

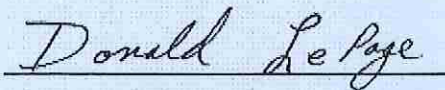


**PRE-RENOVATION  
INVESTIGATIVE SURVEY FOR  
ASBESTOS-CONTAINING MATERIALS  
30 TRINITY STREET  
HARTFORD, CONNECTICUT**

**Project No. 2B-06-34  
DPW No. 19035**

*Prepared for*  
State of Connecticut  
Department of Public Works  
Hartford, Connecticut

*Prepared by*  
TRC Environmental Corporation  
Windsor, Connecticut

A handwritten signature in black ink that reads "Donald LePage". The signature is written in a cursive style and is underlined.

Donald LePage  
Project Manager

TRC Project No. 43500-5450-00001  
December 21, 2006

**TRC Environmental Corporation**  
21 Griffin Road North  
Windsor, Connecticut 06095  
Telephone (860) 298-9692  
Facsimile (860) 298-6399

# **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

## **APPENDICES**

- A SITE SKETCH
- B LABORATORY AND INSPECTOR ACCREDITATIONS
- C ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORMS
- D PLM LABORATORY ANALYSIS DATA
- E TEM LABORATORY ANALYSIS DATA

## **EXECUTIVE SUMMARY**

On November 30, 2006 TRC Environmental Corporation (TRC) of Windsor, Connecticut conducted an inspection for suspect asbestos-containing materials (ACM) at 30 Trinity Street in Hartford, Connecticut. 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 Room 110 and entrance foyer floor areas at 30 Trinity Street. A Connecticut licensed asbestos inspector from TRC 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 transmission electron microscopy (TEM) methods at CTDPH/NVLAP accredited laboratories. ACM was identified as vinyl floor asbestos tile (VAT) with associated mastic. ACM to be impacted by renovation activities must be removed prior to disturbance in accordance with OSHA, USEPA, CTDPH, and CTDEP standards for asbestos abatement/disposal. Detailed results of the asbestos survey can be found in Tables 1-3 and Appendices A through E.

## PROJECT OUTLINE

Project Address: 30 Trinity Street  
Hartford, CT

DAS Contract No. 03PSX0346E

DPW Project Manager Michael Sanders

DPW Project No.: 2B-06-34

DPW Building No: 19035

TRC Project No.: 43500-5450-00001

TRC Project Manager: Don LePage

Asbestos Inspector: Stephen Arienti (LIC #000583)

Date of Inspection: November 30, 2006

Asbestos Identified: Yes

### Additional Notes:

The site investigation was limited to the collection and analysis of suspect asbestos-containing materials associated with floor renovations in Room 110 and entrance foyer at 30 Trinity Street in Hartford, CT.

# TABLES

**TABLE 1  
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS  
CT DPW - 30 TRINITY STREET  
HARTFORD, CONNECTICUT**

Sample No.	Sample Location	Homogeneous Material	% and Type Asbestos
01	Room 110	Black mastic associated with FT1	3% chrysotile
		Grey floor tile (FT1)	10% chrysotile
02	Room 110	Glue associated with CB1	ND<1% <sup>1</sup>
		Blue cove base (CB1)	ND<1% <sup>1</sup>
03	Room 110	Yellow carpet glue (CG1)	0.18% chrysotile <sup>1</sup>
04	Front foyer (top layer)	Yellow mastic associated with FT2	0.12% chrysotile <sup>1</sup>
		12"X12" tan floor tile (FT2)	ND<1% <sup>1</sup>
05	Front foyer (2 <sup>nd</sup> layer)	Black mastic associated with FT3	5% chrysotile
		Light grey floor tile (FT1)	5% chrysotile

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%)  
CJ DPW - 30 TRINITY STREET  
HARTFORD, 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>
Grey floor tile (FT1) & associated black mastic	Sampled 11/06	Room 110 (under carpet)	Category I Non-Friable	Miscellaneous	~800 SF
Light grey floor tile (FT3) & associated black mastic	Sampled 11/06	Front entrance foyer (2 <sup>nd</sup> layer)	Category I Non-Friable	Miscellaneous	~400 SF

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  
CT DPW - 30 TRINITY STREET  
HARTFORD, CONNECTICUT**

<b>Material</b>	<b>General Location</b>
Yellow carpet glue (CG1)	Room 110
Blue cove base (CB1) & associated glue	Room 110
12"X12" tan floor tile (FT2) & associated yellow glue (top layer)	Front foyer entrance



