



Environmental Services, Inc.

90 Brookfield Street South Windsor, CT 06074-1262 (860) 528-9500 (860) 289-0138 (fax)
www.e-s-i.com

REPORT

(Amended to include data from additional testing of
building materials conducted on June 2, 2017.)

PRE-RENOVATION INVESTIGATIVE SURVEY FOR ASBESTOS- CONTAINING MATERIALS, LEAD BASED PAINT & POLYCHLORINATED BIPHENYLS

**BEARDSLEY PUMP HOUSE
119 WHITE PLAINS ROAD
TRUMBULL, CT 06611**

Prepared for
Arcadis U.S., Inc.
44 S Broadway, 15th Floor
White Plains, NY 10601

Prepared by
Environmental Services, Inc
South Windsor, Connecticut
November 23, 2016
Amended June 21, 2017





Environmental Services, Inc.

90 Brookfield Street South Windsor, CT 06074-1262 (860) 528-9500 (860) 289-0138 (fax)
www.e-s-i.com

**PRE-RENOVATION
INVESTIGATIVE SURVEY FOR ASBESTOS-
CONTAINING MATERIALS, LEAD BASED PAINT
& POLYCHLORINATED BIPHENYLS**

**BEARDSLEY PUMP HOUSE
119 WHITE PLAINS ROAD
TRUMBULL, CT 06611**

Arcadis U.S., Inc.

44 S Broadway, 15th Floor
White Plains, NY 10601

Prepared by
Environmental Services, Inc
South Windsor, Connecticut

Jonathan Fitzsimonds, CSP
Inspector (CT Lic #: 000199)

Bruce Devannay
Project Manager

ESI Project No. 2016-0860
June 21, 2017

Environmental Services, Inc
90 Brookfield Street
South Windsor, Connecticut 06074
Telephone (860) 528-9500
Facsimile (860) 289-0138



TABLE OF CONTENTS

EXECUTIVE SUMMARY

PROJECT OUTLINE

TABLES

- 1.....BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
- 2.....IDENTIFIED ASBESTOS CONTAINING MATERIALS
- 3.....CONFIRMED NON-ASBESTOS CONTAINING MATERIALS
- 4.....PCB SAMPLE SUMMARY
- 5.....LEAD BASED PAINT SAMPLE SUMMARY
- 6.....INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS,
WASTES AND ITEMS IDENTIFIED

APPENDICES

- A.....SITE SKETCH
- B.....INSPECTOR ACCREDITATIONS
- C.....ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORMS
- D.....ASBESTOS LABORATORY ANALYSIS DATA
- E.....PCB & LEAD PAINT CHIP SAMPLE CHAIN OF CUSTODY
- F.....PCB & LEAD LABORATORY ANALYSIS DATA

EXECUTIVE SUMMARY

On November 3, 2016 and June 2, 2017 Environmental Services, Inc (ESI) of South Windsor, Connecticut conducted an inspection for suspect asbestos-containing materials (ACM), lead based paint (LBP) and polychlorinated biphenyls (PCBs) at the Beardsley Pump House located at 119 White Plains Road, Trumbull, CT. The inspection was initiated prior to planned renovation activities in accordance with USEPA Asbestos National Emissions Standard for Hazardous Air Pollutants (NESHAPS) requirements.

The scope of the inspection was limited to specific areas of the interior & exterior directly affected by the scheduled renovations. A Connecticut licensed asbestos inspector from Environmental Services, Inc conducted the inspection in accordance with USEPA AHERA protocols and ASTM Standard E2356-04. Bulk samples of suspect materials were collected and analyzed via polarized light microscopy (PLM) and in the case of Non-Friable Organically Bound (NOB) materials, transmission electron microscopy (TEM) at CTDPH/NVLAP accredited laboratories. Suspect ACMs were identified as White Cloth Flexible Duct Connector, White Cloth Gasket Material, 12" White Vinyl Floor Tile & associated Mastic, 12" Tan Vinyl Floor Tile & associated Mastic, 12" White Speckled Vinyl Floor Tile & associated Mastic, Interior Window Frame Caulk, Interior Window Glazing Putty, Exterior Window/Louvre Frame Caulk, Exterior Window Glazing Putty, three types of Glue behind Cove Molding, and two types of Ceiling Plaster.

ACM to be impacted by demolition activities must be removed prior to disturbance in accordance with OSHA, USEPA, CTDPH, and CTDEEP standards for asbestos abatement & disposal. Detailed results of the asbestos survey can be found in Tables 1-3 and Appendices A through D.

A certified lead inspector from Environmental Services, Inc conducted a limited LBP survey around the interior and exterior of the building being affected by scheduled renovations. Exposure levels for lead in the construction industry are regulated by OSHA 29 CFR 1926.62. Construction activities disturbing surfaces containing lead paint which are likely to be employed, such as grinding, cutting, and demolition has been known to expose workers to airborne levels of lead in excess of the permissible

exposure limit (PEL). The Contractor shall conduct demolition work in conformance with the OSHA regulations, utilizing engineering controls and personal protective equipment. In addition, disposal of construction waste containing lead paint is subject to regulation under both the CTDEEP Hazardous and Special Waste Management (22a-209-1 through 16; 22a-449(c)-11; 22a-449(c)-13; 22a-449(c)-100 through 110; and 22a-454) and USEPA RCRA Hazardous Waste Management (40 CFR Parts 260 through 274) regulations. However, scrap metal is exempt from regulation under the CTDEEP/USEPA Hazardous Waste Regulations provided it is properly recycled. The Contractor shall recycle any lead painted scrap metal at an approved scrap metal recycling facility.

Building debris waste disposal determination with regards to potentially hazardous lead painted components is regulated by USEPA Resource Conservation Recovery Act (RCRA) Hazardous Waste Regulations (40 CFR Parts 260 through 274), and the CTDEEP Hazardous Waste Regulations (22a-209-1 and 22a-449(c)). A Toxicity Characterization Leachate Procedure (TCLP) test for Lead should be collected and analyzed prior to the disposal of any lead impacted waste.

PROJECT OUTLINE

Project Address:	119 White Plains Road Trumbull, CT 06611
MDC Project Manager:	Vanessa McPherson
ESI Project No.:	2016-0860
ESI Project Manager:	Bruce Devanney
Asbestos Inspector:	Jonathan Fitzsimonds, CSP (LIC #000199)
Lead Inspector:	Jonathan Fitzsimonds, CSP
Date of Inspection:	11/03/2016 & 06/02/2017
Asbestos Identified:	Yes (See Table #2)
Lead Based Paint Identified:	Yes (See Table #4)
Add'l Haz./Reg. Mat./Waste/Items:	Yes (See Table #5)

Additional Notes:

The site investigation was limited to the collection and analysis of suspect Asbestos Containing Materials, Polychlorinated Biphenyls & Lead Based Paint from specific areas of the interior and exterior of the subject building. The property consists of a one story brick pump house with lower level "Wet & Dry Wells" below the building. (see site drawing for orientation and identification).

Tables

TABLE 1 BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT			
Sample No.	Sample Location	Material Identification	% and Type of Asbestos
2016-0860-01	Garage-Generator Air Intake	Flexible Duct Connector-White Cloth	5% Chrysotile
2016-0860-02	Garage-Generator Air Intake	Flexible Duct Connector-White Cloth	NA/PS
2016-0860-03	Garage-Generator Louvre Vent	Gasket-White Cloth	10% Chrysotile
2016-0860-04	Garage-Generator Louvre Vent	Gasket-White Cloth	NA/PS
2016-0860-05	Garage Locker Room	12" Vinyl Floor Tile (VFT)-White	10% Chrysotile
2016-0860-06	Garage Locker Room	12" Vinyl Floor Tile (VFT)-White	NA/PS
2016-0860-07	Garage Locker Room	Mastic-below 12" White VFT	NAD ¹
2016-0860-08	Garage Locker Room	Mastic-below 12" White VFT	NAD
2016-0860-09	Garage-Window to Boiler Room	Window Frame Caulk-Interior	5% Chrysotile
2016-0860-10	Boiler Room-Window to Garage	Window Frame Caulk-Interior	NA/PS
2016-0860-11	Garage-Window to Boiler Room	Window Glazing Putty-Interior	10% Chrysotile
2016-0860-12	Boiler Room -Window to Garage	Window Glazing Putty-Interior	NA/PS
2016-0860-13	Garage Locker Room	Glue-behind Vinyl Cove Molding	NAD
2016-0860-14	Garage Locker Room	Glue-behind Vinyl Cove Molding	NAD
2016-0860-15	Window-Left of Office Entrance	Window/Louvre Frame Caulk-Exterior	NAD
2016-0860-16	Louvre-Left Side of Building	Window/Louvre Frame Caulk-Exterior	NAD
2016-0860-17	Window-Right of Office Entrance	Window Glazing Putty-Exterior	NAD ¹
2016-0860-18	Window-Right Side of Building	Window Glazing Putty-Exterior	NAD
2016-0860-19	Office	12" Vinyl Floor Tile (VFT)-Tan	10% Chrysotile
2016-0860-20	Office	12" Vinyl Floor Tile (VFT)-Tan	NA/PS
2016-0860-21	Office	Mastic-below 12" Tan VFT	NAD ¹
2016-0860-22	Office	Mastic-below 12" Tan VFT	NAD

PVA..... Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS..... Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
SNA..... Sample Not Analyzed
NAD..... No asbestos detected
¹..... NOB material; result confirmed by TEM analyses

TABLE 1 BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT			
Sample No.	Sample Location	Material Identification	% and Type of Asbestos
2016-0860-23	Wet Well	Flexible Duct Connector-White Cloth	30% Chrysotile
2016-0860-24	Wet Well	Flexible Duct Connector-White Cloth	NA/PS
2016-0860-25	Lavatory	12" Vinyl Floor Tile (VFT)-White	5% Chrysotile
2016-0860-26	Lavatory	12" Vinyl Floor Tile (VFT)-White	NA/PS
2016-0860-27	Lavatory	Mastic-below 12" White VFT	NAD ¹
2016-0860-28	Lavatory	Mastic-below 12" White VFT	NAD
2016-0860-29	Office	Glue-behind Vinyl Cove Molding	NAD
2016-0860-30	Office	Glue-behind Vinyl Cove Molding	NAD
2016-0860-31	Lavatory	Glue-behind Vinyl Cove Molding	NAD
2016-0860-32	Lavatory	Glue-behind Vinyl Cove Molding	NAD
2016-0860-33	Garage	Ceiling Plaster-1 Layer System	NAD
2016-0860-34	Boiler Room	Ceiling Plaster-1 Layer System	NAD
2016-0860-35	Office	Ceiling Plaster-2 Layer System	NAD
2016-0860-36	Office	Ceiling Plaster-2 Layer System	NAD
2016-0860-37	Garage Locker Room	Wallboard/Sheetrock	NAD
2016-0860-38	Garage Locker Room	Wallboard/Sheetrock	NAD
2016-0860-39	Garage Locker Room	Joint Compound	NAD
2016-0860-40	Garage Locker Room	Joint Compound	NAD
2016-0860-41	Boiler Room	Boiler Rope Gasket	NAD
2016-0860-42	Boiler Room	Boiler Rope Gasket	NAD
2016-0860-43	Boiler Room	Boiler Section Gasket	NAD
2016-0860-44	Boiler Room	Boiler Section Gasket	NAD

PVA..... Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS..... Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
SNA..... Sample Not Analyzed
NAD..... No asbestos detected
¹..... NOB material; result confirmed by TEM analyses

