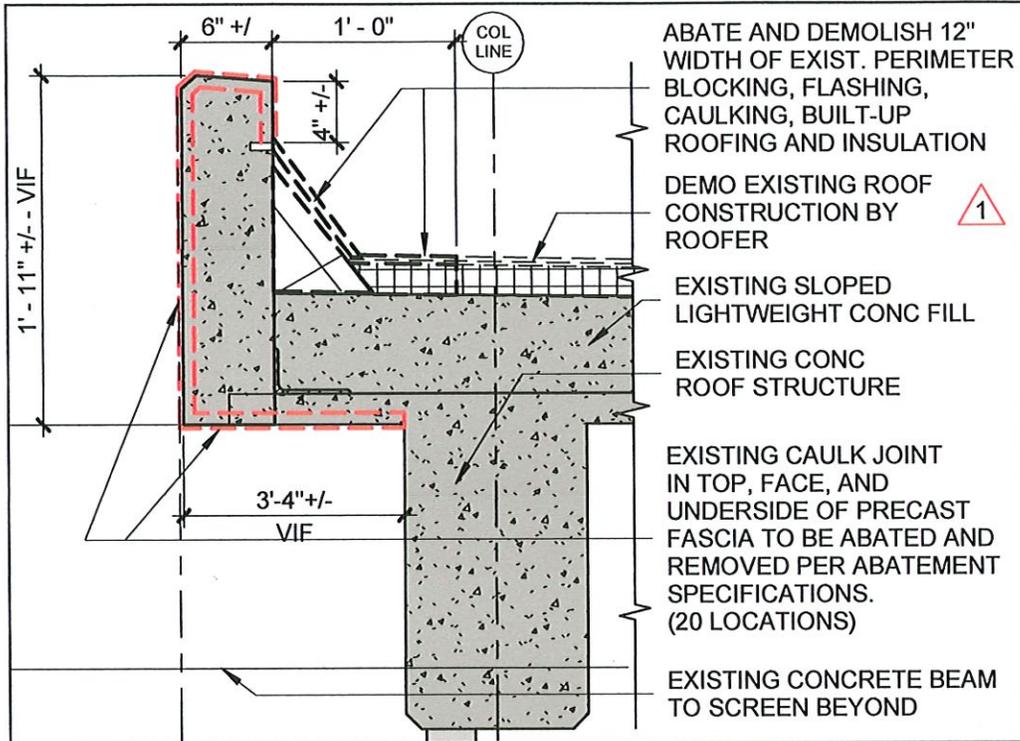
Comments:



August 4, 2022
ATTACHMENT E
Notification of "Risk-Base Clean-Up of PCBs
Hampden Dinning Commons (Roofing Replacement)
University of Massachusetts
Amherst, Massachusetts

ATTACHMENT E

Parapet Wall/Roof Cap Replacement Detail



3 DEMO SECTION AT MAIN ROOF PARAPET

SCALE: 1" = 1'-0"



August 4, 2022
ATTACHMENT F
Notification of "Risk-Base Clean-Up of PCBs
Hampden Dinning Commons (Roofing Replacement)
University of Massachusetts
Amherst, Massachusetts

