

# REPORT

## PRE-RENOVATION INVESTIGATIVE SURVEY FOR HAZARDOUS BUILDING MATERIALS

### WESTPORT MAINTENANCE FACILITY ROOF WESTPORT, CONNECTICUT Project No. 158-213

*Prepared for*

**State of Connecticut**  
**Department of Transportation**  
Newington, Connecticut

*Prepared by*

**TRC**  
Windsor, Connecticut

September 8, 2016

**PRE-RENOVATION  
INVESTIGATIVE SURVEY FOR  
HAZARDOUS BUILDING MATERIALS**

**WESTPORT MAINTENANCE FACILITY ROOF  
WESTPORT, CONNECTICUT  
Project No. 158-213**

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TRC  
Windsor, Connecticut

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Erik R. Plimpton, P.E., CHMM, CMC  
Vice President – Program Manager

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Edmund J. Burke, P.E.  
Engineer in Charge

TRC Project No. 222165.5382.0710  
Issued-September 2016

**TRC**  
21 Griffin Road North  
Windsor, Connecticut 06095  
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Facsimile (860) 298-6399

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## **EXECUTIVE SUMMARY**

On September 1, 2016 TRC of Windsor, Connecticut conducted an inspection for suspect asbestos-containing materials (ACM), lead based paint (LBP), hazardous materials, wastes and items and polychlorinated biphenyl (PCB) caulk associated with the Westport Maintenance Facility Roof in Westport, Connecticut. The inspection was initiated prior to planned roof replacement activities in accordance with USEPA Asbestos National Emissions Standard for Hazardous Air Pollutants (NESHAPS) requirements.

A Connecticut licensed asbestos inspector from TRC conducted the inspection in accordance with USEPA AHERA protocols. Bulk samples of suspect materials were collected and analyzed via polarized light microscopy (PLM) and transmission electron microscopy (TEM) methods at CTDPH/NVLAP accredited laboratories. ACM was identified as built-up roofing, various types of flashings and vapor barrier in the subject area. ACM to be impacted by renovation 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 E.

A lead based paint (LBP) survey was conducted by a Connecticut licensed lead inspector from TRC. No painted surfaces associated with the roof were identified.

A visual inventory of additional household hazardous waste items and regulated materials (Hg, PCB, CFC, used electronics, UST/AST, etc.) associated with the roof replacement was also conducted. No additional hazmat items were identified.

TRC's on-site inspectors also conducted a visual inspection and bulk sampling of suspect PCB containing caulking on the exterior roof. Bulk samples were collected following a sample strategy similar to the EPA's simplified sampling scheme for ACM. The samples were then sent to a CTDPH accredited laboratory for PCB analysis via EPA method 8082, with EPA Method 3540c, Soxhlet extraction. Analytical results indicated two (2) caulks (C1, C2) were confirmed as unregulated

excluded product <1 ppm. Detailed results of the PCB caulk/glaze inspection can be found in Tables 6 and 7 as well as Appendix F.

## PROJECT OUTLINE

DOT Project No.: 158-213  
Assignment No.: 514-5382  
DOT Project Manager: Denise Young

Site Address: Westport Maintenance Facility – Roof  
900 Post Road East, Westport, CT

TRC Project No.: 222165-5382-0710

Asbestos Inspector(s): Michael Stewart (LIC #000305)  
Kelly Grey (LIC #000904)

Date of Inspection: 9/1/16

Asbestos Identified: Yes

Lead Based Paint Identified: No painted surfaces in the subject area

Gen. Bldg. Mat. Haz Waste: No painted surfaces in the subject area

Add'l Haz./Reg. Mat./Waste/Items: No

EPA Regulated PCB Caulk Identified: No

CTDEEP Regulated PCB Caulk Identified: No

Additional Notes:  
The site investigation was limited to the roof replacement areas.

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## TABLES

<b>TABLE 1</b> <b>BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS</b> <b>WESTPORT MAINTENANCE FACILITY – ROOF</b> <b>WESTPORT, CONNECTICUT</b>			
Sample No.	Sample Location	Homogeneous Material	% and Type Asbestos
1	Main Roof – Top Layer	Built Up Roofing (BUR1)	3% chrysotile
2	Main Roof – Top Layer	Built Up Roofing (BUR1)	NA/PS
3	Main Roof – Under BUR 1	Roof Insulation (RI1)	ND
4	Main Roof – Under BUR 1	Roof Insulation (RI1)	ND
5	Main Roof – on Concrete	Water Proofing on Concrete (WP1)	ND
6	Main Roof – on Concrete	Water Proofing on Concrete (WP1)	ND <sup>1</sup>
7	Main Roof – Perimeter	Perimeter Flashing (FL1)	20% chrysotile
8	Main Roof – Perimeter	Perimeter Flashing (FL1)	NA/PS
9	Main Roof – Chimney	Chimney Flashing (FL2)	3% chrysotile
10	Main Roof – Chimney	Chimney Flashing (FL2)	NA/PS
11	Main Roof – Penetrations	Penetration Flashing (FL3)	20% chrysotile
12	Main Roof – Penetrations	Penetration Flashing (FL3)	NA/PS
13	Main Roof – Chimney – under insulation	Black Vapor Barrier (VB1)	5% chrysotile
14	Main Roof – Chimney – under insulation	Black Vapor Barrier (VB1)	NA/PS
15	Main Roof – D Side	Roof Patching (RP1)	ND
16	Main Roof – D Side	Roof Patching (RP1)	Trace chrysotile <sup>1</sup>
17	Canopy Roof	Built Up Roofing (BUR2)	ND
18	Canopy Roof	Built Up Roofing (BUR2)	Trace chrysotile <sup>1</sup>
19	Canopy Roof – Perimeter	Perimeter Flashing (FL4)	20% chrysotile
20	Canopy Roof – Perimeter	Perimeter Flashing (FL4)	NA/PS
21	Main Roof – D Side Gutter	Gutter Seam Caulk (C1)	ND
22	Main Roof – D Side Gutter	Gutter Seam Caulk (C1)	ND <sup>1</sup>
23	Main Roof – by Chimney	Residual Caulk (C2)	ND
24	Main Roof – by Chimney	Residual Caulk (C2)	ND <sup>1</sup>

NA/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

ND<1% Non-detected, less than 1%

NAD No asbestos detected

+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive

1 NOB material; result confirmed by TEM analyses

\* Quantified by PLM Point Counting techniques

**TABLE 2  
IDENTIFIED ASBESTOS CONTAINING MATERIALS (>1%)  
WESTPORT MAINTENANCE FACILITY – ROOF  
WESTPORT, CONNECTICUT**

<b>Material</b>	<b>Sampled- Assumed (mo/yr)</b>	<b>General Location</b>	<b>NESHAP Category</b>	<b>AHERA Category</b>	<b>Estimated Quantity</b>
Built Up Roofing (BUR1)	Sampled 9/16	Main Roof – Top Layer	Category I Non-friable	Miscellaneous	7,760 SF
Perimeter Flashing (FL1)	Sampled 9/16	Main Roof – Perimeter	Category I Non-friable	Miscellaneous	468 SF
Chimney Flashing (FL2)	Sampled 9/16	Main Roof – Chimney	Category I Non-friable	Miscellaneous	20 SF
Penetration Flashing (FL3)	Sampled 9/16	Main Roof – Penetrations	Category I Non-friable	Miscellaneous	4 SF
Black Vapor Barrier (VB1)	Sampled 9/16	Main Roof – Chimney – under flashing (FL2) & insulation	Category I Non-friable	Miscellaneous	20 SF
Perimeter Flashing (FL4)	Sampled 9/16	Canopy Roof – Perimeter	Category I Non-friable	Miscellaneous	60 SF
A CCMPA tar coating	Assumed 9/16	Corrugated metal roof drain pipe underground	Category I Non-friable	Miscellaneous	Unknown

AHERA Categories = thermal system insulation (TSI), surfacing material or miscellaneous  
NESHAP Categories = friable, category I non-friable or category II non-friable  
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  
 WESTPORT MAINTENANCE FACILITY - ROOF  
 WESTPORT, CONNECTICUT**

<b>Material</b>	<b>General Location</b>
Roof insulation (RI1)	Main Roof – under BUR1 built-up roofing
Waterproofing on concrete (WP1)	Main Roof – on concrete below built-up roofing BUR1 and insulation RI1
Roof patching (RP1)	Main Roof – D-Side along gutters
Built-up roofing (BUR2)	Canopy Roof
White gutter seam caulk (C1)	Main Roof – D-Side gutter seams/ends/downspout
Brown/white residual caulk (C2)	Main Roof – by chimney

**TABLE 4  
SUMMARY OF LEAD PAINT XRF MEASUREMENTS  
WESTPORT MAINTENANCE FACILITY - ROOF  
WESTPORT, CONNECTICUT**

<b>Structure</b>	<b>No. of Measurements</b>	<b>Calibrations</b>	<b>Void</b>	<b>Lead Detected</b>	<b>No Lead Detected via XRF*</b>
<b>NO PAINTED SURFACES IDENTIFIED IN THE ROOF AREA</b>					