TABLE 1 BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT			
Sample No.	Sample Location	Material Identification	% and Type of Asbestos
2016-0860-45	Boiler Room	Burner Gasket	NAD
2016-0860-46	Boiler Room	Burner Gasket	NAD
2016-0860-47	Main Entrance-Door to Office	Door Frame Caulk-Exterior	10% Chrysotile
2016-0860-48	Loading Dock-Door to Garage	Door Frame Caulk-Exterior	NA/PS

PVA..... Not analyzed/positive via inseparable association with a confirmed positive ACM
 NA/PS..... Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
 SNA..... Sample Not Analyzed
 NAD..... No asbestos detected
¹..... NOB material; result confirmed by TEM analyses

TABLE 2
IDENTIFIED ASBESTOS CONTAINING MATERIALS
BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT

Sample No.	Material	General Location	NESHAP Category	Estimated Quantity	Abatement Method
2016-0860-1	White Cloth Flexible Duct Connector	Generator Air Intake Duct	Friable	8 sqft	Negative Pressure Enclosure
2016-0860-3	White Cloth Gasket	Generator Air Intake Louvre	Friable	8 sqft	Negative Pressure Enclosure
2016-0860-5	12" White Vinyl Floor Tile	Locker Room	Category I Non-Friable	25 sqft	Negative Pressure Enclosure
2016-0860-9	Interior Window Frame Caulk	Boiler Room	Category II Non-Friable	12 linft	Negative Pressure Enclosure
2016-0860-11	Interior Window Glazing Putty	Boiler Room	Category II Non-Friable	12 linft	Negative Pressure Enclosure
2016-0860-19	12" Tan Vinyl Floor Tile	Office	Category I Non-Friable	96 sqft	Negative Pressure Enclosure
2016-0860-23	White Cloth Flexible Duct Connector	Wet Well	Friable	4 sqft	Intact Removal
2016-0860-25	12" White Vinyl Floor Tile	Lavatory	Category I Non-Friable	25 sqft	Negative Pressure Enclosure
2016-0860-47	Door Frame Caulk	¹ Door to Office ² Door from Garage to Loading-Dock ³ Doors to Electrical Room	Category II Non-Friable	54 linft	Intact Removal

NESHAP Categories

Friable = crumbled, pulverized or reduced to powder by hand pressure when dry

Category I Non-friable = packings, gaskets, resilient floor covering and asphalt roofing

Category II Non-friable = all non-friable that is not Category I

TABLE 3 CONFIRMED NON-ASBESTOS CONTAINING MATERIALS BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT	
Material	General Location
Mastic-below 12" White VFT	Locker Room
Window Frame Caulk-Interior	Window between Boiler Room & Garage
Glue-behind Vinyl Cove Molding	Locker Room
Window/Louvre Frame Caulk-Exterior	Throughout
Window Glazing Putty-Exterior	Throughout
Mastic-below 12" Tan VFT	Office
Mastic-below 12" White VFT	Lavatory
Glue-behind Vinyl Cove Molding	Office
Glue-behind Vinyl Cove Molding	Lavatory
Ceiling Plaster-1 Layer System	Garage, Boiler Room, Locker Room
Ceiling Plaster-2 Layer System	Office & Lavatory
Wallboard/Sheetrock	Locker Room
Joint Compound	Locker Room
Boiler Rope Gasket	Boiler Room
Boiler Section Gasket	Boiler Room
Burner Gasket	Boiler Room

TABLE 4 PCB SAMPLE SUMMARY BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT			
Sample No.	Sample Location	Material Identification	Result
2016-0860-PCB-1	Window-Right Side of the Office Door (Exterior)	Window Frame Caulk	860 µg/kg (ppb) Aroclor 1248
2016-0860-PCB-2	1 st Louvre on Left Side of Building (Exterior)	Louvre Frame Caulk	None Detected
2016-0860-PCB-3	Door from Loading Dock to Garage	Door Frame Caulk	None Detected
2016-0860-PCB-4	Generator Louvre Frame (Exterior)	Louvre Frame Caulk	520 µg/kg (ppb) Aroclor 1254
2016-0860-PCB-5*	Wet Well Flow Meter (Interior)	Gray Paint on Metal	79 µg/kg (ppb) Aroclor 1254
2016-0860-PCB-6*	Wet Well Pump (Interior)	White Paint on Metal	2100 µg/kg (ppb) Aroclor 1254
2016-0860-PCB-7*	Wet Well Discharge Header (Interior)	Gray Paint on Metal	1700 µg/kg (ppb) Aroclor 1254
2016-0860-PCB-8*	Wet Well Wall (Interior)	Yellow Paint on CMU	None Detected
2016-0860-PCB-9*	Window-Right Side of the Office Door (Exterior)	Brick	None Detected
2016-0860-PCB-10*	Generator Louvre Frame (Exterior)	Brick	None Detected

*indicates that the sample was collected on June 2, 2017

CMU-Concrete Masonry Unit (Cement Block)

TABLE 5 Lead Paint (Pb) SAMPLE SUMMARY BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT			
2016-0860-Pb-1	Window-Left Side of the Office Door (Exterior)	Black Paint on Wood	2,000 mg/kg (ppm)
2016-0860-Pb-2	Door from Loading Dock to Garage (Exterior)	Gray Paint on Metal	12.4 mg/kg (ppm)
2016-0860-Pb-3	Door to Office (Exterior)	Black Paint on Wood	36,600 mg/kg (ppm)
2016-0860-Pb-4	Garage-Door to Locker Room (Interior)	Gray Paint on Metal	Not Analyzed
2016-0860-Pb-5	1 st Window on Left Side of Garage (Interior)	Gray Paint on Wood	1,080 mg/kg (ppm)
2016-0860-Pb-6	Garage Wall-(Interior)	Yellow Paint on CMU	134 mg/kg (ppm)
2016-0860-Pb-7	Wet Well Pump Motor (Interior)	Gray Paint on Metal	46,100 mg/kg (ppm)
2016-0860-Pb-8	Wet Well Pump-(Interior)	White Paint on Metal	1,370 mg/kg (ppm)
2016-0860-Pb-9	Wet Well Check Valve (Interior)	Red Paint on Metal	801 mg/kg (ppm)
2016-0860-Pb-10	Wet Well Discharge Header (Interior)	Drk Gray Paint on Metal	61,500 mg/kg (ppm)
2016-0860-Pb-11	Wet Well Discharge Header (Interior)	Lt Gray Paint on Metal	23,300 mg/kg (ppm)
2016-0860-Pb-12	Wet Well Wall-(Interior)	Yellow Paint on CMU	7,520 mg/kg (ppm)

*indicates that the sample was collected on June 2, 2017

CMU-Concrete Masonry Unit (Cement Block)

Note: Any metal components should be recycled to promote waste minimization efforts, rather than disposed of, and the recycling operation is exempt from the USEPA RCRA and CTDEP Hazardous Waste regulations with respect to lead.

See Appendix F for specific Laboratory Results

TABLE 5 Lead Paint (Pb) SAMPLE SUMMARY BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT			
2016-0860-Pb-13	Wet Well Suction Piping (Interior)	Gray Paint on Metal	26,600 mg/kg (ppm)
2016-0860-Pb-14	Window Shutter- Left Side of the Office Door (Exterior)	Black Paint on Wood	5,020 mg/kg (ppm)
2016-0860-Pb-15	Garage Lavatory Wall-(Interior)	Green Paint on CMU	146 mg/kg (ppm)

*indicates that the sample was collected on June 2, 2017

CMU-Concrete Masonry Unit (Cement Block)

Note: Any metal components should be recycled to promote waste minimization efforts, rather than disposed of, and the recycling operation is exempt from the USEPA RCRA and CTDEP Hazardous Waste regulations with respect to lead.

See Appendix F for specific Laboratory Results

TABLE 6 INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES & ITEMS IDENTIFIED BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT				
Quantity	Size	Material/Item	General Location	Potential Hazard
18	4 ft	Fluorescent Lamps	Garage/Generator Room	UW — Hg lamps
9	n/a	Fluorescent Lamp Ballasts	Garage/Generator Room	CRW — PCB ballasts
3	4 ft	Fluorescent Lamps	Locker Room	UW — Hg lamps
1	n/a	Fluorescent Lamp Ballasts	Locker Room	CRW — PCB ballasts
28	4 ft	Fluorescent Lamps	Office	UW — Hg lamps
7	n/a	Fluorescent Lamp Ballasts	Office	CRW — PCB ballasts
1	Compact Fluorescent	Fluorescent Lamps	Lavatory	UW — Hg lamps

CRW.....Connecticut Regulated Waste — PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludge, etc. (CR04), waste chemical solids (CR05)

UW.....Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)

III.....Inhalation hazard (silica, etc.)

I.....Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140°F) (D001)

C.....Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)

T.....Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation

R.....Reactive — may contain ingredients which are unstable, react violently with water or are explosive (D003)

APPENDIX A

SITE SKETCH

APPENDIX B

INSPECTOR ACCREDITATIONS

APPENDIX C

ASBESTOS BULK SAMPLE CHAIN OF CUSTODY

APPENDIX D

ASBESTOS LABORATORY ANALYSIS DATA

APPENDIX E

PCB & LEAD PAINT CHIP CHAIN OF CUSTODY

APPENDIX F

PCB & LEAD PAINT CHIP LABORATORY ANALYSIS DATA



Environmental Services, Inc.

90 Brookfield Street South Windsor, CT 06074-1262 (860) 528-9500 (860) 289-0138 (fax)
www.e-s-i.com

REPORT

PRE-RENOVATION INVESTIGATIVE SURVEY FOR ASBESTOS- CONTAINING MATERIALS, LEAD BASED PAINT & POLYCHLORINATED BIPHENYLS

**BEARDSLEY PUMP HOUSE
119 WHITE PLAINS ROAD
TRUMBULL, CT 06611**

Prepared for
Arcadis U.S., Inc.
44 S Broadway, 15th Floor
White Plains, NY 10601

Prepared by
Environmental Services, Inc
South Windsor, Connecticut
November 23, 2016





Environmental Services, Inc.

90 Brookfield Street South Windsor, CT 06074-1262 (860) 528-9500 (860) 289-0138 (fax)

www.e-s-i.com

**PRE-RENOVATION
INVESTIGATIVE SURVEY FOR ASBESTOS-
CONTAINING MATERIALS, LEAD BASED PAINT
& POLYCHLORINATED BIPHENYLS**

**BEARDSLEY PUMP HOUSE
119 WHITE PLAINS ROAD
TRUMBULL, CT 06611**

Arcadis U.S., Inc.