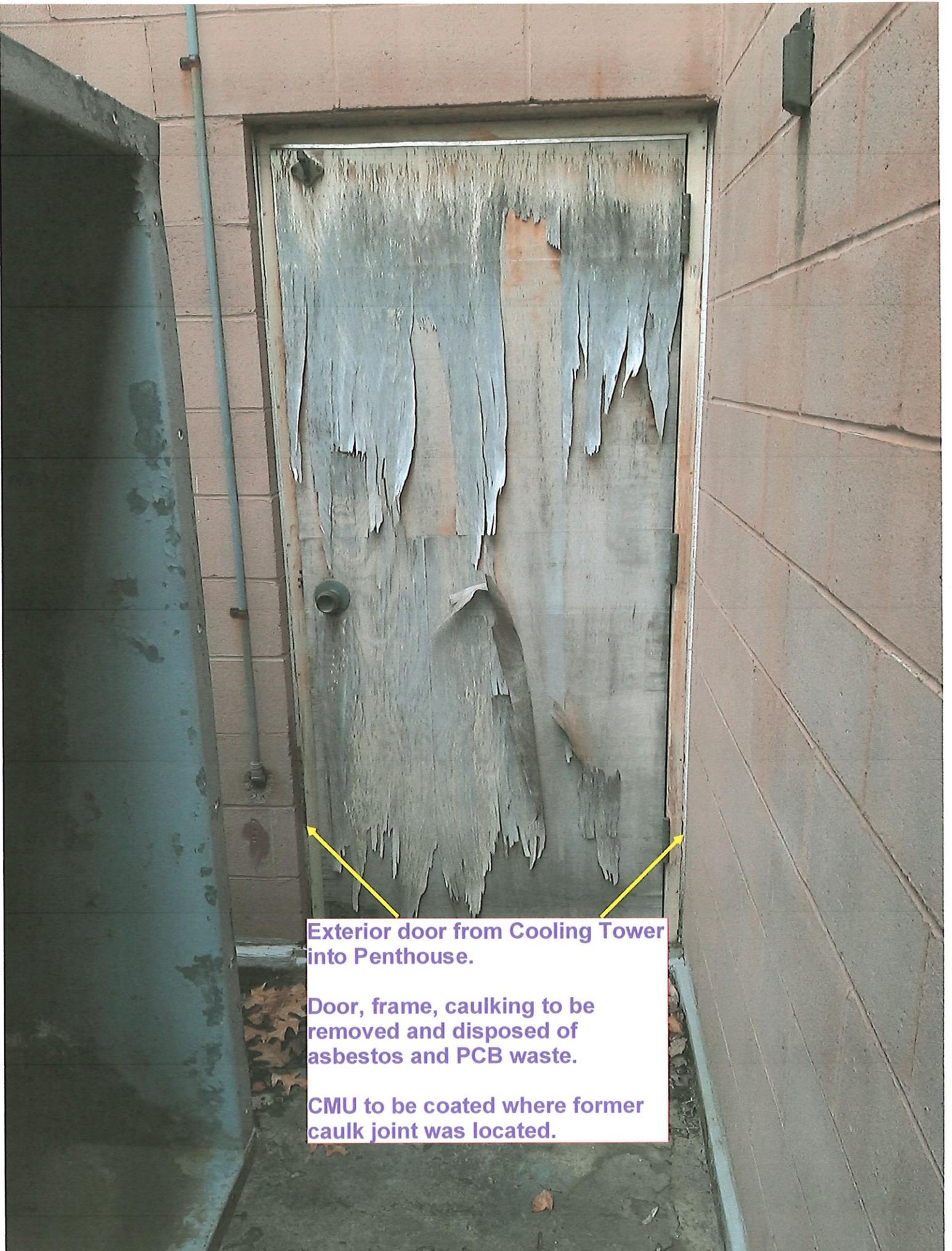
ATTACHMENT F

Site Photos



Concrete pad under Chiller Unit.