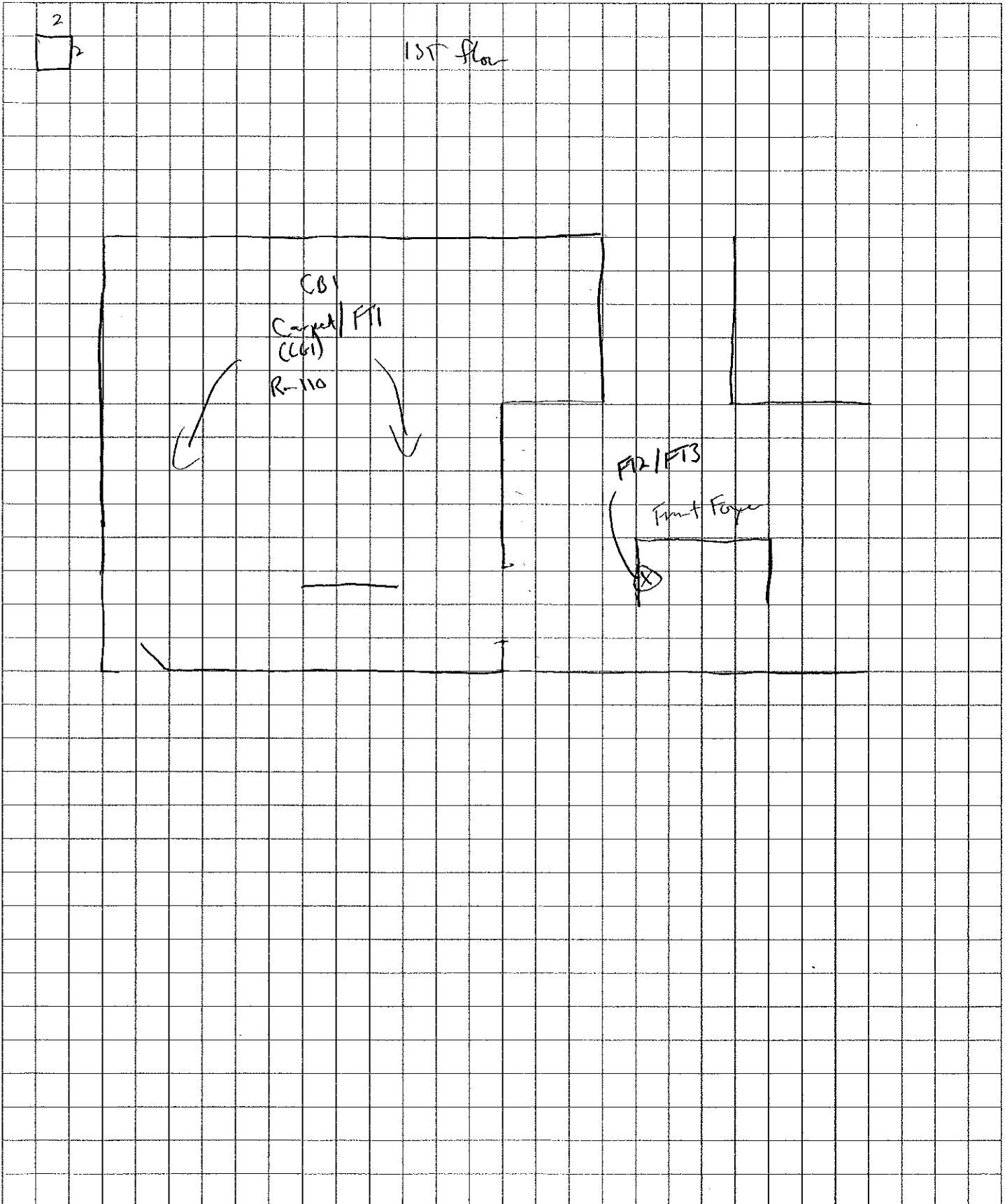
**APPENDIX A**

**SITE SKETCH**



SUBJECT Draw - 30 Trinity St. Hartford, CT

SHEET NO. 1 OF 1  
PROJECT NO. Y8500-5480-00001  
DATE 11/30/00  
BY SM  
CHK'D \_\_\_\_\_



**APPENDIX B**

**LABORATORY AND INSPECTOR ACCREDITATIONS**

0003494 FP \*\*PASRT T9 0 0654 06450

STEPHEN R. ARIENTI  
63 PINEHURST DRIVE  
MERIDEN CT 06450

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 to me.

Department of Public Health (860) 509-7603  
P.O. Box 540308  
MS #12MOA <http://www.dph.state.ct.us>  
Hartford, CT 06134-0308

Sincerely,

*J Robert Galvin M.D., M.P.H.*

J. ROBERT GALVIN, MD, MPH, 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. Only one copy of this card can be supplied to you.

EMPLOYER'S COPY

STATE OF CONNECTICUT  
DEPARTMENT OF PUBLIC HEALTH

NAME:

STEPHEN R. ARIENTI

VALIDATION NO.

03 321623

LICENSE NO.