44 S Broadway, 15th Floor
White Plains, NY 10601

Prepared by
Environmental Services, Inc
South Windsor, Connecticut

Jonathan Fitzsimonds, CSP
Inspector (CT Lic #: 000199)

Bruce Devannay
Project Manager

ESI Project No. 2016-0860
November 23, 2016

Environmental Services, Inc
90 Brookfield Street
South Windsor, Connecticut 06074
Telephone (860) 528-9500
Facsimile (860) 289-0138



TABLE OF CONTENTS

EXECUTIVE SUMMARY

PROJECT OUTLINE

TABLES

- 1..... BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
- 2..... IDENTIFIED ASBESTOS CONTAINING MATERIALS
- 3..... CONFIRMED NON-ASBESTOS CONTAINING MATERIALS
- 4..... LEAD BASED PAINT SAMPLE SUMMARY
- 5..... INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED

APPENDICES

- A..... SITE SKETCH
- B..... INSPECTOR ACCREDITATIONS
- C..... ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORMS
- D..... ASBESTOS LABORATORY ANALYSIS DATA
- E..... PCB & LEAD PAINT CHIP SAMPLE CHAIN OF CUSTODY
- F..... PCB & LEAD LABORATORY ANALYSIS DATA

EXECUTIVE SUMMARY

On November 3, 2016 Environmental Services, Inc (ESI) of South Windsor, Connecticut conducted an inspection for suspect asbestos-containing materials (ACM), lead based paint (LBP) and polychlorinated biphenyls (PCBs) at the Beardsley Pump House located at 119 White Plains Road, Trumbull, CT. The inspection was initiated prior to planned renovation activities in accordance with USEPA Asbestos National Emissions Standard for Hazardous Air Pollutants (NESHAPS) requirements.

The scope of the inspection was limited to specific areas of the interior & exterior directly affected by the scheduled renovations. A Connecticut licensed asbestos inspector from Environmental Services, Inc conducted the inspection in accordance with USEPA AHERA protocols and ASTM Standard E2356-04. Bulk samples of suspect materials were collected and analyzed via polarized light microscopy (PLM) and in the case of Non-Friable Organically Bound (NOB) materials, transmission electron microscopy (TEM) at CTDPH/NVLAP accredited laboratories. Suspect ACMs were identified as White Cloth Flexible Duct Connector, White Cloth Gasket Material, 12” White Vinyl Floor Tile & associated Mastic, 12” Tan Vinyl Floor Tile & associated Mastic, 12” White Speckled Vinyl Floor Tile & associated Mastic, Interior Window Frame Caulk, Interior Window Glazing Putty, Exterior Window/Louvre Frame Caulk, Exterior Window Glazing Putty, three types of Glue behind Cove Molding, and two types of Ceiling Plaster.

ACM to be impacted by demolition activities must be removed prior to disturbance in accordance with OSHA, USEPA, CTDPH, and CTDEEP standards for asbestos abatement & disposal. Detailed results of the asbestos survey can be found in Tables 1-3 and Appendices A through D.

A certified lead inspector from Environmental Services, Inc conducted a limited LBP survey around the interior and exterior of the building being affected by scheduled renovations. Exposure levels for

lead in the construction industry are regulated by OSHA 29 CFR 1926.62. Construction activities disturbing surfaces containing lead paint which are likely to be employed, such as grinding, cutting, and demolition has been known to expose workers to airborne levels of lead in excess of the permissible exposure limit (PEL). The Contractor shall conduct demolition work in conformance with the OSHA regulations, utilizing engineering controls and personal protective equipment. In addition, disposal of construction waste containing lead paint is subject to regulation under both the CTDEEP Hazardous and Special Waste Management (22a-209-1 through 16; 22a-449(c)-11; 22a-449(c)-13; 22a-449(c)-100 through 110; and 22a-454) and USEPA RCRA Hazardous Waste Management (40 CFR Parts 260 through 274) regulations. However, scrap metal is exempt from regulation under the CTDEEP/USEPA Hazardous Waste Regulations provided it is properly recycled. The Contractor shall recycle any lead painted scrap metal at an approved scrap metal recycling facility.

Building debris waste disposal determination with regards to potentially hazardous lead painted components is regulated by USEPA Resource Conservation Recovery Act (RCRA) Hazardous Waste Regulations (40 CFR Parts 260 through 274), and the CTDEEP Hazardous Waste Regulations (22a209-1 and 22a-449(c)). A Toxicity Characterization Leachate Procedure (TCLP) test for Lead should be collected and analyzed prior to the disposal of any lead impacted waste.

PROJECT OUTLINE

Project Address:	119 White Plains Road Trumbull, CT 06611
MDC Project Manager:	Vanessa McPhearson
ESI Project No.:	2016-0860
ESI Project Manager:	Bruce Devanney
Asbestos Inspector:	Jonathan Fitzsimonds, CSP (LIC #000199)
Lead Inspector:	Jonathan Fitzsimonds, CSP
Date of Inspection:	11/03/2016
Asbestos Identified:	Yes (See Table #2)
Lead Based Paint Identified:	Yes (See Table #4)
Add'l Haz./Reg. Mat./Waste/Items:	Yes (See Table #5)

Additional Notes:

The site investigation was limited to the collection and analysis of suspect Asbestos Containing Materials, Polychlorinated Biphenyls & Lead Based Paint from specific areas of the interior and exterior of the subject building. The property consists of a one story brick pump house with a lower level "Wet Well" below the building. (see site drawing for orientation and identification).

Tables

TABLE 1 BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT			
Sample No.	Sample Location	Material Identification	% and Type of Asbestos
2016-0860-01	Garage-Generator Air Intake	Flexible Duct Connector-White Cloth	5% Chrysotile
2016-0860-02	Garage-Generator Air Intake	Flexible Duct Connector-White Cloth	NA/PS
2016-0860-03	Garage-Generator Louvre Vent	Gasket-White Cloth	10% Chrysotile
2016-0860-04	Garage-Generator Louvre Vent	Gasket-White Cloth	NA/PS
2016-0860-05	Garage Locker Room	12" Vinyl Floor Tile (VFT)-White	10% Chrysotile
2016-0860-06	Garage Locker Room	12" Vinyl Floor Tile (VFT)-White	NA/PS
2016-0860-07	Garage Locker Room	Mastic-below 12" White VFT	NAD ¹
2016-0860-08	Garage Locker Room	Mastic-below 12" White VFT	NAD
2016-0860-09	Garage-Window to Boiler Room	Window Frame Caulk-Interior	5% Chrysotile
2016-0860-10	Boiler Room-Window to Garage	Window Frame Caulk-Interior	NA/PS
2016-0860-11	Garage-Window to Boiler Room	Window Glazing Putty-Interior	10% Chrysotile
2016-0860-12	Boiler Room -Window to Garage	Window Glazing Putty-Interior	NA/PS
2016-0860-13	Garage Locker Room	Glue-behind Vinyl Cove Molding	NAD
2016-0860-14	Garage Locker Room	Glue-behind Vinyl Cove Molding	NAD
2016-0860-15	Window-Left of Office Entrance	Window/Louvre Frame Caulk-Exterior	NAD
2016-0860-16	Louvre-Left Side of Building	Window/Louvre Frame Caulk-Exterior	NAD
2016-0860-17	Window-Right of Office Entrance	Window Glazing Putty-Exterior	NAD ¹
2016-0860-18	Window-Right Side of Building	Window Glazing Putty-Exterior	NAD
2016-0860-19	Office	12" Vinyl Floor Tile (VFT)-Tan	10% Chrysotile
2016-0860-20	Office	12" Vinyl Floor Tile (VFT)-Tan	NA/PS
2016-0860-21	Office	Mastic-below 12" Tan VFT	NAD ¹
2016-0860-22	Office	Mastic-below 12" Tan VFT	NAD

PVA..... Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS..... Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
SNA..... Sample Not Analyzed
NAD..... No asbestos detected
¹..... NOB material; result confirmed by TEM analyses

TABLE 1 BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT			
Sample No.	Sample Location	Material Identification	% and Type of Asbestos
2016-0860-23	Wet Well	Flexible Duct Connector-White Cloth	30% Chrysotile
2016-0860-24	Wet Well	Flexible Duct Connector-White Cloth	NA/PS
2016-0860-25	Lavatory	12" Vinyl Floor Tile (VFT)-White	5% Chrysotile
2016-0860-26	Lavatory	12" Vinyl Floor Tile (VFT)-White	NA/PS
2016-0860-27	Lavatory	Mastic-below 12" White VFT	NAD ¹
2016-0860-28	Lavatory	Mastic-below 12" White VFT	NAD
2016-0860-29	Office	Glue-behind Vinyl Cove Molding	NAD
2016-0860-30	Office	Glue-behind Vinyl Cove Molding	NAD
2016-0860-31	Lavatory	Glue-behind Vinyl Cove Molding	NAD
2016-0860-32	Lavatory	Glue-behind Vinyl Cove Molding	NAD
2016-0860-33	Garage	Ceiling Plaster-1 Layer System	NAD
2016-0860-34	Boiler Room	Ceiling Plaster-1 Layer System	NAD
2016-0860-35	Office	Ceiling Plaster-2 Layer System	NAD
2016-0860-36	Office	Ceiling Plaster-2 Layer System	NAD
2016-0860-37	Garage Locker Room	Wallboard/Sheetrock	NAD
2016-0860-38	Garage Locker Room	Wallboard/Sheetrock	NAD
2016-0860-39	Garage Locker Room	Joint Compound	NAD
2016-0860-40	Garage Locker Room	Joint Compound	NAD
2016-0860-41	Boiler Room	Boiler Rope Gasket	NAD
2016-0860-42	Boiler Room	Boiler Rope Gasket	NAD
2016-0860-43	Boiler Room	Boiler Section Gasket	NAD
2016-0860-44	Boiler Room	Boiler Section Gasket	NAD

PVA..... Not analyzed/positive via inseparable association with a confirmed positive ACM
 NA/PS..... Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
 SNA..... Sample Not Analyzed
 NAD..... No asbestos detected
¹..... NOB material; result confirmed by TEM analyses

TABLE 1 BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT			
Sample No.	Sample Location	Material Identification	% and Type of Asbestos
2016-0860-45	Boiler Room	Burner Gasket	NAD
2016-0860-46	Boiler Room	Burner Gasket	NAD
2016-0860-47	Main Entrance-Door to Office	Door Frame Caulk-Exterior	10% Chrysotile
2016-0860-48	Loading Dock-Door to Garage	Door Frame Caulk-Exterior	NA/PS

PVA..... Not analyzed/positive via inseparable association with a confirmed positive ACM
 NA/PS..... Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
 SNA..... Sample Not Analyzed
 NAD..... No asbestos detected
¹..... NOB material; result confirmed by TEM analyses

TABLE 2
IDENTIFIED ASBESTOS CONTAINING MATERIALS
BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT

Sample No.	Material	General Location	NESHAP Category	Estimated Quantity	Abatement Method
2016-0860-1	White Cloth Flexible Duct Connector	Generator Air Intake Duct	Friable	8 sqft	Negative Pressure Enclosure
2016-0860-3	White Cloth Gasket	Generator Air Intake Louvre	Friable	8 sqft	Negative Pressure Enclosure
2016-0860-5	12" White Vinyl Floor Tile	Locker Room	Category I Non-Friable	25 sqft	Negative Pressure Enclosure
2016-0860-9	Interior Window Frame Caulk	Boiler Room	Category II Non-Friable	12 linft	Negative Pressure Enclosure
2016-0860-11	Interior Window Glazing Putty	Boiler Room	Category II Non-Friable	12 linft	Negative Pressure Enclosure
2016-0860-19	12" Tan Vinyl Floor Tile	Office	Category I Non-Friable	96 sqft	Negative Pressure Enclosure
2016-0860-23	White Cloth Flexible Duct Connector	Wet Well	Friable	4 sqft	Intact Removal
2016-0860-25	12" White Vinyl Floor Tile	Lavatory	Category I Non-Friable	25 sqft	Negative Pressure Enclosure
2016-0860-47	Door Frame Caulk	¹ Door to Office ² Door from Garage to Loading-Dock ³ Doors to Electrical Room	Category II Non-Friable	54 linft	Intact Removal