**TABLE 5  
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED  
MATERIALS, WASTES AND ITEMS IDENTIFIED  
WESTPORT MAINTENANCE FACILITY – ROOF  
WESTPORT, CONNECTICUT**

Quantity	Size	Material/Item	General Location	Potential Hazard
<b>NO ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES OR ITEMS IDENTIFIED IN THE ROOF AREA</b>				

- 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)
- IH- 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)

**TABLE 6**  
**BULK SAMPLE SUMMARY OF SUSPECT PCB CONTAINING CAULKS**  
**WESTPORT MAINTENANCE FACILITY - ROOF**  
**WESTPORT, CONNECTICUT**

Sample No.	Homogenous Material Type		Sample Location	Total PCB (ppm)	EPA/CTDEEP Regulated
1	C1	White flexible gutter seam sealant caulk	D-side gutter	ND<0.78	Non Regulated
2			D-side gutter	ND<0.48	
3			D-side gutter	ND<3.3	
4	C2*	Brown/white residual caulk	Around chimney	ND<0.75	Non Regulated

*\*Reduced (<3) numbers of samples were adequate for material characterization as there was very limited quantity of material at the site.*

*BRL< = Below Reportable Detection Limit*

*PCB ≥ 50 ppm = EPA PCB Bulk Product Waste*

*PCB >1 ppm but <50 ppm = CTDEEP regulated*

**TABLE 7  
 IDENTIFIED PCB CONTAINING CAULKS  
 WESTPORT MAINTENANCE FACILITY – ROOF  
 WESTPORT, CONNECTICUT**

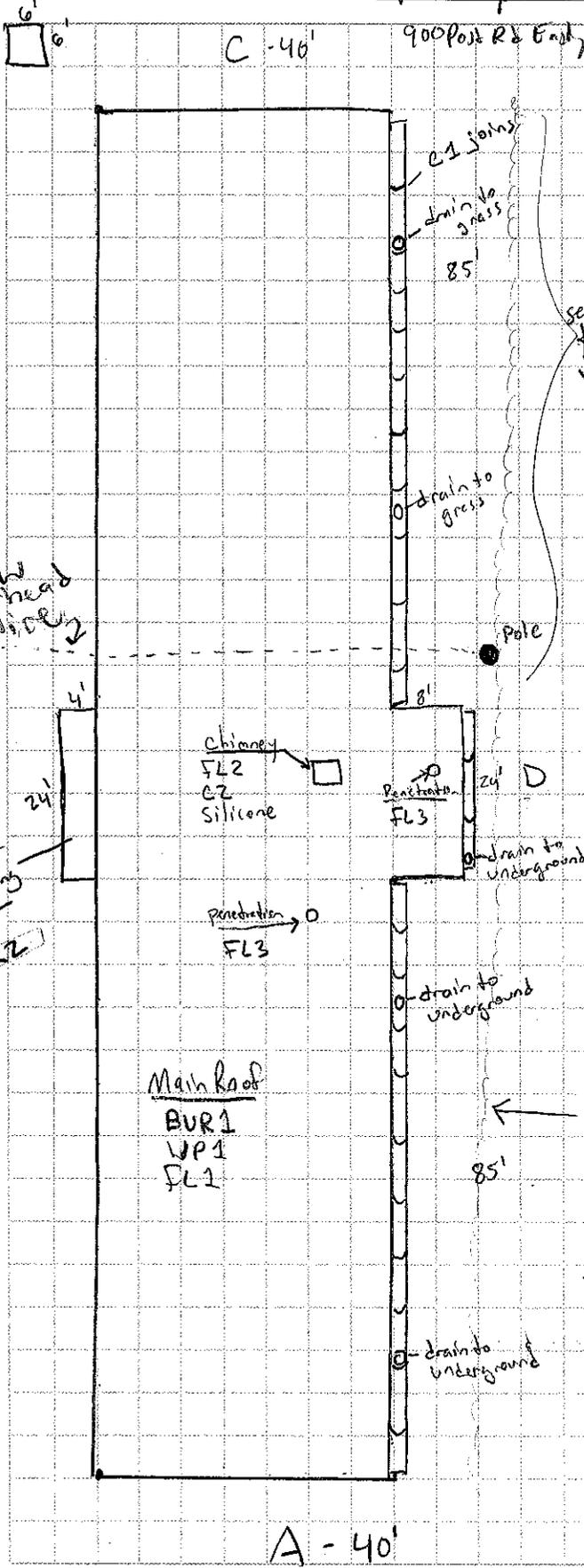
<b>Material</b>	<b>Sample Date (mo/yr)</b>	<b>General Location</b>	<b>Adjacent Substrates</b>	<b>Estimated Quantity</b>
<b>CTDEEP REGULATED PCB CONTAINING MATERIALS (&gt; 1 ppm, &lt; 50 ppm)</b>				
NO CTDEEP REGULATED PCB CONTAINING MATERIALS IDENTIFIED IN THE SUBJECT AREA				
<b>EPA REGULATED PCB BULK PRODUCT WASTE (≥ 50 ppm)</b>				
NO EPA REGULATED PCB CONTAINING MATERIALS IDENTIFIED IN THE SUBJECT AREA				

**APPENDIX A**  
**SITE SKETCH**



SUBJECT Westport MF - Roof

SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
 PROJECT NO. 222165.5382  
 DATE 9/1/16  
 BY KG + MS  
 CHK'D \_\_\_\_\_



ACM + Notes

- C1 - white sealant at gutter seams lends/boundary ~ 1 sqft per patch x 30 patches = ~30 SF (metal/metal only)
  - C2 - brown/white remnant caulk from base of chimney, removed and left on roof, replaced w/silicone (at brick/copper flashing) ~ 12 LF (not all recovered)
  - FL1 - Perimeter flashing around edge of main roof (~468 SF)
  - FL2 - chimney flashing (~20 SF)
  - FL3 - Penetration flashing (~4 SF)
  - BUR1 - Main Roof (Built up Roof) (~7760 SF)
  - WP1 - waterproofing on concrete below BUR1 (and insulation)
  - RP1 - Roof patching by gutters (25 patches x ~3 SF/patch = 75 SF)
  - VB1 - Vapor Barrier under FL2 (at chimney)
  - BUR2 - Lower overhanging built up roofing
  - FL4 - perimeter flashing on lower overhanging roof
- ← Possible 15" corrugated metal drain pipe underground  
 → Assumed ACM tar coating - inaccessible  
 - maybe 2ft under ground - nature of location
- \* - ~40 LF of newer gray caulk on ext back wall where window (previously removed) lintels are (con lintel and brick) not part of roof

A - 40'

A

**APPENDIX B**

**SITE PHOTOS**

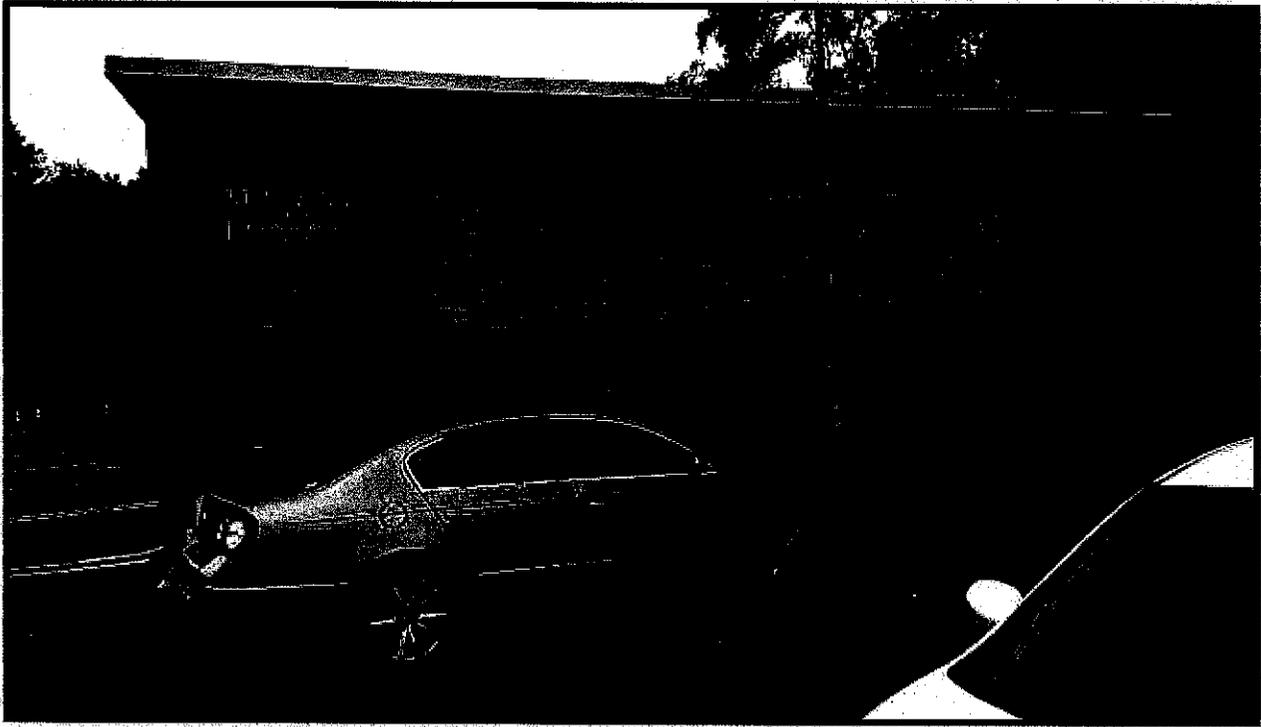


PHOTO 1. A side.