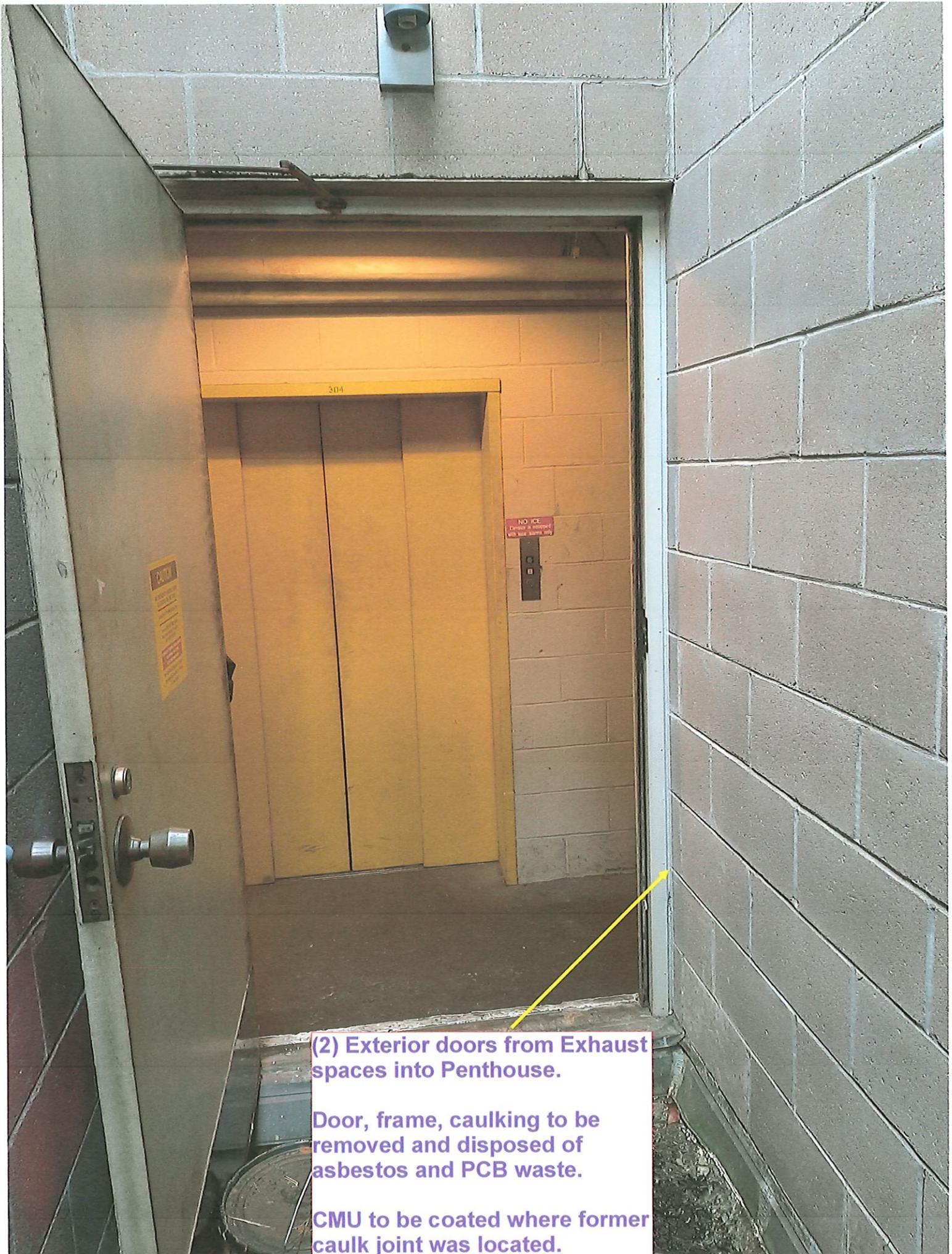
Caulk at joint to be removed and concrete to be cut 6" out from joint and disposed of as asbestos/PCB waste



Exterior door from Cooling Tower into Penthouse.

Door, frame, caulking to be removed and disposed of as asbestos and PCB waste.