NESHAP Categories

Friable = crumbled, pulverized or reduced to powder by hand pressure when dry

Category I Non-friable = packings, gaskets, resilient floor covering and asphalt roofing

Category II Non-friable = all non-friable that is not Category I

TABLE 3 CONFIRMED NON-ASBESTOS CONTAINING MATERIALS BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT	
Material	General Location
Mastic-below 12" White VFT	Locker Room
Window Frame Caulk-Interior	Window between Boiler Room & Garage
Glue-behind Vinyl Cove Molding	Locker Room
Window/Louvre Frame Caulk-Exterior	Throughout
Window Glazing Putty-Exterior	Throughout
Mastic-below 12" Tan VFT	Office
Mastic-below 12" White VFT	Lavatory
Glue-behind Vinyl Cove Molding	Office
Glue-behind Vinyl Cove Molding	Lavatory
Ceiling Plaster-1 Layer System	Garage, Boiler Room, Locker Room
Ceiling Plaster-2 Layer System	Office & Lavatory
Wallboard/Sheetrock	Locker Room
Joint Compound	Locker Room
Boiler Rope Gasket	Boiler Room
Boiler Section Gasket	Boiler Room
Burner Gasket	Boiler Room

TABLE 4 PCB CAULK & LEAD BASED PAINT SAMPLE SUMMARY BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT			
Sample No.	Sample Location	Material Identification	Result
2016-0860-PCB-1	Window-Right Side of the Office Door	Window Frame Caulk	860 µg/kg (ppb) Aroclor 1248
2016-0860-PCB-2	1 st Louvre on Left Side of Building	Louvre Frame Caulk	None Detected
2016-0860-PCB-3	Door from Loading Dock to Garage	Door Frame Caulk	None Detected
2016-0860-PCB-4	Generator Louvre Frame	Generator Louvre Frame Caulk	520 µg/kg (ppb) Aroclor 1254
2016-0860-Pb-1	Window-Left Side of the Office Door	Ext Black Window Sash	2,000 mg/kg (ppm)
2016-0860-Pb-2	Door from Loading Dock to Garage	Ext Gray Door	12.4 mg/kg (ppm)
2016-0860-Pb-3	Door to Office	Ext Black Door Frame	36,600 mg/kg (ppm)
2016-0860-Pb-4	Garage-Door to Locker Room	Interior Gray Door	1,080 mg/kg (ppm)
2016-0860-Pb-5	1 st Window on Left Side of Garage	Interior Gray Window Frame	Not Analyzed
2016-0860-Pb-6	Garage Wall	Interior Yellow Wall	134 mg/kg (ppm)

Note: Any metal components should be recycled to promote waste minimization efforts, rather than disposed of, and the recycling operation is exempt from the USEPA RCRA and CTDEP Hazardous Waste regulations with respect to lead.

See Appendix F for specific Laboratory Results

Beardsley Pump House

119 White Plains Road, Trumbull, CT 06611

November 23, 2016

Page | 14

TABLE 5 INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES & ITEMS IDENTIFIED BEARDSLEY PUMP HOUSE, 119 WHITE PLAINS ROAD, TRUMBULL, CT				
Quantity	Size	Material/Item	General Location	Potential Hazard
18	4 ft	Fluorescent Lamps	Garage/Generator Room	UW — Hg lamps
9	n/a	Fluorescent Lamp Ballasts	Garage/Generator Room	CRW — PCB ballasts
3	4 ft	Fluorescent Lamps	Locker Room	UW — Hg lamps
1	n/a	Fluorescent Lamp Ballasts	Locker Room	CRW — PCB ballasts
28	4 ft	Fluorescent Lamps	Office	UW — Hg lamps
7	n/a	Fluorescent Lamp Ballasts	Office	CRW — PCB ballasts
1	Compact Fluorescent	Fluorescent Lamps	Lavatory	UW — Hg lamps

CRW.....Connecticut Regulated Waste — PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)

UW.....Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)

III.....Inhalation hazard (silicas, etc.)

I.....Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140°F) (D001)

C.....Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)

T.....Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation

R.....Reactive — may contain ingredients which are unstable, react violently with water or are explosive (D003)

APPENDIX A

SITE SKETCH

**30% SUBMITTAL
DO NOT USE FOR
CONSTRUCTION**

CITY OF YOUR PROJECT
TOWN OF TRUMBULL,
CONNECTICUT

BEARDSLEY PUMP STATION UPGRADE

ARCADIS PROJ. NO. 06532002.0000

[illegible]

COPYRIGHT: ARCADIS U.S., INC.
2015

DATE: SEPTMEBER 2016

PROJECT NO.: 06532002.0000

FILE NAME: A-01

DESIGNED BY: R. BELLO

DRAWN BY: R. BRIDGE

CHECKED BY: _____

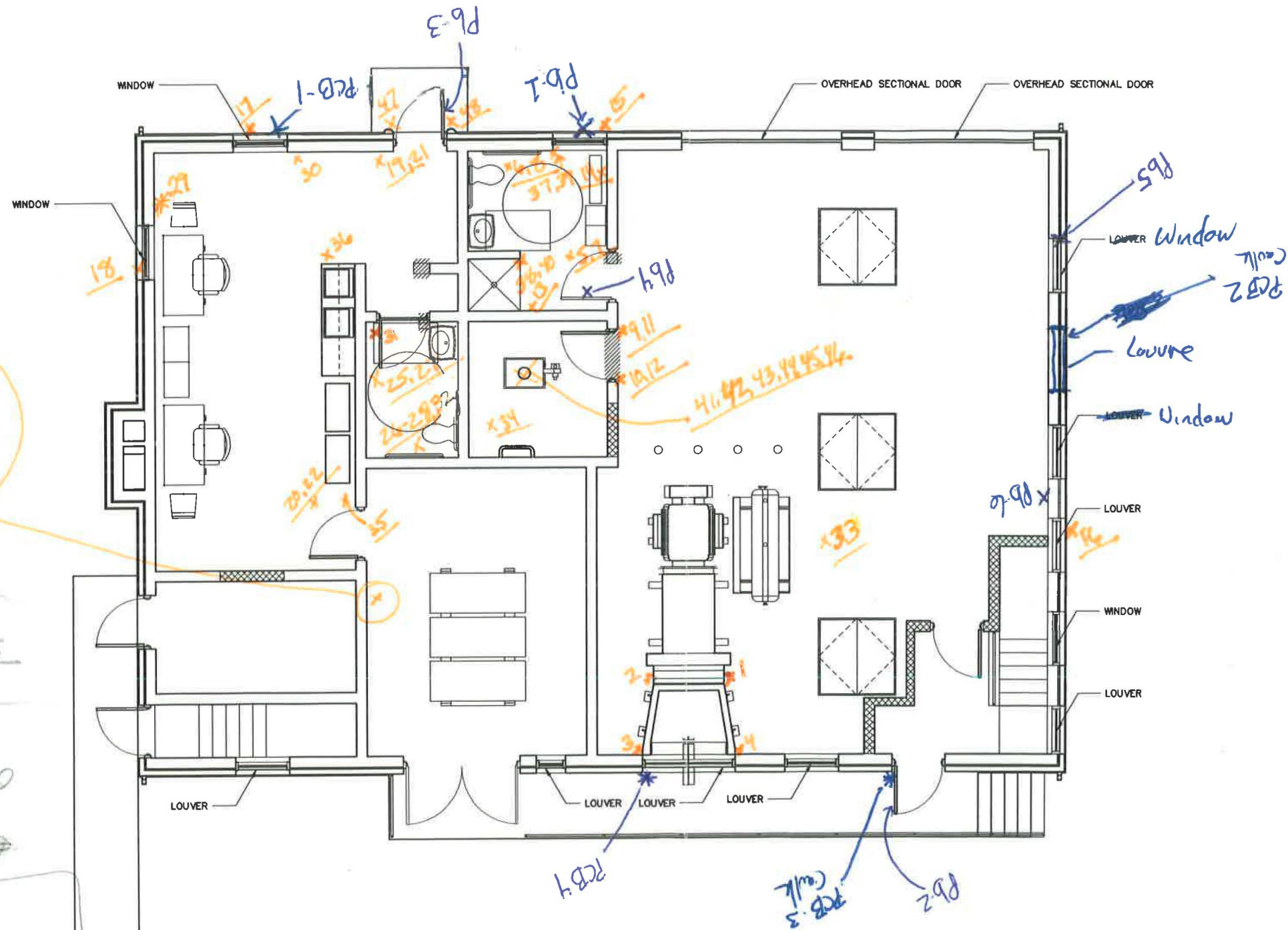
SHEET TITLE

ARCHITECTURAL

SCALE: $1/4"=1'-0"$

A-01

SHEET 1 OF XXX



* = Asbestos Sample

PCB & Pb samples

Inside Artwell
below floor
23, 24

3/19 D 244E

761109 L
9 10/18 80 01410

3
Lodge room 10/10/64
10/11/64

Garage/Generator
room 18 floor bulbs
9 bulbs

APPENDIX B

INSPECTOR ACCREDITATIONS

EnviroMed Services, Inc.

25 Science Park • New Haven, Connecticut 06511 • (203) 786-5580

Certificate of Completion

Jonathan W. Fitzsimonds

SS: 043-60-2181

has successfully completed, and passed an examination covering the contents of the initial three (3) day (24 hour) course for Asbestos Abatement Building Inspectors. Required by the EPA Revised MAP for accreditation under the TSCA Title II as self-certified by Trainer 10/3/94.

10/3/96, 10/4/96 & 10/7/96

Course Date (s)

10/7/96

Exam Date

10/7/97

Expiration Date

18556 Asb-05

Certificate Number

Lawrence P. Connor C.I.H.

Training Coordinator

CERTIFICATE OF ACHIEVEMENT

This certifies that

Jonathan Fitzsimonds

has successfully completed the
4 Hour Asbestos Site Inspector Refresher Training
Asbestos Accreditation Under TSCA Title II
40 CFR Part 763

conducted by

ATC Group Services, LLC
73 William Franks Drive
West Springfield, MA 01089
(413) 781-0070

Gregory Morsch

Principal Instructor: Gregory Morsch

May 19, 2016

Date of Course

May 19, 2017

Expiration Date

Gregory Morsch

Regional Training Manager: Gregory Morsch

SLAR-5451

Certificate Number

May 19, 2016

Examination Date



JONATHAN P. FITZSIMONDS
143 HYDE RD
WEST HARTFORD CT 06117-1621

Dear JONATHAN P. FITZSIMONDS,

Attached you will find your validated certificate for the coming year. Should you have any questions about your certificate renewal, please do not hesitate to write or call:

Department of Public Health
P.O. Box 340308
M.S.#12MQA
Hartford, CT 06134-0308

(860) 509-7603
oplc.dph@ct.gov
www.ct.gov/dph/license

Sincerely,

RAUL PINO, MD, MPH, COMMISSIONER
DEPARTMENT OF PUBLIC HEALTH

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT

THE INDIVIDUAL NAMED BELOW IS CERTIFIED
BY THIS DEPARTMENT AS A

ASBESTOS CONSULTANT-INSP/MGMT PLANNER

JONATHAN P. FITZSIMONDS

CERTIFICATE NO.

000199

CURRENT THROUGH

05/31/17

VALIDATION NO.

03-467377

SIGNATURE

COMMISSIONER

EMPLOYER'S COPY

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME

JONATHAN P. FITZSIMONDS

VALIDATION NO.

03-467377

CERTIFICATE NO.