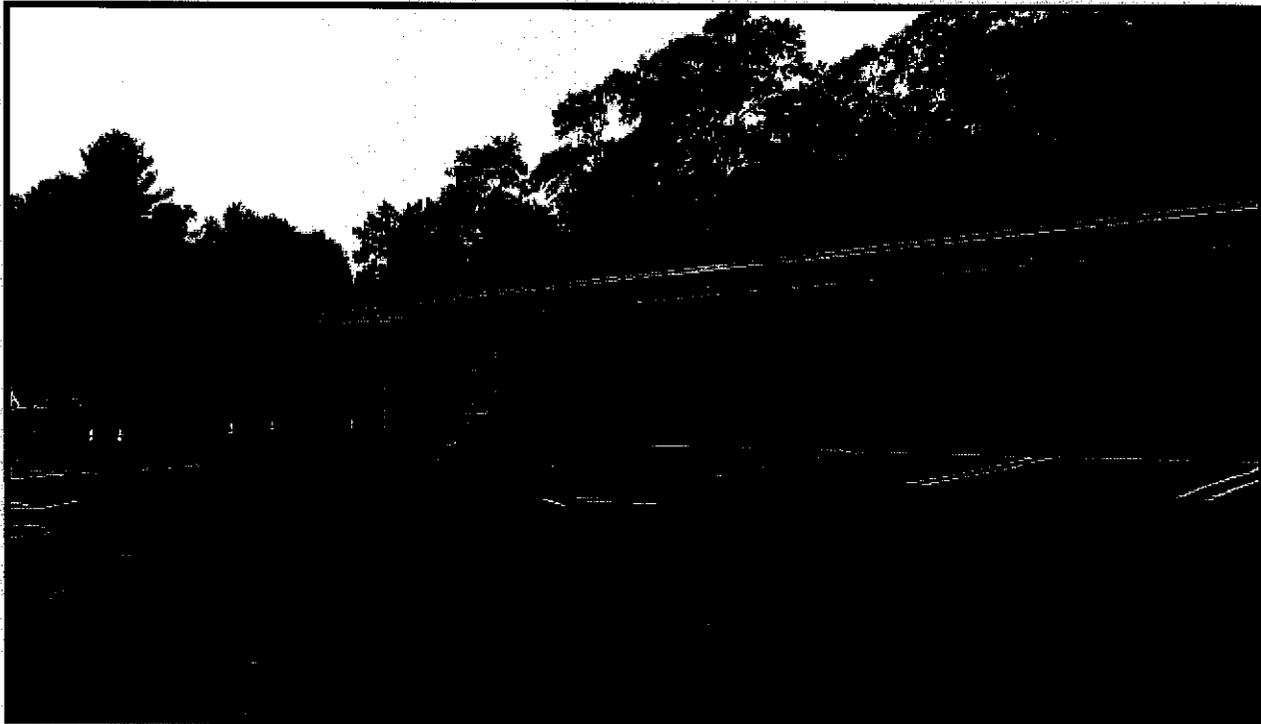


PHOTO 2. B side.

WESTPORT MAINTENANCE FACILITY, WESTPORT, CT

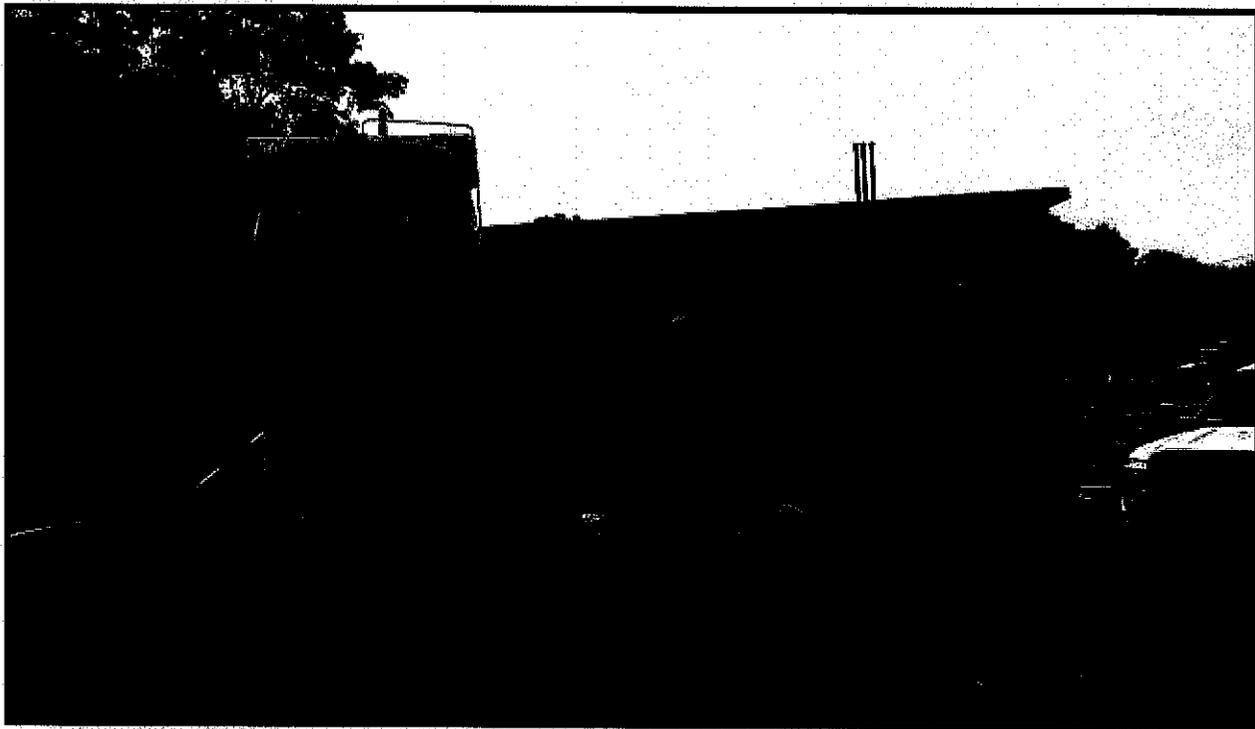


PHOTO 3. C side.

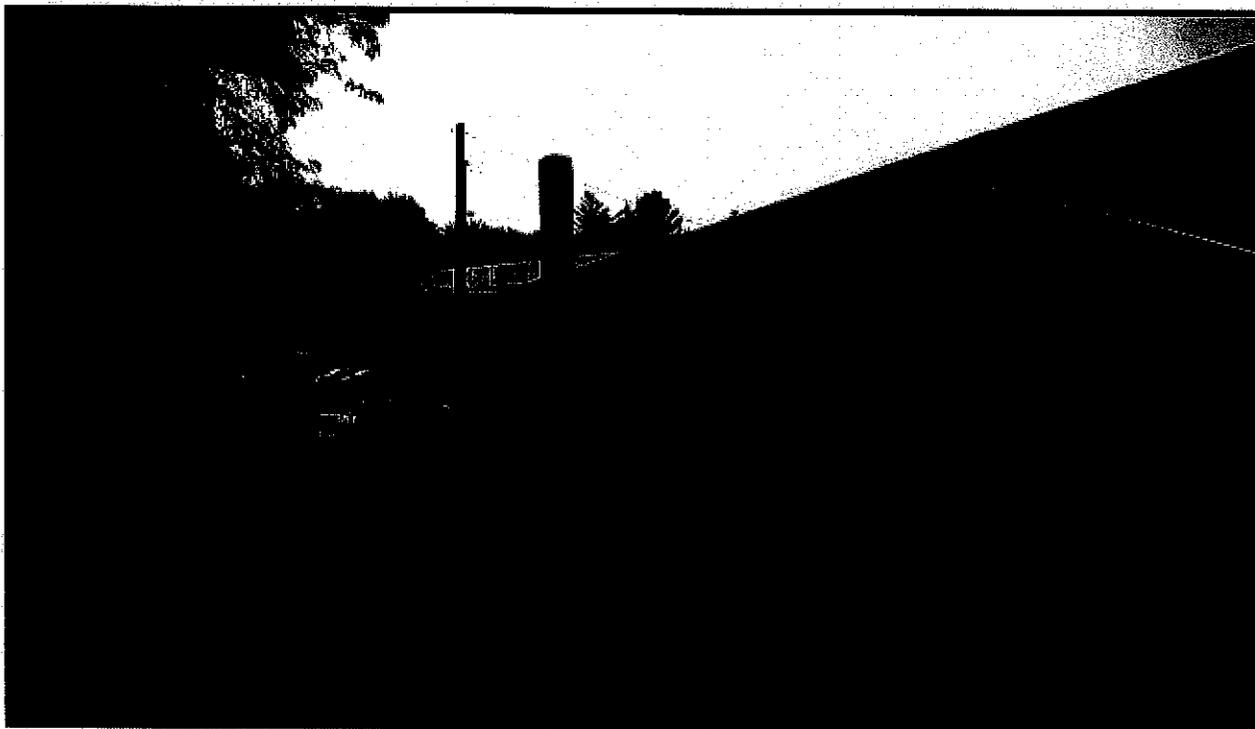


PHOTO 4. D side.