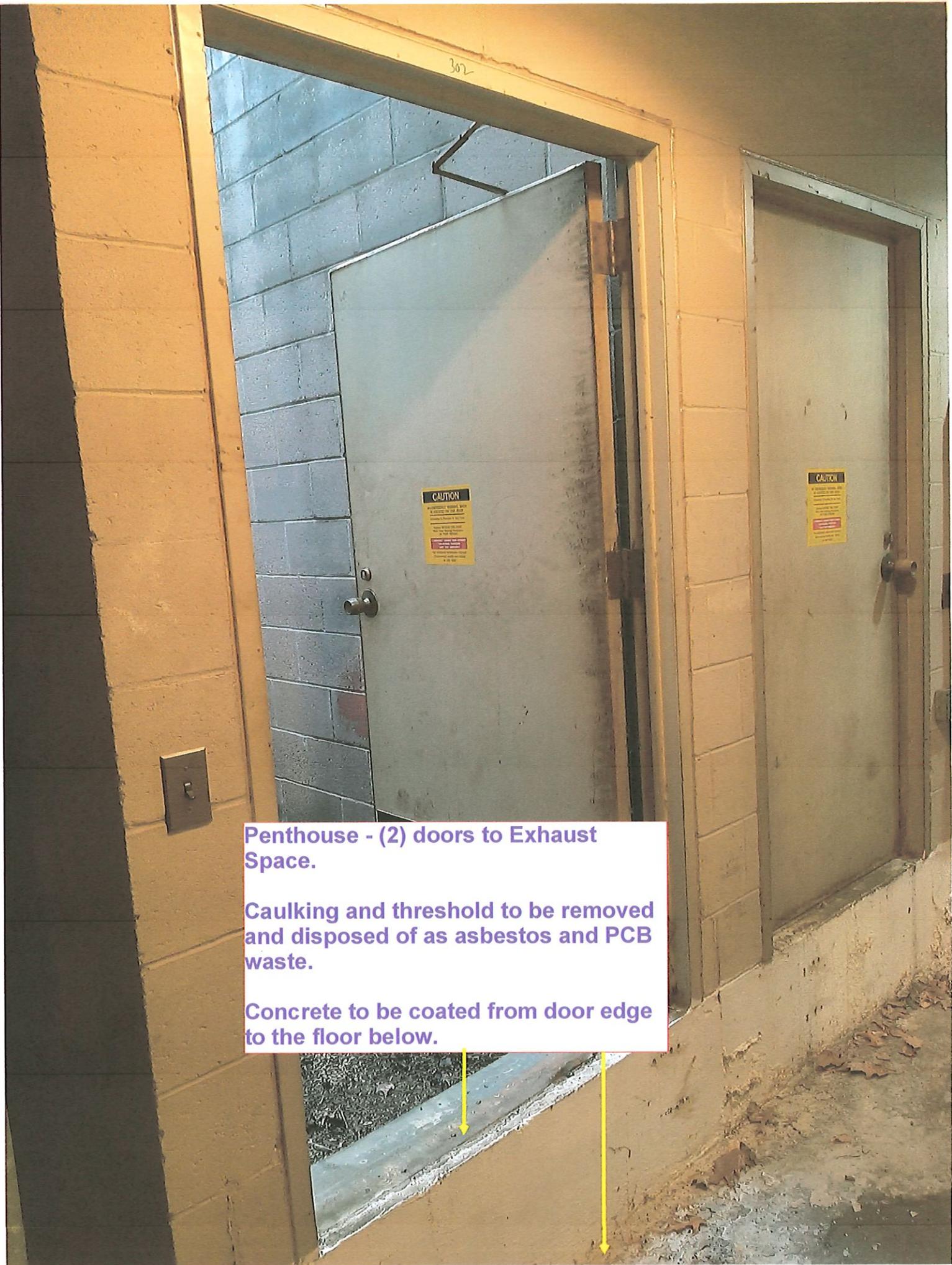
CMU to be coated where former caulk joint was located.



(2) Exterior doors from Exhaust spaces into Penthouse.

Door, frame, caulk to be removed and disposed of as asbestos and PCB waste.

CMU to be coated where former caulk joint was located.



302

CAUTION
Asbestos and PCBs may be present in the door frame, threshold, and surrounding concrete. Avoid disturbing these materials. For more information, contact the Environmental Health and Safety Department at 302-837-2222.

CAUTION
Asbestos and PCBs may be present in the door frame, threshold, and surrounding concrete. Avoid disturbing these materials. For more information, contact the Environmental Health and Safety Department at 302-837-2222.

Penthouse - (2) doors to Exhaust Space.

Caulking and threshold to be removed and disposed of as asbestos and PCB waste.

Concrete to be coated from door edge to the floor below.