000199

CURRENT THROUGH

05/31/17

PROFESSION

ASBESTOS CONSULTANT-INSP/MGMT PLANNER

SIGNATURE

COMMISSIONER

INSTRUCTIONS:

1. Detach and sign each of the cards on this form
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.
4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

WALLET CARD

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME

JONATHAN P. FITZSIMONDS

VALIDATION NO.

03-467377

CERTIFICATE NO.

000199

CURRENT THROUGH

05/31/17

PROFESSION

ASBESTOS CONSULTANT-INSP/MGMT PLANNER

SIGNATURE

COMMISSIONER

EnviroMed Services, Inc.

470 Murdock Avenue • Meriden, Connecticut 06450 • (203) 238-4846

Certificate of Completion

Jonathan P. Fitzsimonds

110 Elmfield Street, West Hartford, Connecticut 06110

has successfully completed a three (3) day, twenty four (24) hour course in Lead Inspector Training approved in accordance with the Department of Public Health Standards established pursuant to Section 20-477 of the Connecticut General Statutes.

4/12-14/2004

Course Date

4/14/2004

Exam Date

4/14/2005

Expiration Date

23436Pb-02

Certificate Number

Lawrence J. Caron C.I.H.

Training Manager

CERTIFICATE OF ACHIEVEMENT

This certifies that

Jonathan Fitzsimonds

143 Hyde Road, W. Hartford, CT 06117

has successfully completed the
EPA Model Lead Inspector Technician Refresher Training

745.225

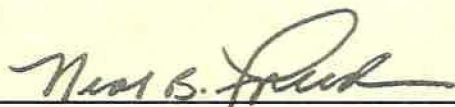
conducted by

ATC Group Services LLC

73 William Franks Drive

West Springfield, MA 01089

(413) 781-0070

A handwritten signature in dark ink, appearing to read "Neal B. Freud". The signature is fluid and cursive, written over a horizontal line.

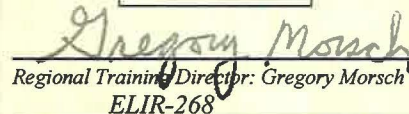
Principal Instructor: Neal Freud

September 29, 2016

Date of Course

September 29, 2016

Exam Date

A handwritten signature in dark ink, appearing to read "Gregory Morsch". The signature is cursive, written over a horizontal line.

Regional Training Director: Gregory Morsch

ELIR-268

Certificate Number

BCSP | BOARD OF CERTIFIED SAFETY PROFESSIONALS

2301 W. Bradley Avenue, Champaign, IL 61821 | P: +1 217-359-9263
To verify current status, visit bcsp.org/certification_directory.

Having met the applicable requirements defined by its bylaws,
BCSP hereby authorizes the use of

Certified Safety Professional (CSP)
to
Jonathan P Fitzsimonds

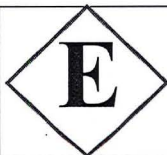
Certificate #
CSP-24167

Expires on
12/31/2016


SECRETARY

APPENDIX C

ASBESTOS BULK SAMPLE CHAIN OF CUSTODY



Environmental Services, Inc

90 Brookfield Street, South Windsor, CT 06074
Ph. (860) 528-9500 / fax. (860) 289-0138

Chain of Custody

Project #: 2016-0860

Client: Arcadis, Inc

PO #: 68550

88847

Edition: June 2015

PROJECT NAME: 2016-0860 Trumbull "Beardsley" Pump House
119 White Plains Road
Trumbull, CT

PARAMETERS

TURN AROUND TIME

PLM		24 hr		48 hr		3 day	<input checked="" type="checkbox"/> 5 day
TEM		24 hr		48 hr	<input checked="" type="checkbox"/>	3 day	5 day

INSPECTOR (signature)

INSPECTOR (printed)

Jonathan Fitzsimonds

PLM EPA
600/R93/116
(Positive Stop)
PLM EPA
600/R93/116
(w Gravimetric Reduction)
(Positive Stop)
ANALYZE BY
LAYER
POINT COUNT
(if >1% & <10%)
TEM NY NOB 198.4
(if PLM Series Neg)

MATERIAL

FIELD SAMPLE NUMBER	DATE	TYPE		SAMPLE LOCATION	PLM EPA 600/R93/116 (Positive Stop)	PLM EPA 600/R93/116 (w Gravimetric Reduction) (Positive Stop)	ANALYZE BY LAYER	POINT COUNT (if >1% & <10%)	TEM NY NOB 198.4 (if PLM Series Neg)	MATERIAL
		Comp	Grab							
2016-0860-01	11/03/2016		X	Garage-Generator Air Intake	X					Flexible Duct Connector-white cloth
2016-0860-02	11/03/2016		X	Garage-Generator Air Intake	X					Flexible Duct Connector-white cloth
2016-0860-03	11/03/2016		X	Garage-Generator Louvre	X					Gasket-white cloth
2016-0860-04	11/03/2016		X	Garage-Generator Louvre	X					Gasket-white cloth
2016-0860-05	11/03/2016		X	Locker Room	X				X	12" Vinyl Floor Tile-white
2016-0860-06	11/03/2016		X	Locker Room	X					12" Vinyl Floor Tile-white
2016-0860-07	11/03/2016		X	Locker Room	X				X	Mastic-below 12" white vinyl floor tile
2016-0860-08	11/03/2016		X	Locker Room	X					Mastic-below 12" white vinyl floor tile
2016-0860-09	11/03/2016		X	Garage-window to boiler rm	X					Window Frame Caulk-interior
2016-0860-10	11/03/2016		X	Boiler Rm-window to garage	X					Window Frame Caulk-interior
2016-0860-11	11/03/2016		X	Garage-window to boiler rm	X				X	Window Glazing Putty-interior
2016-0860-12	11/03/2016		X	Boiler Rm-window to garage	X					Window Glazing Putty-interior

Relinquished By (Signature)

Date

Received By (Signature)

Date

Relinquished By (Signature)

Date

Received By (Signature)

Date

(Printed)

Time

(Printed)

Time

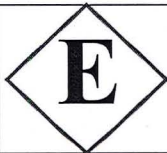
(Printed)

Time

(Printed)

Time

Remarks



Environmental Services, Inc

90 Brookfield Street, South Windsor, CT 06074
Ph. (860) 528-9500 / fax. (860) 289-0138

Chain of Custody

Project #: 2016-0860

PO #: 68550

Client: Arcadis, Inc

Edition: June 2015

88847

PROJECT NAME: 2016-0860 Trumbull "Beardsley" Pump House
119 White Plains Road
Trumbull, CT

PARAMETERS

TURN AROUND TIME

PLM		24 hr	48 hr		3 day	<input checked="" type="checkbox"/> 5 day
TEM		24 hr	48 hr	<input checked="" type="checkbox"/>	3 day	5 day

INSPECTOR (signature)

INSPECTOR (printed)

Jonathan Fitzsimonds

PLM EPA
600/R93/116
(Positive Stop)
PLM EPA
600/R93/116
(w Gravimetric Reduction)
(Positive Stop)
ANALYZE BY
LAYER
POINT COUNT
(if >1% & <10%)
TEM NY NOB 198.4
(if PLM Series Neg)

MATERIAL

FIELD SAMPLE NUMBER	DATE	TYPE	SAMPLE LOCATION	PLM EPA 600/R93/116 (Positive Stop)	PLM EPA 600/R93/116 (w Gravimetric Reduction) (Positive Stop)	ANALYZE BY LAYER	POINT COUNT (if >1% & <10%)	TEM NY NOB 198.4 (if PLM Series Neg)	MATERIAL
2016-0860- 13	11/03/2016	X	Locker Room	X					Glue-behind vinyl cove base molding
2016-0860- 14	11/03/2016	X	Locker Room	X					Glue-behind vinyl cove base molding
2016-0860- 15	11/03/2016	X	Window to Left of Office Entrance	X					Window/Louvre Frame Caulk-exterior
2016-0860- 16	11/03/2016	X	O/S Garage- Left Side of Bldg	X					Window/Louvre Frame Caulk-exterior
2016-0860- 17	11/03/2016	X	Window to Right of Office Entrance	X				X	Window Glazing Putty-exterior
2016-0860- 18	11/03/2016	X	O/S Office- Right Side of Bldg	X					Window Glazing Putty-exterior
2016-0860- 19	11/03/2016	X	Office	X				X	12" Vinyl Floor Tile-tan
2016-0860- 20	11/03/2016	X	Office	X					12" Vinyl Floor Tile-tan
2016-0860- 21	11/03/2016	X	Office	X				X	Mastic-below 12" tan vinyl floor tile
2016-0860- 22	11/03/2016	X	Office	X					Mastic-below 12" tan vinyl floor tile
2016-0860- 23	11/03/2016	X	Wet Well	X					Flexible Duct Connector-white cloth
2016-0860- 24	11/03/2016	X	Wet Well	X					Flexible Duct Connector-white cloth

Relinquished By (Signature)

Date

Received By (Signature)

Date

Relinquished By (Signature)

Date

Received By (Signature)

Date

(Printed)

Jonathan Fitzsimonds

Time

1510

(Printed)

Cathryn Lemire

Time

1510

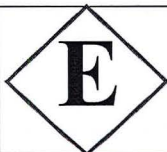
(Printed)

Time

(Printed)

Time

Remarks



Environmental Services, Inc

90 Brookfield Street, South Windsor, CT 06074
Ph. (860) 528-9500 / fax. (860) 289-0138

Chain of Custody

Project #: 2016-0860

PO #: 68550

Client: Arcadis, Inc

Edition: June 2015

88847

PROJECT NAME: 2016-0860 Trumbull "Beardsley" Pump House
119 White Plains Road
Trumbull, CT

PARAMETERS

TURN AROUND TIME

PLM		24 hr	48 hr	3 day	<input checked="" type="checkbox"/> 5 day
TEM		24 hr	48 hr	<input checked="" type="checkbox"/> 3 day	5 day

INSPECTOR (signature)

INSPECTOR (printed)

Jonathan Fitzsimonds

FIELD
SAMPLE
NUMBER

DATE

TYPE
Comp Grab

SAMPLE LOCATION

PLM EPA
600/R93/116
(Positive Stop)

PLM EPA
600/R93/116
(w Gravimetric Reduction)
(Positive Stop)

ANALYZE BY
LAYER

POINT COUNT
(if >1% & <10%)

TEM NY NOB 198.4
(if PLM Series Neg)

MATERIAL

2016-0860- 25	11/03/2016		X	Lavatory	X				X	12" Vinyl Floor Tile-white
2016-0860- 26	11/03/2016		X	Lavatory	X					12" Vinyl Floor Tile-white
2016-0860- 27	11/03/2016		X	Lavatory	X				X	Mastic-below 12" white vinyl floor tile
2016-0860- 28	11/03/2016		X	Lavatory	X					Mastic-below 12" white vinyl floor tile
2016-0860- 29	11/03/2016		X	Office	X					Glue-behind vinyl cove base molding
2016-0860- 30	11/03/2016		X	Office	X					Glue-behind vinyl cove base molding
2016-0860- 31	11/03/2016		X	Lavatory	X					Glue-behind vinyl cove base molding
2016-0860- 32	11/03/2016		X	Lavatory	X					Glue-behind vinyl cove base molding
2016-0860- 33	11/03/2016		X	Garage	X					Ceiling Plaster-1 layer system
2016-0860- 34	11/03/2016		X	Boiler Room	X					Ceiling Plaster-1 layer system
2016-0860- 35	11/03/2016		X	Office	X					Ceiling Plaster-2 layer system
2016-0860- 36	11/03/2016		X	Office	X					Ceiling Plaster-2 layer system