WESTPORT MAINTENANCE FACILITY, WESTPORT, CT

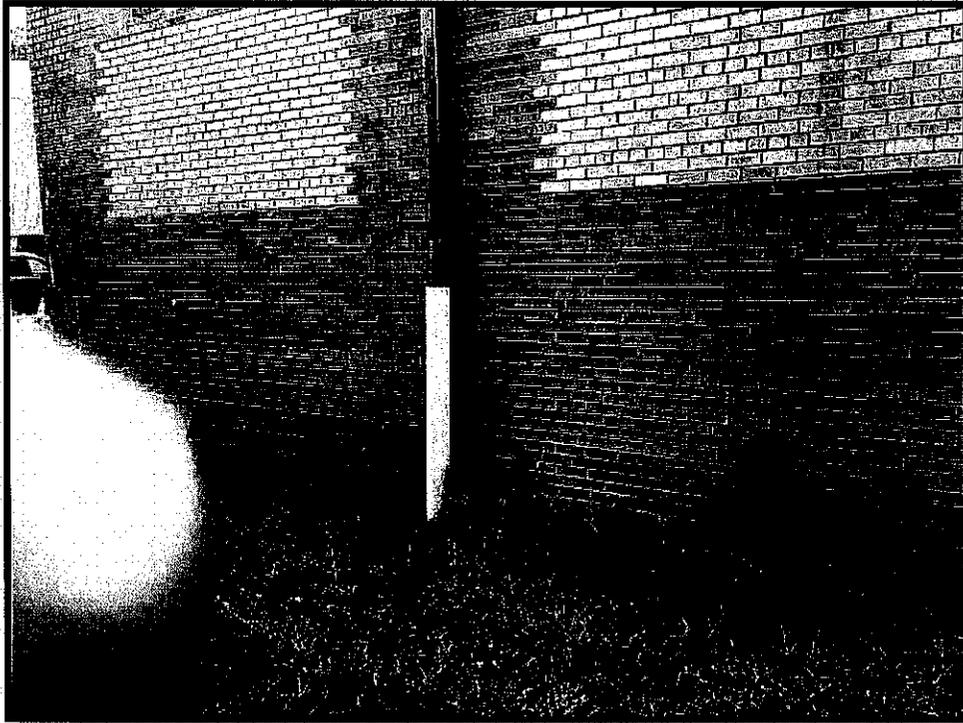


PHOTO 5. Downspout leading into ground.



PHOTO 6. Roof cross section.

WESTPORT MAINTENANCE FACILITY WESTPORT, CT

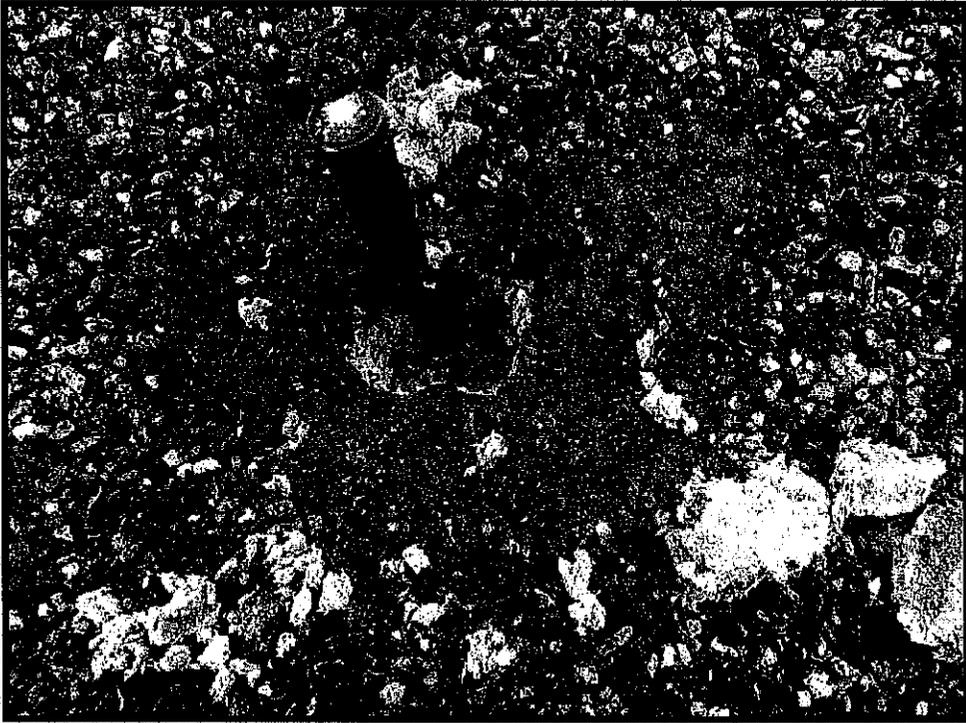


PHOTO 7. Test cut.



PHOTO 8. Water proofing on concrete.

WESTPORT MAINTENANCE FACILITY, WESTPORT, CT

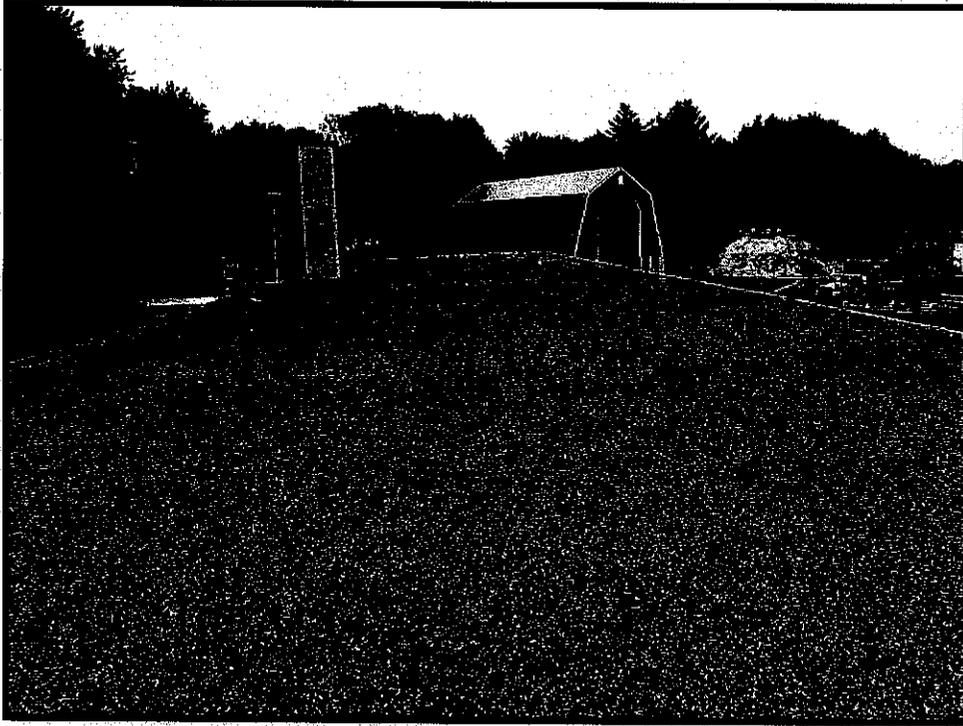


PHOTO 9. Roof C-side facing A-side.