303

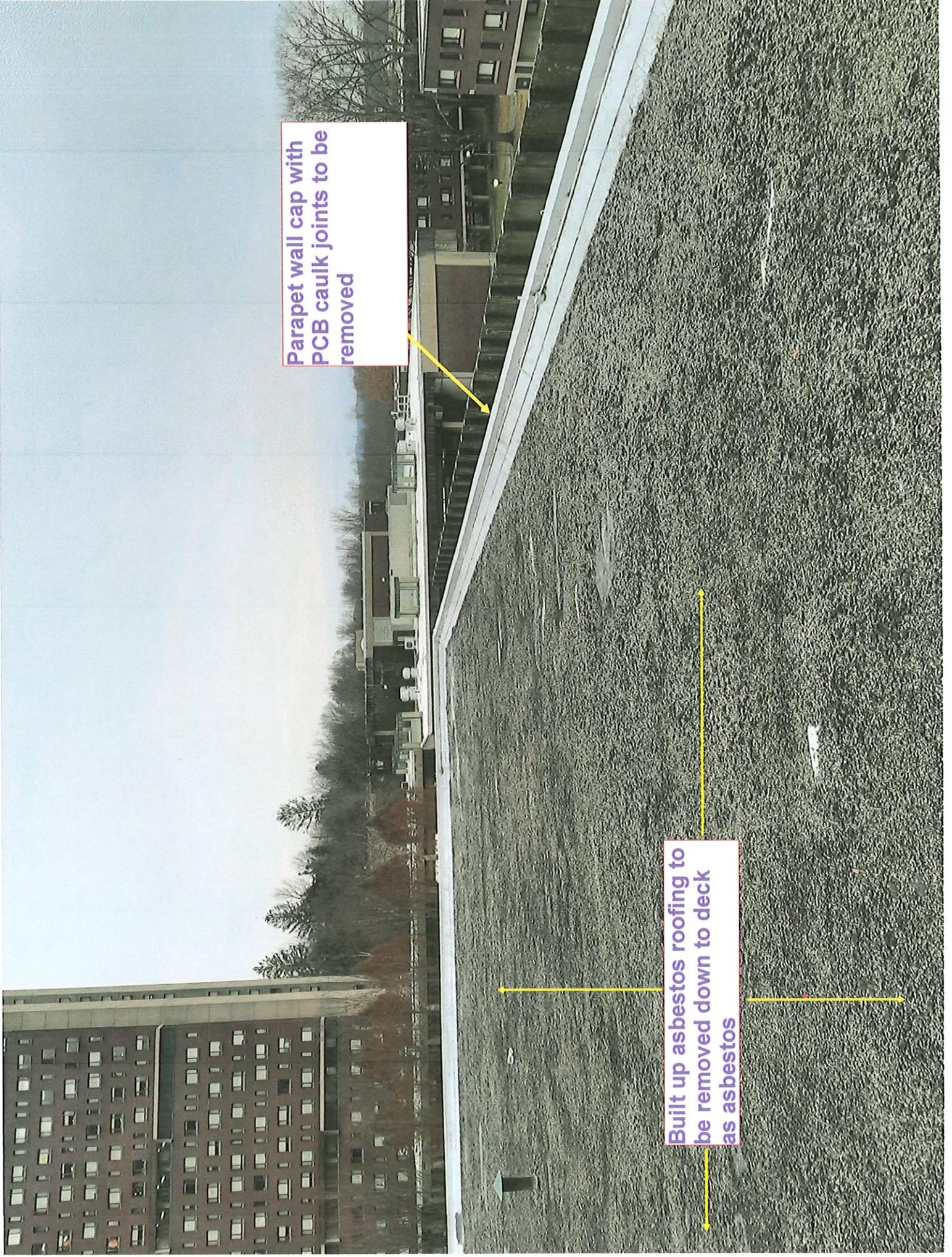
CAUTION
AN EMERGENCY WARNING SIREN
IS LOCATED ON THIS ROOF.
Activation is Possible At Any Time.
Anyone BEYOND THIS POINT
Must Wear Hearing Protection
ON THEIR PERSON.
**• DANGEROUS WORKING CONDITIONS
• USE HEARING PROTECTION
(Ear Plugs Recommended)**
For Additional Information Contact:
Environmental Health and Safety
at 543-2022

Penthouse - door to Chiller.
**Caulking and threshold to be
removed and disposed of as
asbestos and PCB waste.**
**Concrete to be coated from
door edge to the floor below.**



Parapet wall cap with
PCB caulk joints to be
removed

Built up asbestos roofing to
be removed down to deck
as asbestos





Caulk at seams of parapet wall cap.
Caulk to be removed and disposed
of asbestos and PCB waste.
Wall cap to be coated in its entirety.



Caulk at seams of fascia/soffit.
Caulk to be removed and disposed of as asbestos and PCB waste
Concrete to be coated 24" to each side of the joints