Relinquished By (Signature)

Date

Received By (Signature)

Date

Relinquished By (Signature)

Date

Received By (Signature)

Date

(Printed)

Time

(Printed)

Time

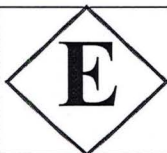
(Printed)

Time

(Printed)

Time

Remarks



Environmental Services, Inc

90 Brookfield Street, South Windsor, CT 06074
Ph. (860) 528-9500 / fax. (860) 289-0138

Chain of Custody

Project #: 2016-0860

PO #: 68550

Client: Arcadis, Inc

Edition: June 2015

88847

PROJECT NAME: 2016-0860 Trumbull "Beardsley" Pump House
119 White Plains Road
Trumbull, CT

PARAMETERS

TURN AROUND TIME

PLM		24 hr		48 hr		3 day	<input checked="" type="checkbox"/>	5 day
TEM		24 hr		48 hr	<input checked="" type="checkbox"/>	3 day		5 day

INSPECTOR (signature)

INSPECTOR (printed)

Jonathan Fitzsimonds

FIELD SAMPLE NUMBER	DATE	TYPE		SAMPLE LOCATION	PLM EPA 600/R93/116 (Positive Stop)	PLM EPA 600/R93/116 (w Gravimetric Reduction) (Positive Stop)	ANALYZE BY LAYER	POINT COUNT (if >1% & <10%)	TEM NY NOB 198.4 (if PLM Series Neg)	MATERIAL
		Comp	Grab							
2016-0860- 37	11/03/2016		X	Locker Room	X					Sheetrock/Wallboard
2016-0860- 38	11/03/2016		X	Locker Room	X					Sheetrock/Wallboard
2016-0860- 39	11/03/2016		X	Locker Room	X					Joint Compound
2016-0860- 40	11/03/2016		X	Locker Room	X					Joint Compound
2016-0860- 41	11/03/2016		X	Boiler Room-on boiler	X					Boiler Rope Gasket
2016-0860- 42	11/03/2016		X	Boiler Room-on boiler	X					Boiler Rope Gasket
2016-0860- 43	11/03/2016		X	Boiler Room-on boiler	X					Boiler Section Gasket
2016-0860- 44	11/03/2016		X	Boiler Room-on boiler	X					Boiler Section Gasket
2016-0860- 45	11/03/2016		X	Boiler Room-on boiler	X					Burner Gasket
2016-0860- 46	11/03/2016		X	Boiler Room-on boiler	X					Burner Gasket
2016-0860- 47	11/03/2016		X	Main Entrance-door to ofc	X					Door Frame Caulk-exterior
2016-0860- 48	11/03/2016		X	Loading Dock-door to garage	X					Door Frame Caulk-exterior

Relinquished By (Signature)	Date	Received By (Signature)	Date	Relinquished By (Signature)	Date	Received By (Signature)	Date
	11/04/16		11/04/16				
(Printed)	Time	(Printed)	Time	(Printed)	Time	(Printed)	Time
Jonathan Fitzsimonds	1510	Cathryn Lemise	1510				

Remarks	Pg 4 of 4
---------	-----------

Proscience Analytical Services, Inc.

22 Cummings Park, Woburn, MA 01801 Ph. 781-935-3212 Fax 781-932-4857

TEM Bulk Chain of Custody Record

Date: 11/10/16

PO#: C260162

Client: TRC

Client Job#: 260162.0000.0000

Client Job Ref./Loc.: 119 White Plains Road, Trumbull, CT

Relinquished by: K. Williamson- KWilliamson@trcsolutions.com

Received by:

Report to: KWilliamson@trcsolutions.com

Samplers Name: J. Fitzsimonds

Analysis Type: Chatfield **EPA N.O.B** Qualitative

Turn Around Time: <12 Hour <24 Hour <48 Hour **<3 Day** 5 Day Other:

				For Lab Use Only	
Client ID #	Lab ID#	Description	Location	Acceptable on Receipt	Comments
2016-0860-07	88847	Mastic	See COC		
2016-0860-17	88847	Glazing Putty			
2016-0860-21	88847	Mastic			
2016-0860-27	88847	Mastic			
For Lab Use Only	# Spies	Total	Client #	Batch #	Results Reported
					Comments

APPENDIX D

ASBESTOS LABORATORY ANALYSIS DATA



BULK ASBESTOS ANALYSIS REPORT

CLIENT: Environmental Services
90 Brookfield Street
South Windsor CT 06074

Lab Log #: 0088847
Project #: 2016-0860
Date Received: 11/04/2016
Date Analyzed: 11/09/2016

Site: Trumbull "Beardsley" Pump House, 119 White Plains Road, Trumbull, CT

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
2016-0860-1	White (flex connector)	Yes	No	--	60% cellulose 20% synthetic fiber	5%	Chrysotile
2016-0860-2	--	--	--	--	--	NA/PS	--
2016-0860-3	White (gasket)	Yes	No	--	80% synthetic fiber	10%	Chrysotile
2016-0860-4	--	--	--	--	--	NA/PS	--
2016-0860-5*	White (tile)	Yes	No	--	---	10%	Chrysotile
2016-0860-6	--	--	--	--	--	NA/PS	--
2016-0860-7*	Black (mastic)	Yes	No	--	---	ND	None
2016-0860-8*	Black (mastic)	Yes	No	--	---	ND	None
2016-0860-9*	Tan (caulk)	Yes	No	--	---	5%	Chrysotile
2016-0860-10	--	--	--	--	--	NA/PS	--
2016-0860-11*	Grey (glaze)	Yes	No	--	---	10%	Chrysotile
2016-0860-12	--	--	--	--	--	NA/PS	--
2016-0860-13*	Brown (glue)	Yes	No	--	---	ND	None
2016-0860-14*	Brown (glue)	Yes	No	--	---	ND	None
2016-0860-15*	White (caulk)	Yes	No	--	---	ND	None
2016-0860-16*	White (caulk)	Yes	No	--	---	ND	None
2016-0860-17*	White (glaze)	Yes	No	--	---	ND	None

TRC LABORATORY ASBESTOS ANALYTICAL ACCREDITATIONS

NVLAP Lab Code 101424-0	AIHA-LAP, LLC #100122	CT #PH-0426	ME LA-0075, LB-0071	MA #AA000052	NY #10980	WV# LT000411
RI #AAL-007	TX #300354	VT #AL014538	LA#05011	VA #3333 000283	AZ #A20944	HI #L-09-004
CO# AL-15020	PHIL# 461	PA#68-03387			NJ #CT004	CA #2907



POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials		Asbestos %	Asbestos Type
2016-0860-18*	White (glaze)	Yes	No	--	---		ND	None
2016-0860-19*	Tan (tile)	Yes	No	--	---		10%	Chrysotile
2016-0860-20	--	--	--	--	--		NA/PS	--
2016-0860-21*	Black (mastic)	Yes	No	--	---		ND	None
2016-0860-22*	Black (mastic)	Yes	No	--	---		ND	None
2016-0860-23	White (flex connector)	Yes	No	--	60%	synthetic fiber	30%	Chrysotile
2016-0860-24	--	--	--	--	--		NA/PS	--
2016-0860-25*	White (tile)	Yes	No	--	---		5%	Chrysotile
2016-0860-26	--	--	--	--	--		NA/PS	--
2016-0860-27*	Black (mastic)	Yes	No	--	---		ND	None
2016-0860-28*	Black (mastic)	Yes	No	--	---		ND	None
2016-0860-29*	Tan (glue)	Yes	No	--	---		ND	None
2016-0860-30*	Tan (glue)	Yes	No	--	---		ND	None
2016-0860-31*	Colorless (glue)	Yes	No	--	---		ND	None
2016-0860-32*	Colorless (glue)	Yes	No	--	---		ND	None
2016-0860-33	Grey (plaster)	Yes	No	--	---		ND	None
2016-0860-34	Grey (plaster)	Yes	No	--	---		ND	None
2016-0860-35	White (skim coat)	No	Yes	1	---		ND	None
2016-0860-35	Grey (base coat)	No	Yes	2	---		ND	None
2016-0860-36	White (skim coat)	No	Yes	1	---		ND	None
2016-0860-36	Grey (base coat)	No	Yes	2	---		ND	None
2016-0860-37	Grey (wallboard)	Yes	No	--	2%	cellulose	ND	None
2016-0860-38	Grey (wallboard)	Yes	No	--	2%	cellulose	ND	None

TRC LABORATORY ASBESTOS ANALYTICAL ACCREDITATIONS

NVLAP Lab Code 101424-0
RI #AAL-007 TX #300354
CO# AL-15020

AIHA-LAP,LLC #100122 CT #PH-0426
VT #AL014538 LA#05011 VA #3333 000283
PHIL# 461 PA#68-03387

ME LA-0075, LB-0071 MA #AA000052 NY #10980 WV#LT000411
AZ #A20944 HI #L-09-004 NJ #CT004 CA #2907



POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
2016-0860-39	White (joint compound)	Yes	No	--	---	ND	None
2016-0860-40	White (joint compound)	Yes	No	--	---	ND	None
2016-0860-41	White/Grey (gasket)	Yes	No	--	99% fibrous glass	ND	None
2016-0860-42	White/Grey (gasket)	Yes	No	--	99% fibrous glass	ND	None
2016-0860-43	Brown (gasket)	Yes	No	--	---	ND	None
2016-0860-44	Brown (gasket)	Yes	No	--	---	ND	None
2016-0860-45	Brown (gasket)	Yes	No	--	80% cellulose	ND	None
2016-0860-46	Brown (gasket)	Yes	No	--	80% cellulose	ND	None
2016-0860-47*	Grey (caulk)	Yes	No	--	---	10%	Chrysotile
2016-0860-48	--	--	--	--	--	NA/PS	--

Reporting limit- asbestos present at 1%

ND - asbestos was not detected

Trace - asbestos was observed at level of less than 1%

NA/PS - Not Analyzed / Positive Stop

SNA- Sample Not Analyzed- See Chain of Custody for details

* Indicates a non-friable organically bound material. Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, EPA recommends, and certain states (e.g. NY) require, that negative results be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation 1982 (EPA 600/M4-82-020) Bulk Analysis Code 18/A01 and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials July 1993, R.L. Perkins and B.W. Harvey, (EPA/600/R-93/116) Bulk Analysis Code 18/A03, which utilize polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2017. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2018. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and QC data related to the samples is available upon written request from client.

This report shall not be reproduced, except in full, without the written approval of TRC. This report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report relates only to the items tested.

Analyzed by:

K. Williamson

Kathleen Williamson, Laboratory Manager

Reviewed by:

Cathryn Lemire

Cathryn Lemire, Approved Signatory

Date Issued

11/10/2016

TRC LABORATORY ASBESTOS ANALYTICAL ACCREDITATIONS

NVLAP Lab Code 101424-0
RI #AAL-007 TX #300354
CO# AL-15020

AIHA-LAP, LLC #100122 CT #PH-0426
VT #AL014538 LA#05011 VA #3333 000283
PHIL# 461 PA#68-03387

ME LA-0075, LB-0071 MA #AA000052
AZ #A20944 HI #L-09-004

NY #10980 WV# LT000411
NJ #CT004 CA #2907



ProScience Analytical Services, Inc

Kathleen Williamson
TRC Environmental Corp. (CT)
21 Griffin Road North
Windsor, CT 06095

November 15, 2016

Dear Kathleen Williamson,

Results of samples you described and submitted to ProScience Analytical Services, Inc. are shown on the enclosed data sheets. The analytical results in this report apply to the items tested only. The listed samples were prepared and analyzed in compliance with the New York State Transmission Electron Microscope Method for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples. This method is used for the determination of weight percent of asbestos in non-friable materials. The sample is processed to remove non-asbestos interference. The remaining residue is examined using a Philips 300 transmission electron microscope equipped with selected area electron diffraction (SAED) and an Evex energy dispersive x-ray analyzer.