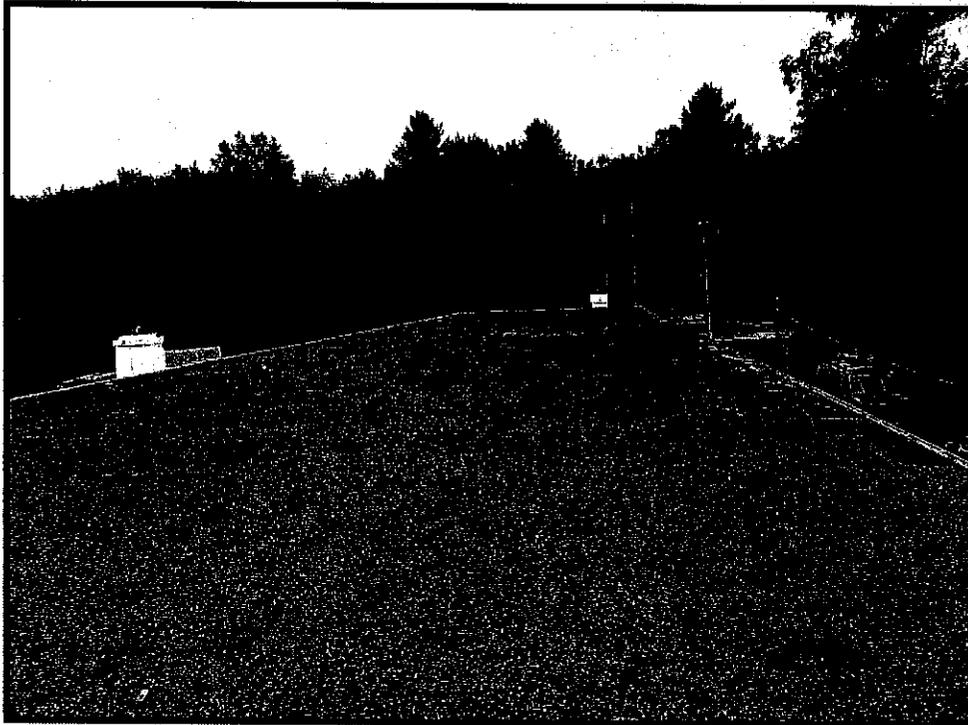


PHOTO 10. Roof From A-side facing C-side.

WESTPORT MAINTENANCE FACILITY, WESTPORT, CT

**APPENDIX C**

**LABORATORY AND INSPECTOR ACCREDITATIONS**

LABORATORY

ACCREDITATIONS

KELLY M GREY  
 TRC SOLUTIONS  
 21 GRIFFIN RD N  
 WINDSOR, CT 06095-1512

Dear Licensed/Certified Professional,  
 Attached you will find your validated license/certification for the coming year. Should you have any questions about your license/certificate renewal, please do not hesitate to write or call.

Department of Public Health (860) 509-7603  
 P.O. Box 340908  
 M.S.#12MOA http://www.dph.state.ct.us  
 Hartford, CT 06134-0308

Sincerely,



JEWEL MULLEN, MD, MPH, MPA, COMMISSIONER  
 DEPARTMENT OF PUBLIC HEALTH

**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. They may copy of this card can be supplied to you.

STATE OF CONNECTICUT  
 DEPARTMENT OF PUBLIC HEALTH  
 PURSUANT TO THE PROVISIONS OF THE CONSTITUTION AND STATUTES OF CONNECTICUT

THE INDIVIDUAL NAMED BELOW IS CERTIFIED  
 BY THIS DEPARTMENT AS A  
**Asbestos Consultant-Inspector**

**KELLY M GREY**

CERTIFICATION NO. 904  
 CURRENT THROUGH 02/29/2016  
 VALIDATION NO. DUPLICATE



COMMISSIONER

EMPLOYER'S COPY

STATE OF CONNECTICUT  
 DEPARTMENT OF PUBLIC HEALTH

NAME: **KELLY M GREY**

VALIDATION NO. DUPLICATE: 904  
 CERTIFICATION NO.: 904  
 CURRENT THROUGH: 02/29/2016  
 PROFESSION: **Asbestos Consultant-Inspector**



COMMISSIONER

WALLET CARD

STATE OF CONNECTICUT  
 DEPARTMENT OF PUBLIC HEALTH

NAME: **KELLY M GREY**

VALIDATION NO. DUPLICATE: 904  
 CERTIFICATION NO.: 904  
 CURRENT THROUGH: 02/29/2016  
 PROFESSION: **Asbestos Consultant-Inspector**



COMMISSIONER

# CERTIFICATE OF ACHIEVEMENT

*This certifies that*

**Kelly Grey**

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

*conducted by*

**Cardno ATC**  
**73 William Franks Drive**  
**West Springfield, MA 01089**  
**(413) 781-0070**

*Thomas Dion*

Principal Instructor: Thomas Dion

October 15, 2015

Date of Course

October 15, 2016

Expiration Date

*Gregory Morsch*

Regional Training Manager: Gregory Morsch

SIAR-5262

Certificate Number

October 15, 2015

Examination Date

1001541 01 AV 0.388 \*\*AUTO T9 1 1464 06095-151221 -C01-P015441



MICHAEL S. STEWART  
21 GRIFFIN RD N  
TRC ENVIRONMENTAL  
WINDSOR CT 06095-1512



Dear MICHAEL S. STEWART,

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,

JEWEL MULLEN, MD, MPH, MPA, COMMISSIONER  
DEPARTMENT OF PUBLIC HEALTH

STATE OF CONNECTICUT  
DEPARTMENT OF PUBLIC HEALTH

NAME  
MICHAEL S. STEWART  
VALIDATION NO. 03-301739  
CERTIFICATE NO. 000305  
CURRENT THROUGH 10/31/16  
PROFESSION  
ASBESTOS CONSULTANT-INSPECTOR

  
SIGNATURE  
COMMISSIONER

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT

THE INDIVIDUAL NAMED BELOW IS CERTIFIED  
BY THIS DEPARTMENT AS A  
ASBESTOS CONSULTANT-INSPECTOR

MICHAEL S. STEWART

CERTIFICATE NO.  
000305  
CURRENT THROUGH  
10/31/16  
VALIDATION NO.  
03-301739

  
SIGNATURE  
COMMISSIONER

1001541-0001548-0000001 of 0000001-C01-a1d00101-1464-01544

# Certificate of Training

*Awarded to*

**MICHAEL STEWART**

*For successful completion of a 4 Hour, 1/2 Day  
Asbestos Building Inspector  
Annual Refresher Training  
August 25, 2016*

This training was approved and given in accordance with the  
Regulations for Connecticut State Agencies  
RCSA 20 - 440 - 1-9 and RCSA 20 - 441 and meets the  
requirements of the EPA Revised MAP under TSCA Title II of 4/4/94.

*Presented by*

**Mystic Air Quality Consultants, Inc.  
1204 North Road, Groton, CT 06340 (800) 247-7746**

Certificate Number: ABIRF25250

Exam Grade: 95

Exam Date: 08/25/2016

Expiration Date: 08/25/2017



**Christopher J. Eident, CIH, CSP, RS**



**George Williamson, Training Director**

Richard Haffey, Training Director

*State of Connecticut, Department of Public Health*  
*Approved Environmental Laboratory*

THIS IS TO CERTIFY THAT THE LABORATORY DESCRIBED BELOW HAS BEEN APPROVED BY THE STATE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO APPLICABLE PROVISIONS OF THE PUBLIC HEALTH CODE AND GENERAL STATUTES OF CONNECTICUT FOR MAKING THE EXAMINATIONS, DETERMINATIONS OR TESTS SPECIFIED BELOW WHICH HAVE BEEN AUTHORIZED IN WRITING BY THAT DEPARTMENT

**TRC ENVIRONMENTAL CORPORATION**

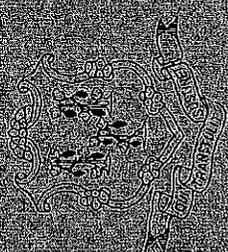
LOCATED AT 21 Griffin Road North IN Windsor, CT 06095  
AND REGISTERED IN THE NAME OF Eric Pamploa

THIS CERTIFICATE IS ISSUED IN THE NAME OF Kathleen Williamson WHO HAS BEEN DESIGNATED BY THE REGISTERED OWNER AUTHORIZED AGENT TO BE IN CHARGE OF THE LABORATORY WORK COVERED BY THIS CERTIFICATE OF APPROVAL AS FOLLOWS:

**BUILDING MATERIALS  
ASBESTOS FIBERS - PCM  
BULK IDENTIFICATION - PLM**

**SEE COMPUTER PRINT-OUT FOR SPECIFIC TESTS APPROVED**

THIS CERTIFICATE EXPIRES DECEMBER 31, 2017 AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH  
DATED AT HARTFORD, CONNECTICUT, THIS 7<sup>th</sup> DAY OF December 2015

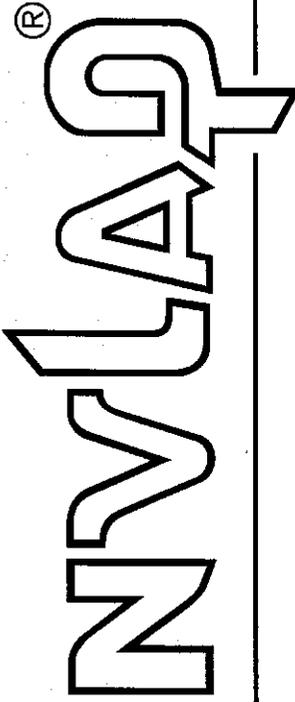


Registration No  
PH-0426



SUZANNE BLANCADOR, MS  
CHIEF, ENVIRONMENTAL HEALTH SECTION

United States Department of Commerce  
National Institute of Standards and Technology



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# Certificate of Accreditation to ISO/IEC 17025:2005

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NVLAP LAB CODE: 101424-0

**TRC Environmental Corporation**  
Windsor, CT

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:

## Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

---

2016-07-01 through 2017-06-30

Effective Dates

A handwritten signature in black ink, appearing to read "Paul S. Lamm".

---

For the National Voluntary Laboratory Accreditation Program



**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005**

**TRC Environmental Corporation**  
21 Griffin Road North  
Windsor, CT 06095  
Ms. Kathleen Williamson  
Phone: 860-298-6392 Fax: 860-298-6214  
Email: [kwilliamson@trcsolutions.com](mailto:kwilliamson@trcsolutions.com)  
<http://www.trcsolutions.com>

**ASBESTOS FIBER ANALYSIS**

**NVLAP LAB CODE 101424-0**

**Bulk Asbestos Analysis**

<u>Code</u>	<u>Description</u>
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

*State of Connecticut, Department of Public Health*  
*Approved Environmental Laboratory*

THIS IS TO CERTIFY THAT THE LABORATORY DESCRIBED BELOW HAS BEEN APPROVED BY THE STATE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO APPLICABLE PROVISIONS OF THE PUBLIC HEALTH CODE AND GENERAL STATUTES OF CONNECTICUT, FOR MAKING THE EXAMINATIONS, DETERMINATIONS OR TESTS SPECIFIED BELOW WHICH HAVE BEEN AUTHORIZED IN WRITING BY THAT DEPARTMENT.

**PROSCIENCE ANALYTICAL SERVICES, INC.**

LOCATED AT 22 Cummings Park IN Woburn, MA 01801  
AND REGISTERED IN THE NAME OF Harvey Yee  
THIS CERTIFICATE IS ISSUED IN THE NAME OF Aimee Corbice WHO HAS BEEN DESIGNATED  
BY THE REGISTERED OWNER AUTHORIZED AGENT TO BE IN CHARGE OF THE LABORATORY WORK COVERED BY THIS CERTIFICATE OF  
APPROVAL AS FOLLOWS:

**SOLID WASTE/SOIL**

Examination for  
Total Metals

**ASBESTOS**

Bulk Identification (PLM + TEM)  
Air-Fiber Counting (PCM + TEM)

**ENVIRONMENTAL HEALTH & HOUSING**

Lead in Paint  
Lead (Paint) in Soil  
Lead in Dust Wipes

SEE COMPUTER PRINT OUT FOR SPECIFIC TESTS APPROVED

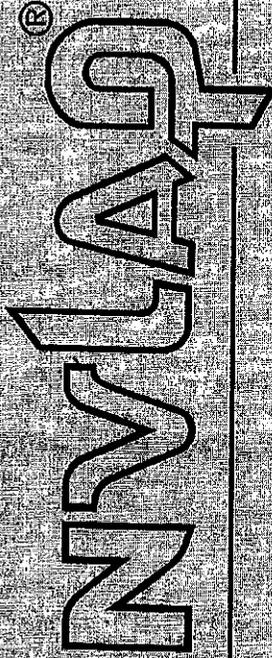
THIS CERTIFICATE EXPIRES December 31, 2016 AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH  
DATED AT HARTFORD, CONNECTICUT THIS 8th DAY OF December, 2014



Registration #  
PH-0209

SUZANNE BLANKFLOD, MS  
CHIEF, ENVIRONMENTAL HEALTH SECTION

United States Department of Commerce  
National Institute of Standards and Technology



# Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200090-0

**ProScience Analytical Services, Inc.**  
Woburn, MA

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

## **Asbestos Fiber Analysis**

*This laboratory is accredited in accordance with the recognized international Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009)*

2016-01-01 through 2016-12-31

Effective Dates



A handwritten signature in black ink, appearing to read "Arthur S. Saman".

For the National Voluntary Laboratory Accreditation Program



**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005**

**ProScience Analytical Services, Inc.**  
22 Cummings Park  
Weburn, MA 01801-2122  
Ms. Aimee Cormier  
Phone: 781-935-3212 Fax: 781-932-4857  
Email: [aimee.cormier@proscience.net](mailto:aimee.cormier@proscience.net)  
<http://www.proscience.net>

**ASBESTOS FIBER ANALYSIS**

**NVLAP LAB CODE 200090-0**

**Bulk Asbestos Analysis**

<u>Code</u>	<u>Description</u>
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

**Airborne Asbestos Analysis**

<u>Code</u>	<u>Description</u>
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

**APPENDIX D**

**ASBESTOS BULK SAMPLE CHAIN OF CUSTODY  
FORMS**



21 GRIFFIN ROAD NORTH  
 WINDSOR, CONNECTICUT 06095  
 TELEPHONE (860) 298-9692  
 FAX (860) 298-6380

## ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009  
 Supersede Previous Edition

LAB ID #. **48959**

PROJECT NUMBER	PROJECT NAME		INSPECTOR		PARAMETERS				TURNAROUND TIME				
	222165.5382.0710	ConndOT - Westport Maintenance Facility	SIGNATURE	Michael Stewart	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (R > 1% & < 10%)	TEM NY NOB 1984 (IF PLM SERIES NEG)	8hr	24hr	48hr	3day
FIELD SAMPLE NUMBER	DATE	TIME	TYPE	COMP	GRAB	SAMPLE LOCATION	MATERIAL						
1	9/1/16	12:41	X		X	Main Roof - Top Layer	Built Up Roofing (BUR 1)						
2	9/1/16	12:42	X		X	Main Roof - Top Layer	Built Up Roofing (BUR 1)						
3	9/1/16	12:43	X		X	Main Roof - Under BUR 1	Roof Insulation (RI 1)						
4	9/1/16	12:44	X		X	Main Roof - Under BUR 1	Roof Insulation (RI 1)						
5	9/1/16	12:47	X		X	Main Roof - on Concrete	Water Proofing on Concrete (WP 1)						
6	9/1/16	12:48	X		X	Main Roof - on Concrete	Water Proofing on Concrete (WP 1)						
7	9/1/16	12:55	X		X	Main Roof - Perimeter	Perimeter Flashing (F1 1)						
8	9/1/16	12:57	X		X	Main Roof - Perimeter	Perimeter Flashing (F1 1)						
9	9/1/16	12:59	X		X	Main Roof - Chimney	Chimney Flashing (F1 2)						
10	9/1/16	13:00	X		X	Main Roof - Chimney	Chimney Flashing (F1 2)						
11	9/1/16	13:03	X		X	Main Roof - Penetrations	Penetration Flashing (F1 3)						

Relinquished by: (Signature) 	Date: 9/1/16	Received by: (Signature) 	Date: 9/12/16
(Printed) Michael Stewart	Time: 20:00	(Printed) 0900	Time: (Printed)
Remarks: Rush turn around per Erik Plimpton.		Condition of Samples: Acceptable: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
		Page 1 of 3	



21 GRIFFIN ROAD NORTH  
WINDSOR, CONNECTICUT 06095  
TELEPHONE (860) 298-9692  
FAX (860) 298-6380

## ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009  
Supersedes Previous Edition

LAB ID #: 48959

PROJECT NUMBER 222165.5382.0710		PROJECT NAME ConnDOT - Westport Maintenance Facility		PROJECT NAME		PARAMETERS		TURNAROUND TIME	
		INSPECTOR Michael Stewart	INSPECTOR Michael Stewart	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 1984 (IF PLM SERIES NEG)	PLM: 8hr X 24hr X 48hr X 3day
FIELD SAMPLE NUMBER	DATE	TIME	TYPE	COMP	GRAB	SAMPLE LOCATION	MATERIAL		
							12	9/1/16	13:04
13	9/1/16	13:14	X	X	X	Main Roof - Chimney - under insulation		Black Vapor Barrier (VB 1)	
14	9/1/16	13:15	X	X	X	Main Roof - Chimney - under insulation	X	Black Vapor Barrier (VB 1)	
15	9/1/16	13:08	X	X	X	Main Roof - D Side		Roof Patching (RP 1)	
16	9/1/16	13:09	X	X	X	Main Roof - D Side	X	Roof Patching (RP 1)	
17	9/1/16	13:21	X	X	X	Canopy Roof		Built Up Roofing (BUR 2)	
18	9/1/16	13:21	X	X	X	Canopy Roof	X	Built Up Roofing (BUR 2)	
19	9/1/16	13:23	X	X	X	Canopy Roof - Perimeter		Perimeter Flashing (F1 4)	
20	9/1/16	13:23	X	X	X	Canopy Roof - Perimeter	X	<del>Built Up Roofing (BUR 2)</del> Flashings (F1 4)	
21	9/1/16	12:30	X	X	X	Main Roof - D Side Gutter	X	Gutter Seam Caulk (C 1)	

Relinquished by: (Signature) 	Date: 9/1/16	Received by: (Signature) 	Date: 9/2/16
(Printed) Michael Stewart	Time: 20:00	(Printed) Erik Plimpton	Time: 09:00
Remarks: Rush turn around per Erik Plimpton.		Condition of Samples: Acceptable: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
		Comments:	