The following are reported: identification numbers, type of material, color of the sample, initial weight of the sample, weight percent of organic material lost by ashing, weight percent of carbonates lost by acid dissolution, weight percent of non-fibrous/non asbestos inorganic material, total weight percent of asbestos in the original sample, and the type(s) of asbestos, if any.

The EPA recognizes asbestos as the following: actinolite, amosite, anthophyllite, chrysotile, crocidolite, and tremolite. To be considered asbestos containing, a material must be determined to contain greater than one percent asbestos. Samples are retained for a period of 2 months.

The quality control data related to the samples analyzed are available for review upon the written request of the client. ProScience Analytical Services, Inc. and its personnel assume no responsibility for potential sample contamination, misuse, misinformation, or misrepresentation by the client. The enclosed results may not be used under any circumstances as product endorsement by any US government agency including NIST/NVLAP. This report may not be reproduced, except in its entirety, without permission of the ProScience Analytical Services, Inc. Laboratory Director.

Please contact me if you have any questions regarding this report or related information.

Sincerely,

Mark Derosier, Senior Analyst
Aimee Cormier, Laboratory Manager

Enclosure:

BATCH NUMBER : NT 16186 CLIENT PROJECT ID: 260162.0000.0000
Client Ref: 119 White Plains Road, Trumbull, CT
NVLAP Lab Code 200090-0; CT ID# PH-0209; MA ID# AA000156; ME ID# LB-055; ME ID# LA-056;
AIHA ID# 102754; VT ID# AL016876; PH ID# 218(TEM,PLM); RI ID# 186.

ProScience Analytical Services, Inc.

22 Cummings Park, Woburn, Massachusetts 01801
781-935-3212 ~ Fax: 781-932-4857 ~ E-Mail: general@proscience.net

Laboratory Report

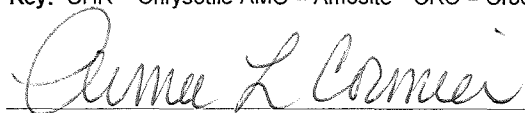
Client Project #: 260162.0000.0000
Client Reference: 119 White Plains Road, Trumbull, CT
PO #: C260162
Client #: 297
Client Name: TRC Environmental Corp. (CT)

Batch: NT 16186
Method: NOB
Date Received: 11/11/2016
Date Analyzed: 11/15/2016
Date of Report: 11/15/2016

LAB ID	Field ID	Description:	Color	Initial Weight	% Asbestos Types						% Other Non-asb.	% Organic	% Carb.	Total % Asbestos	Analyzed / Charged	Preped / Charged
					CHR	AMO	ACT	CRO	ANT	TRE						
NT122632	20106-0860-07	Mastic		.1160	.10	.00	.00	.00	.00	.00	9.66	85.34	5.00	TR	Yes	No
NT122633	20106-0860-17	Window Glazing Putty		.3420	.00	.00	.00	.00	.07	.00	3.42	8.01	88.57	TR	Yes	No
NT122634	20106-0860-21	Mastic		.1915	.18	.00	.00	.00	.00	.00	9.04	77.91	13.05	TR	Yes	No
NT122635	20106-0860-27	Mastic		.1531	.25	.00	.00	.00	.00	.00	12.28	76.42	11.30	TR	Yes	No

Comments:

Key: CHR = Chrysotile AMO = Amosite CRO = Crocidolite ACT = Actinolite TRE = Tremolite ANT = Anthophyllite TR = Trace = < 1% ND = None Detected



Aimee Cormier, Analyst

APPENDIX E

PCB & LEAD PAINT CHIP CHAIN OF CUSTODY

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
 Email: info@phoenixlabs.com Fax (860) 645-0823
 Client Services (860) 645-8726

Coolant: ☐ IPK ☐ ICE ☒ Yes ☐ No

Temp °C Pg of

Contact Options:

☒ Fax: 860 289 3119
☒ Phone: 860 528 9500
☒ Email: jfitts@phoenixlabs.com

Customer: EST
 Address: 90 Brookfield St
3 Windsor CT 06074

Project: 2016-0860 - Areadis
 Report to: Jen Fitzmaurice
 Invoice to: A/P

Project P.O.: 68551

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification
 Sampler's Signature: [Signature] Date: 11/3/14

Matrix Code:

DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
 RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
 OIL=Oil B=Bulk L=Liquid

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled
76120	PCB-1	SD	11/3/14	
76121	PCB-2	SD		
76122	PCB-3	SD		
76123	PCB-4	SD		
76124	Pb-1	SD		
76125	Pb-2	SD		
76126	Pb-3	SD		
76127	Pb-4	SD		
76128	Pb-5	SD		
76129	Pb-6	SD		

Analysis Request

PCB - 8082
 Total Lead

2x3 Ziplock Bag
 Soil VOA Vials 1 methanol 1 H2O
 GL Soil container (8) 1oz
 40 ml VOA Vial 1oz
 GL Amber 1000ml 1As is 1HCl
 PL As is 1 250ml 1500ml 1H2SO4
 PL H2SO4 1 250ml 1500ml 1HNO3 250ml
 PL NaOH 250ml
 Bacteria Bottle

Relinquished by: [Signature] Accepted by: [Signature] Date: 11/4/14 Time: 14:26

Comments, Special Requirements or Regulations:
 PCB-1- WFC
 PCB-2- Louvre FC
 PCB-3- DFC
 PCB-4- Generator Louvre Frame Caulk
 Pb1- Black Window Ext
 Pb2- Gray Door Ext
 Pb3- Black DF Ext
 Pb4- Int Gray Door
 Pb5- Int Gray WF
 Pb6- Yellow Cull Wall

Turnaround:

☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other

* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQulS
☐ Other
 Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

State where samples were collected: CT

* SURCHARGE APPLIES

Sarah Bell

From: Jonathan Fitzsimonds <JFitzsimonds@e-s-i.com>
Sent: Tuesday, November 08, 2016 3:52 PM
To: Sarah Bell
Subject: RE: BV76127

OK Thanks for the heads up.

Jon Fitz
H&S Manager @ ESI

-----Original Message-----

From: Sarah Bell [<mailto:sarah@phoenixlabs.com>]
Sent: Tuesday, November 8, 2016 12:52 PM
To: Jonathan Fitzsimonds
Cc: Sarah Bell
Subject: BV76127

Hello there,

I was asked to let you know that BV76127 your id Pb-4 is not able to be analyzed, there was not enough sample and the sample that was provided the little bit there was is stuck to the bag. So we will not be able to report anything on this sample.

Thanks
Sarah

APPENDIX F

PCB & LEAD PAINT CHIP LABORATORY ANALYSIS DATA



Monday, November 14, 2016

**Attn: Mr. Jon Fitzsimonds
Environmental Services Inc
90 Brookfield Street
South Windsor, CT 06074**

**Project ID: 2016-0860 ARCADIS
Sample ID#s: BV76120 - BV76126, BV76128 - BV76129**

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

**Phyllis Shiller
Laboratory Director**

**NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B**

**NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301**



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 14, 2016

FOR: Attn: Mr. Jon Fitzsimonds
Environmental Services Inc
90 Brookfield Street
South Windsor, CT 06074

Sample Information

Matrix: SOLID
Location Code: ESI
Rush Request: Standard
P.O.#: 68551

Custody Information

Collected by:
Received by: B
Analyzed by: see "By" below

Date Time

11/03/16
11/04/16 14:26

Laboratory Data

SDG ID: GBV76120
Phoenix ID: BV76120

Project ID: 2016-0860 ARCADIS
Client ID: PCB-1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				11/04/16	NQ/I	SW3540C

PCB (Soxhlet SW3540C)

PCB-1016	ND	760	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1221	ND	760	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1232	ND	760	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1242	ND	760	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1248	860	760	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1254	ND	760	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1260	ND	760	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1262	ND	760	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1268	ND	760	ug/Kg	5	11/08/16	AW	SW8082A

QA/QC Surrogates

% DCBP	85	%	5	11/08/16	AW	30 - 150 %
% TCMX	68	%	5	11/08/16	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
-----------	--------	------------	-------	----------	-----------	----	-----------

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

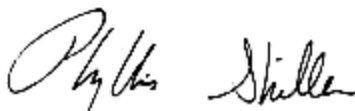
Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

This report must not be reproduced except in full as defined by the attached chain of custody.



Phyllis Shiller, Laboratory Director

November 14, 2016

Reviewed and Released by: Ethan Lee, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 14, 2016

FOR: Attn: Mr. Jon Fitzsimonds
Environmental Services Inc
90 Brookfield Street
South Windsor, CT 06074

Sample Information

Matrix: SOLID
Location Code: ESI
Rush Request: Standard
P.O.#: 68551

Custody Information

Collected by:
Received by: B
Analyzed by: see "By" below

Date Time

11/03/16
11/04/16 14:26

Laboratory Data

SDG ID: GBV76120
Phoenix ID: BV76121

Project ID: 2016-0860 ARCADIS
Client ID: PCB-2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				11/04/16	NQ/I	SW3540C

PCB (Soxhlet SW3540C)

PCB-1016	ND	330	ug/Kg	2	11/07/16	AW	SW8082A
PCB-1221	ND	330	ug/Kg	2	11/07/16	AW	SW8082A
PCB-1232	ND	330	ug/Kg	2	11/07/16	AW	SW8082A
PCB-1242	ND	330	ug/Kg	2	11/07/16	AW	SW8082A
PCB-1248	ND	330	ug/Kg	2	11/07/16	AW	SW8082A
PCB-1254	ND	330	ug/Kg	2	11/07/16	AW	SW8082A
PCB-1260	ND	330	ug/Kg	2	11/07/16	AW	SW8082A
PCB-1262	ND	330	ug/Kg	2	11/07/16	AW	SW8082A
PCB-1268	ND	330	ug/Kg	2	11/07/16	AW	SW8082A

QA/QC Surrogates

% DCBP	53	%	2	11/07/16	AW	30 - 150 %
% TCMX	61	%	2	11/07/16	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
-----------	--------	------------	-------	----------	-----------	----	-----------

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

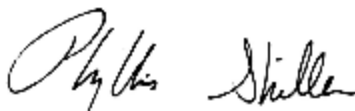
Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

This report must not be reproduced except in full as defined by the attached chain of custody.