**APPENDIX E**

**PLM ASBESTOS LABORATORY ANALYSIS DATA**

**BULK ASBESTOS ANALYSIS REPORT**

CLIENT: CT Department of Transportation

Lab Log #: 0048959  
 Project #: 222165.5382.0710  
 Date Received: 09/02/2016  
 Date Analyzed: 09/02/2016

Site: Westport Maintenance Facility, Westport, CT

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

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
1	Black	Yes	No	--	5% cellulose 10% fibrous glass	3%	Chrysotile
2	--	--	--	--	--	NA/PS	--
3	Beige	Yes	No	--	99% cellulose	ND	None
4	Beige	Yes	No	--	99% cellulose	ND	None
5	Black	Yes	No	--	---	ND	None
6	Black	Yes	No	--	---	ND	None
7	Black	Yes	No	--	---	20%	Chrysotile
8	--	--	--	--	--	NA/PS	--
9	Black	Yes	No	--	10% cellulose	3%	Chrysotile
10	--	--	--	--	--	NA/PS	--
11	Black	Yes	No	--	---	20%	Chrysotile
12	--	--	--	--	--	NA/PS	--
13	Black	Yes	No	--	5% cellulose 20% fibrous glass	5%	Chrysotile
14	--	--	--	--	--	NA/PS	--
15	Black	Yes	No	--	30% cellulose	ND	None
16	Black	Yes	No	--	30% cellulose	ND	None
17	Black	Yes	No	--	10% fibrous glass	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
18	Black	Yes	No	--	10% fibrous glass	ND	None
19	Black	Yes	No	--	---	20%	Chrysotile
20	--	--	--	--	--	NA/PS	--
21	Grey/Yellow	Yes	No	--	10% synthetic fiber	ND	None
22	Grey/Yellow	Yes	No	--	10% synthetic fiber	ND	None
23	Black	Yes	No	--	---	ND	None
24	Black	Yes	No	--	---	ND	None

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

Note: 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, 2016. 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 Reviewed by: Cathryn Lemire Date Issued  
 Kathleen Williamson, Laboratory Manager Cathryn Lemire, Approved Signatory 09/02/2016

**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 NJ #CT004 CA #2907  
 CO# AL-15020 PHIL# 461 PA#68-03387

**APPENDIX F**

**TEM ASBESTOS LABORATORY ANALYSIS DATA**

# ProScience Analytical Services, Inc.

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

## Laboratory Report

**Batch:** NT 16084  
**Method:** NOB  
**Date Received:** 9/6/2016  
**Date Analyzed:** 9/7/2016  
**Date of Report:** 9/7/2016

**Client Project #:** 222165.5382.0710  
**Client Reference:** CT DOT - Westport Maintenance Facility  
**PO #:** C222165  
**Client #:** 297  
**Client Name:** TRC Environmental Corp. (CT)

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						
NT122003	16	Water Proofing		.0997	.00	.00	.00	.00	12.94	65.40	21.66	Yes	No	
NT122004	16	Roof Patching		.4246	.15	.00	.00	.00	29.35	68.44	2.21	Yes	No	
NT122005	18	Built Up Roofing		.2265	.35	.00	.00	.00	6.93	91.13	1.94	Yes	No	
NT122006	22	Gutter Seam Caulk		.1685	.00	.00	.00	.00	10.80	57.98	31.22	Yes	No	
NT122007	24	Residual Caulk		.5229	.00	.00	.00	.00	2.92	39.11	57.97	Yes	No	

**Comments:**

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

*Aimee Cormier*

Aimee Cormier, Analyst

**APPENDIX G**  
**PCB CAULK SAMPLING DATA**





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

**Draft Progress Report**  
 September 02, 2016

FOR: Attn:  
 TRC Environmental Corp.  
 21 Griffin Rd North  
 Windsor, CT 06095

Sample Information

Matrix: SOLID  
 Location Code: TRC-PCB  
 Rush Request: 24 Hour  
 P.O.#: 22216553820710

Custody Information

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

Date      Time  
 09/01/16      13:10  
 09/01/16      16:00

Laboratory Data

SDG ID: GBV01685  
 Phoenix ID: BV01685

Project ID: CONN DOT WESTPORT MF  
 Client ID: 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				09/01/16	Q/I	SW3540C
<b><u>PCB (Soxhlet SW3540C)</u></b>							
PCB-1016	ND	0.78	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1221	ND	0.78	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1232	ND	0.78	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1242	ND	0.78	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1248	ND	0.78	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1254	ND	0.78	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1260	ND	0.78	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1262	ND	0.78	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1268	ND	0.78	mg/Kg	5	09/02/16	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	97		%	5	09/02/16	AW	30 - 150 %
% TCMX	81		%	5	09/02/16	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.

**PCB Comment:**

For PCBs, in order to reach the desired RL, multiple cleanup steps were performed. The extract was cleaned up with a combination of sulfuric acid, potassium permanganate, copper powder and additional florasil.

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.

**PLEASE NOTE: THIS PROGRESS REPORT IS CONSIDERED PRELIMINARY DATA. THE RESULTS ENTERED HAVE NOT BEEN EXAMINED BY OUR QA/QC DEPARTMENT.**



Phyllis Shiller, Laboratory Director

September 02, 2016



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

**Draft Progress Report**  
 September 02, 2016

FOR: Attn:  
 TRC Environmental Corp.  
 21 Griffin Rd North  
 Windsor, CT 06095

Sample Information

Matrix: SOLID  
 Location Code: TRC-PCB  
 Rush Request: 24 Hour  
 P.O.#: 22216553820710

Custody Information

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

Date      Time  
 09/01/16      13:15  
 09/01/16      16:00

Laboratory Data

SDG ID: GBV01685  
 Phoenix ID: BV01686

Project ID: CONN DOT WESTPORT MF  
 Client ID: 2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				09/01/16	Q/I	SW3540C
<b><u>PCB (Soxhlet SW3540C)</u></b>							
PCB-1016	ND	0.48	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1221	ND	0.48	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1232	ND	0.48	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1242	ND	0.48	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1248	ND	0.48	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1254	ND	0.48	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1260	ND	0.48	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1262	ND	0.48	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1268	ND	0.48	mg/Kg	5	09/02/16	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	90		%	5	09/02/16	AW	30 - 150 %
% TCMX	79		%	5	09/02/16	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.

**PCB Comment:**

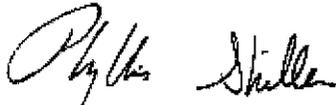
For PCBs, in order to reach the desired RL, multiple cleanup steps were performed. The extract was cleaned up with a combination sulfuric acid, potassium permanganate, copper powder and additional florasil.

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.

**PLEASE NOTE: THIS PROGRESS REPORT IS CONSIDERED PRELIMINARY DATA. THE RESULTS ENTERED HAVE NOT BEEN EXAMINED BY OUR QA/QC DEPARTMENT.**



Phyllis Shiller, Laboratory Director

September 02, 2016



Environmental Laboratories, Inc.

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

Draft Progress Report

September 02, 2016

FOR: Attn:  
TRC Environmental Corp.  
21 Griffin Rd North  
Windsor, CT 06095

Sample Information

Matrix: SOLID  
Location Code: TRC-PCB  
Rush Request: 24 Hour  
P.O.#: 22216553820710

Custody Information

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

Date Time  
09/01/16 13:20  
09/01/16 16:00

Laboratory Data

SDG ID: GBV01685  
Phoenix ID: BV01687

Project ID: CONN DOT WESTPORT MF  
Client ID: 3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				09/01/16	Q/I	SW3540C
<b>PCB (Soxhlet SW3540C)</b>							
PCB-1016	ND	3.3	mg/Kg	20	09/02/16	AW	SW8082A
PCB-1221	ND	3.3	mg/Kg	20	09/02/16	AW	SW8082A
PCB-1232	ND	3.3	mg/Kg	20	09/02/16	AW	SW8082A
PCB-1242	ND	3.3	mg/Kg	20	09/02/16	AW	SW8082A
PCB-1248	ND	3.3	mg/Kg	20	09/02/16	AW	SW8082A
PCB-1254	ND	3.3	mg/Kg	20	09/02/16	AW	SW8082A
PCB-1260	ND	3.3	mg/Kg	20	09/02/16	AW	SW8082A
PCB-1262	ND	3.3	mg/Kg	20	09/02/16	AW	SW8082A
PCB-1268	ND	3.3	mg/Kg	20	09/02/16	AW	SW8082A
<b>QA/QC Surrogates</b>							
% DCBP	98		%	20	09/02/16	AW	30 - 150 %
% TCMX	71		%	20	09/02/16	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 (preceeded 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.

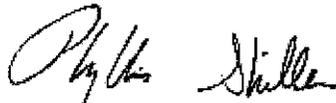
**PCB Comment:**

For PCBs, due to matrix interference from non target compounds in the sample an elevated RL was reported. Multiple cleanup ste were performed but were unsuccessful. The extract was cleaned up with a combination of sulfuric acid, potassium permanganate, copper powder and additional florisil.

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.

**PLEASE NOTE: THIS PROGRESS REPORT IS CONSIDERED PRELIMINARY DATA. THE RESULTS ENTERED HAVE NOT BEEN EXAMINED BY OUR QA/QC DEPARTMENT.**



Phyllis Shiller, Laboratory Director

September 02, 2016



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

# Draft Progress Report

September 02, 2016

FOR: Attn:  
TRC Environmental Corp.  
21 Griffin Rd North  
Windsor, CT 06095

### Sample Information

Matrix: SOLID  
Location Code: TRC-PCB  
Rush Request: 24 Hour  
P.O.#: 22216553820710

### Custody Information

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

Date      Time  
09/01/16      12:55  
09/01/16      16:00

### Laboratory Data

SDG ID: GBV01685  
Phoenix ID: BV01688

Project ID: CONN DOT WESTPORT MF  
Client ID: 4

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				09/01/16	Q/I	SW3540C
<b><u>PCB (Soxhlet SW3540C)</u></b>							
PCB-1016	ND	0.75	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1221	ND	0.75	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1232	ND	0.75	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1242	ND	0.75	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1248	ND	0.75	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1254	ND	0.75	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1260	ND	0.75	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1262	ND	0.75	mg/Kg	5	09/02/16	AW	SW8082A
PCB-1268	ND	0.75	mg/Kg	5	09/02/16	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>							
% DCBP	107		%	5	09/02/16	AW	30 - 150 %
% TCMX	95		%	5	09/02/16	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level  
QA/QC Surrogates: Surrogates are compounds (preceeded 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.

**PLEASE NOTE: THIS PROGRESS REPORT IS CONSIDERED PRELIMINARY DATA. THE RESULTS ENTERED HAVE NOT BEEN EXAMINED BY OUR QA/QC DEPARTMENT.**



Phyllis Shiller, Laboratory Director

September 02, 2016

# Sample Criteria Exceedences Report

GBV01685 - TRC-PCB

Criteria: None

State: CT

Sample No	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL	Analysis Units
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\*\*\* 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.

**APPENDIX H**  
**RELATED CORRESPONDENCE**

STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION

*subject:* Project No. 0158-0213  
Lead and Asbestos Investigations  
Roof Replacement of the Westport  
Maintenance Facility  
Westport  
*date:* June 7, 2016

**m e m o r a n d u m**

*to:* Mr. Christopher J. Bonsignore  
Transportation Principal Engineer  
Bureau of Engineering and  
Construction

*from:* Gregory M. Dorosh  
Transportation Principal Engineer  
Bureau of Engineering and  
Construction

Digitally signed by  
Dorosh, Gregory M  
Date: 2016.06.07  
09:22:04-07

This office is requesting that lead and asbestos investigations be performed for the roof replacement of the Westport Maintenance Facility.

No previous inspections from EnviroMed have been performed.

Please provide the results of your investigations as soon as possible based on the September 14, 2016 FDP.

PE efforts for this project will be under the above noted project number.

The current scope of work is attached.

Should you have any questions or need any additional information, please contact the Project Engineer, Ms. Shinel M. Phillip, at Extension 2467.

Attachment

Shinel M. Phillip/smp/sk

Digitally signed by  
Shinel M. Phillip  
Date: 2016.06.07  
09:22:04-07

cc: Daniel J. Smachetti – David A. Hartley  
Scott A. Hill  
James Fallon – Gregory M. Dorosh – Michael J. Strong

Digitally signed by  
Gregory M. Dorosh  
Date: 2016.06.07  
09:22:04-07

**SCOPE OF WORK FOR THE ROOF REPLACEMENT OF  
THE WESTPORT MAINTENANCE GARAGE**

Project No. 0158-0213

02/24/2016

**GENERAL:**

The built-up roof at the Westport Maintenance Garage is currently leaking water into the building. The scope of work includes the removal of the existing ballast, built-up roof and insulation down to the sloped concrete deck. Remove gutters, rain leaders, and rain leaders with PVC sleeves, roof flashing and blocking down to the concrete deck. Remove brick chimney, flush with concrete deck. Remove exhaust fan or vent. Remove roof assembly at canopy back to structure. Rebuild the masonry wall at the rear of the building if needed. Remove and replace the 15" underground asphalt coated corrugated metal pipe (ACCMP) located near the existing generator pad (230LF).

Installation a Polyvinyl Chloride (PVC) membrane roof system inclusive of a roof covers board and insulation to meet current energy code. Exhaust fan or vent, gutters and rain leaders connected to PVC sleeves six (6') foot up from grade to the existing asphalt corrugated metal pipe. Install chimney thimble assembly with roof cricket. Perimeter roof flashing to be standard "brown" similar to new facilities. Roof assembly at canopy with a gutter and rain leader terminating onto pavement.

## Plimpton, Erik

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**From:** Plimpton, Erik  
**Sent:** Wednesday, September 7, 2016 3:02 PM  
**To:** 'Tarini, Brian R'  
**Subject:** RE: Westport DOT

We can just assume the pipe will have asphalt tar in it that might be asbestos containing, no need to dig, its not that big an item.

Erik R. Plimpton, PE, CHMM, CMC  
Vice President  
Eastern Region Practice Leader  
Building Sciences & Industrial Hygiene



21 Griffin Road North, Windsor, CT 06095  
T: 860.298.6280 | F: 860.298.6380 | C: 860.798.4699

[LinkedIn](#) | [Twitter](#) | [Blog](#) | [Flickr](#) | [www.trcsolutions.com](http://www.trcsolutions.com)



[WorkCare \(888\) 449-7787](#)



[Incident Notification Report](#)



[Auto Incident Report](#)



[Safe Catch Report](#)

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**From:** Tarini, Brian R [mailto:Brian.Tarini@ct.gov]  
**Sent:** Wednesday, September 7, 2016 3:01 PM  
**To:** Plimpton, Erik <EPlimpton@trcsolutions.com>  
**Subject:** Westport DOT

Good Afternoon Erik

How important is it to find the piece of corrugated drainage pipe at Westport that may contain asbestos  
We visually looked again for the outlet but can't seem to locate

If you really need a sample I guess we would have to dig

Let me know

*Brian R Tarini  
Ct Dept of Transportation  
Property & Facilities Region 3 Trumbull  
203-380-6675  
Cell 860-982-1540*

Lucky Hill Sign Shop – CT15 SB – left onto CT160 – right onto CT3 – behind District I office on right after crossing over I91 – 1107 Cromwell Ave.

Simsbury Maint – CT15 NB to I91 NB exit 37 – left onto CT305 – right on CT187 continue on CT189 – left on CT315 – right on US202 – garage is on left - 1549 Hopmeadow Street

Southbury Maint, Elect - CT15 SB to I691 WB to I84 WB exit 15 – right off exit – left onto Main St – right onto SR492 – garage on left at end of street

Southington Maint – CT15 NB to I84 WB exit 29 – left onto CT66 – take a right onto Mulberry St. – 476 Mulberry St.

Stratford Maint – CT15 SB exit for Milford Connector to I95 SB exit 30 – garage is at corner of Lordship Blvd & Surf Ave. facing bottom of ramp

Stratford Region 3 P&F – CT15 SB exit 53 – left onto CT110 – left onto Ryders Lane

Thomaston District IV – CT15 SB to I691 WB to I84 WB to CT8 NB exit 38 – left at the end of the ramp – office is on right +/- 1 mile – 359 South Main St. (US6)

Thomaston Maint - CT72 WB to US6 WB – left onto Prospect St – garage is 2/10 mile on right

Torrington Bridge, Signs & mkgs – CT9 to CT72 WB to US6 WB to CT8 NB exit 43 – continue on East Albert – left onto Oak St. – left onto Fowler Ave – garage is on right – 80 Fowler Avenue

Tylerville Maint – see Haddam

Union Maint – CT15 NB to I84 EB exit 73 – right onto CT190 – 829 Buckley Highway

Vernon Maint – CT15 NB to I84 EB exit 64/65 – continue on CT30 – Right onto Dobson – left onto Campbell – garage is on left - 37 Campbell Ave.

Wallingford Maint – CT15 SB to I91 SB exit 13 – right onto SR702 (Wharton Brook Connector) – garage is +/- ¼ mile on right

Waterbury Maint, Repair, Stores - CT15 SB to I691 WB to I84 WB exit 20 to CT8 NB exit 36 – right onto Huntingdon Ave – left onto Chase River Rd. – garage is on right – 100 Chase River Rd.

Waterbury/Oxford Airport – see Oxford

Waterford Maint – CT15 NB to CT2 EB to CT11 – left at end of expressway onto CT82 – right onto CT85 – left onto Industrial Drive – garage is on left - 20 Industrial Dr

Westbrook Maint – CT15 SB to CT9 SB to I95 SB exit 64 – right onto CT145 – garage is on left – 201 Horsehill Road

Westport Maint – CT15 SB to I91 SB to I95 SB to Sherwood Island Connector – right onto US1 – garage is on right – 900 Post Road East