Phyllis Shiller, Laboratory Director

November 14, 2016

Reviewed and Released by: Ethan Lee, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 14, 2016

FOR: Attn: Mr. Jon Fitzsimonds
Environmental Services Inc
90 Brookfield Street
South Windsor, CT 06074

Sample Information

Matrix: SOLID
Location Code: ESI
Rush Request: Standard
P.O.#: 68551

Custody Information

Collected by:
Received by: B
Analyzed by: see "By" below

Date Time

11/03/16
11/04/16 14:26

Laboratory Data

SDG ID: GBV76120
Phoenix ID: BV76122

Project ID: 2016-0860 ARCADIS
Client ID: PCB-3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				11/04/16	NQ/I	SW3540C

PCB (Soxhlet SW3540C)

PCB-1016	ND	320	ug/Kg	2	11/08/16	AW	SW8082A
PCB-1221	ND	320	ug/Kg	2	11/08/16	AW	SW8082A
PCB-1232	ND	320	ug/Kg	2	11/08/16	AW	SW8082A
PCB-1242	ND	320	ug/Kg	2	11/08/16	AW	SW8082A
PCB-1248	ND	320	ug/Kg	2	11/08/16	AW	SW8082A
PCB-1254	ND	320	ug/Kg	2	11/08/16	AW	SW8082A
PCB-1260	ND	320	ug/Kg	2	11/08/16	AW	SW8082A
PCB-1262	ND	320	ug/Kg	2	11/08/16	AW	SW8082A
PCB-1268	ND	320	ug/Kg	2	11/08/16	AW	SW8082A

QA/QC Surrogates

% DCBP	53	%	2	11/08/16	AW	30 - 150 %
% TCMX	50	%	2	11/08/16	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
-----------	--------	------------	-------	----------	-----------	----	-----------

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

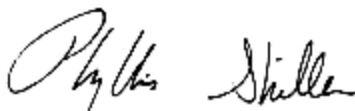
Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

This report must not be reproduced except in full as defined by the attached chain of custody.



Phyllis Shiller, Laboratory Director

November 14, 2016

Reviewed and Released by: Ethan Lee, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 14, 2016

FOR: Attn: Mr. Jon Fitzsimonds
Environmental Services Inc
90 Brookfield Street
South Windsor, CT 06074

Sample Information

Matrix: SOLID
Location Code: ESI
Rush Request: Standard
P.O.#: 68551

Custody Information

Collected by:
Received by: B
Analyzed by: see "By" below

Date Time

11/03/16
11/04/16 14:26

Laboratory Data

SDG ID: GBV76120
Phoenix ID: BV76123

Project ID: 2016-0860 ARCADIS
Client ID: PCB-4

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Caulk Extraction for PCB	Completed				11/04/16	NQ/I	SW3540C

PCB (Soxhlet SW3540C)

PCB-1016	ND	470	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1221	ND	470	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1232	ND	470	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1242	ND	470	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1248	ND	470	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1254	520	470	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1260	ND	470	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1262	ND	470	ug/Kg	5	11/08/16	AW	SW8082A
PCB-1268	ND	470	ug/Kg	5	11/08/16	AW	SW8082A

QA/QC Surrogates

% DCBP	63	%	5	11/08/16	AW	30 - 150 %
% TCMX	49	%	5	11/08/16	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
-----------	--------	------------	-------	----------	-----------	----	-----------

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

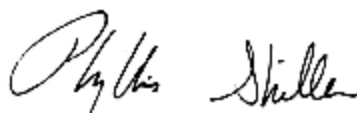
Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

This report must not be reproduced except in full as defined by the attached chain of custody.



Phyllis Shiller, Laboratory Director

November 14, 2016

Reviewed and Released by: Ethan Lee, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 14, 2016

FOR: Attn: Mr. Jon Fitzsimonds
Environmental Services Inc
90 Brookfield Street
South Windsor, CT 06074

Sample Information

Matrix: SOLID
Location Code: ESI
Rush Request: Standard
P.O.#: 68551

Custody Information

Collected by:
Received by: B
Analyzed by: see "By" below

Date Time

11/03/16
11/04/16 14:26

Laboratory Data

SDG ID: GBV76120
Phoenix ID: BV76124

Project ID: 2016-0860 ARCADIS
Client ID: PB-1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Lead	2000	14	mg/Kg	10	11/10/16	LK	SW6010C
Total Metals Digest	Completed				11/04/16	X/AG/BF	SW3050B

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

November 14, 2016

Reviewed and Released by: Ethan Lee, Project Manager



Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 14, 2016

FOR: Attn: Mr. Jon Fitzsimonds
Environmental Services Inc
90 Brookfield Street
South Windsor, CT 06074

Sample Information

Matrix: SOLID
Location Code: ESI
Rush Request: Standard
P.O.#: 68551

Custody Information

Collected by:
Received by: B
Analyzed by: see "By" below

Date

11/03/16

Time

14:26

Laboratory Data

SDG ID: GBV76120
Phoenix ID: BV76125

Project ID: 2016-0860 ARCADIS
Client ID: PB-2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Lead	12.4	1.9	mg/Kg	1	11/11/16	LK	SW6010C
Total Metals Digest	Completed				11/04/16	X/AG/BF	SW3050B

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

November 14, 2016

Reviewed and Released by: Ethan Lee, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 14, 2016

FOR: Attn: Mr. Jon Fitzsimonds
Environmental Services Inc
90 Brookfield Street
South Windsor, CT 06074

Sample Information

Matrix: SOLID
Location Code: ESI
Rush Request: Standard
P.O.#: 68551

Custody Information

Collected by:
Received by: B
Analyzed by: see "By" below

Date

11/03/16

Time

14:26

Laboratory Data

SDG ID: GBV76120
Phoenix ID: BV76126

Project ID: 2016-0860 ARCADIS
Client ID: PB-3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Lead	36600	110	mg/Kg	100	11/11/16	LK	SW6010C
Total Metals Digest	Completed				11/04/16	X/AG/BF	SW3050B

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

November 14, 2016

Reviewed and Released by: Ethan Lee, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 14, 2016

FOR: Attn: Mr. Jon Fitzsimonds
Environmental Services Inc
90 Brookfield Street
South Windsor, CT 06074

Sample Information

Matrix: SOLID
Location Code: ESI
Rush Request: Standard
P.O.#: 68551

Custody Information

Collected by:
Received by: B
Analyzed by: see "By" below

Date Time

11/03/16
11/04/16 14:26

Laboratory Data

SDG ID: GBV76120
Phoenix ID: BV76128

Project ID: 2016-0860 ARCADIS
Client ID: PB-5

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Lead	1080	16	mg/Kg	10	11/10/16	LK	SW6010C
Total Metals Digest	Completed				11/04/16	X/AG/BF	SW3050B

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

November 14, 2016

Reviewed and Released by: Ethan Lee, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 14, 2016

FOR: Attn: Mr. Jon Fitzsimonds
Environmental Services Inc
90 Brookfield Street
South Windsor, CT 06074

Sample Information

Matrix: SOLID
Location Code: ESI
Rush Request: Standard
P.O.#: 68551

Custody Information

Collected by:
Received by: B
Analyzed by: see "By" below

Date Time

11/03/16
11/04/16 14:26

Laboratory Data

SDG ID: GBV76120
Phoenix ID: BV76129

Project ID: 2016-0860 ARCADIS
Client ID: PB-6

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Lead	134	1.2	mg/Kg	1	11/10/16	LK	SW6010C
Total Metals Digest	Completed				11/04/16	X/AG/BF	SW3050B

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

November 14, 2016

Reviewed and Released by: Ethan Lee, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

November 14, 2016

QA/QC Data

SDG I.D.: GBV76120

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 365700 (mg/kg), QC Sample No: BV76915 (BV76124, BV76125, BV76126, BV76128, BV76129)													
<u>ICP Metals - Soil</u>													
Lead	BRL	0.33	4.7	4.90	4.20	91.2			95.4			75 - 125	30



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

November 14, 2016

QA/QC Data

SDG I.D.: GBV76120

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 365707 (ug/Kg), QC Sample No: BV76052 10X (BV76120, BV76121, BV76122, BV76123)										
<u>Polychlorinated Biphenyls - Solid</u>										
PCB-1016	ND	170	76	73	4.0				40 - 140	30
PCB-1221	ND	170							40 - 140	30
PCB-1232	ND	170							40 - 140	30
PCB-1242	ND	170							40 - 140	30
PCB-1248	ND	170							40 - 140	30
PCB-1254	ND	170							40 - 140	30
PCB-1260	ND	170	82	82	0.0				40 - 140	30
PCB-1262	ND	170							40 - 140	30
PCB-1268	ND	170							40 - 140	30
% DCBP (Surrogate Rec)	86	%	102	103	1.0				30 - 150	30
% TCMX (Surrogate Rec)	26	%	83	81	2.4				30 - 150	30 s

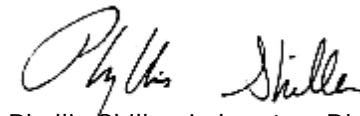
Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

s = This parameter is outside laboratory Blank Surrogate specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference


Phyllis Shiller, Laboratory Director
November 14, 2016

Sample Criteria Exceedances Report

GBV76120 - ESI

Criteria: None

State: CT

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
--------	-------	-----------------	----------	--------	----	----------	----------------	-------------------

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc.

Client: Environmental Services Inc

Project Location: 2016-0860 ARCADIS

Project Number:

Laboratory Sample ID(s): BV76120-BV76126,
BV76128, BV76129

Sampling Date(s): 11/3/2016

List RCP Methods Used (e.g., 8260, 8270, et cetera) 6010, 8082

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1B	<u>VPH and EPH methods only:</u> Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
2	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature (< 6 Degrees C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? See Section: PCB Narration.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
7	Are project-specific matrix spikes and laboratory duplicates included in the data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

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

Authorized Signature: Ethan Lee **Position:** Project Manager

Printed Name: Ethan Lee **Date:** Monday, November 14, 2016

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



RCP Certification Report

November 14, 2016

SDG I.D.: GBV76120

SDG Comments

Metals Analysis:

The client requested a shorter list of elements than the 6010 RCP list. Only Lead is reported as requested on the chain of custody.

ICP Metals Narration

Were all QA/QC performance criteria specified in the analytical method achieved? Yes.

Instrument:

ARCOS 11/09/16 14:55 Laura Kinnin, Chemist 11/09/16

BV76124, BV76128, BV76129

The linear range is defined daily by the calibration range.

The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.

The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

ARCOS 11/10/16 15:48 Laura Kinnin, Chemist 11/10/16

BV76125, BV76126

The linear range is defined daily by the calibration range.

The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.

The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 365700 (BV76915)

BV76124, BV76125, BV76126, BV76128, BV76129

All LCS recoveries were within 75 - 125 with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 365707 (Samples: BV76120, BV76121, BV76122, BV76123) ----

The surrogate recovery for the batch blank was below acceptance recovery for %TCMX. All other surrogate recoveries were within criteria, the low bias affects the blank only.

Instrument:

AU-ECD5 11/08/16-1 Adam Werner, Chemist 11/08/16

BV76120

The initial calibration (PC0913AI) RSD for the compound list was less than 20% except for the following compounds: None.

The initial calibration (PC0913BI) RSD for the compound list was less than 20% except for the following compounds: None.

The continuing calibration %D for the compound list was less than 15% except for the following compounds: None.

AU-ECD6 11/07/16-1 Adam Werner, Chemist 11/07/16

BV76121, BV76122, BV76123

The initial calibration (PC1024AI) RSD for the compound list was less than 20% except for the following compounds: None.

The initial calibration (PC1024BI) RSD for the compound list was less than 20% except for the following compounds: None.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



RCP Certification Report

November 14, 2016

SDG I.D.: GBV76120

PCB Narration

The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

QC (Batch Specific):

Batch 365707 (BV76052)

BV76120, BV76121, BV76122, BV76123

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Temperature Narration

The samples were received at 1C with cooling initiated.

(Note acceptance criteria is above freezing up to 6°C)