000589

CURRENT THROUGH

04/30/07

PROFESSION:

ASBESTOS CONSULTANT-INSPECTOR

SIGNATURE

*J Robert Galvin M.D., M.P.H.*  
COMMISSIONER

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT

THE INDIVIDUAL NAMED BELOW IS LICENSED

BY THIS DEPARTMENT AS A

ASBESTOS CONSULTANT-INSPECTOR

STEPHEN R. ARIENTI

LICENSE NO.  
000589

CURRENT THROUGH  
04/30/07

VALIDATION NO.  
03 321623

SIGNATURE

*J Robert Galvin M.D., M.P.H.*  
COMMISSIONER

# CERTIFICATE OF ACHIEVEMENT

*This certifies that*

**Stephen Arienti**

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

*conducted by*

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

*Edward Volz*  
Principal Instructor

January 5, 2006

Date of Course

January 5, 2007

Expiration Date

*Gregory J. Morach*  
Regional Manager

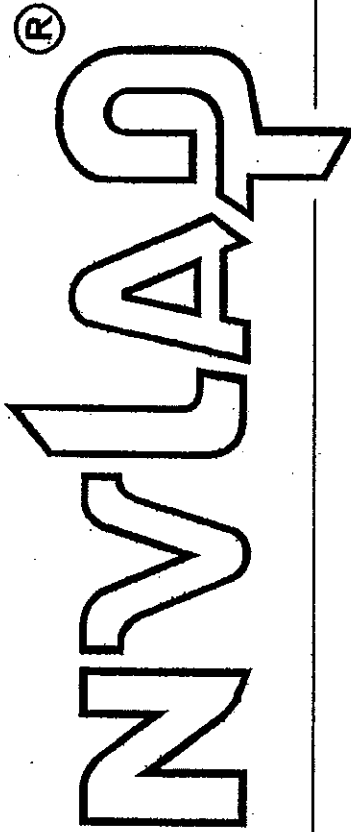
SLAR-2079

Certificate Number

January 5, 2006

Examination Date

United States Department of Commerce  
National Institute of Standards and Technology



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**Certificate of Accreditation to ISO/IEC 17025:1999**

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NVLAP LAB CODE: 101424-0

**TRC Environmental Corporation**  
Windsor, CT

*is recognized by the National Voluntary Laboratory Accreditation Program for conformance with criteria set forth in  
NIST Handbook 150:2001 and all requirements of ISO/IEC 17025:1999.  
Accreditation is granted for specific services, listed on the Scope of Accreditation, for:*

**BULK ASBESTOS FIBER ANALYSIS**

2006-07-01 through 2007-06-30

*Effective dates*



*Dolly S. Bruce*  
For the National Institute of Standards and Technology

# 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

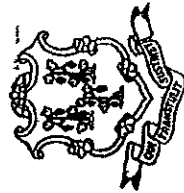
LOCATED AT 21 Griffin Road North IN Windsor, CT 06095  
AND REGISTERED IN THE NAME OF Richard A. Love

THIS CERTIFICATE IS ISSUED IN THE NAME OF Henry Laliberte 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:

ASBESTOS  
AIR-FIBER COUNTING - PCM  
BULK IDENTIFICATION - PLM

SEE COMPUTER PRINT-OUT FOR SPECIFIC TESTS APPROVED

THIS CERTIFICATE EXPIRES December 31, 2007 AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH  
DATED AT HARTFORD, CONNECTICUT, THIS 22<sup>ND</sup> DAY OF DECEMBER 2005



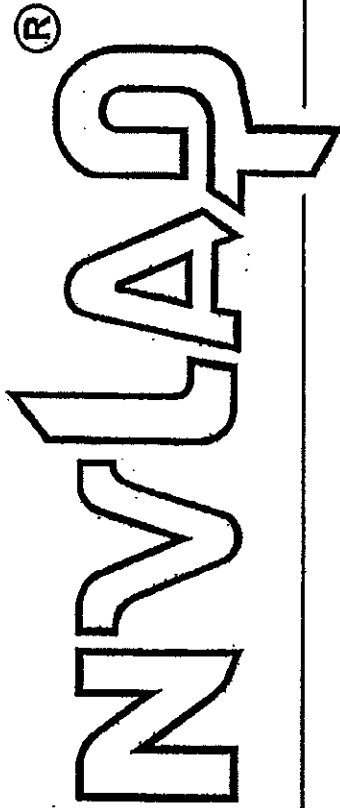
Registration  
No.

PH- 0426

*Ellen J. Blaschinski*

CHIEF, REGULATORY SERVICES BRANCH

United States Department of Commerce  
National Institute of Standards and Technology



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## Certificate of Accreditation to ISO/IEC 17025:1999

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NVLAP LAB CODE: 200090-0

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

is recognized by the National Voluntary Laboratory Accreditation Program for conformance with criteria set forth in  
NIST Handbook 150:2001 and all requirements of ISO/IEC 17025:1999.  
Accreditation is granted for specific services, listed on the Scope of Accreditation, for:

**BULK ASBESTOS FIBER ANALYSIS**

2006-01-01 through 2006-12-31

Effective dates



A handwritten signature in black ink, appearing to read "W. P. Wood".

For the National Institute of Standards and Technology



*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 Adrian Stanca WHO HAS BEEN DESIGNATED  
THIS CERTIFICATE IS ISSUED IN THE NAME OF Adrian Stanca, Director

BY THE REGISTERED OWNER/AUTHORIZED AGENT TO BE IN CHARGE OF THE LABORATORY WORK COVERED BY THIS CERTIFICATE OF APPROVAL AS FOLLOWS:  
Stephen Chace, Co-Director (Chemistry)

**WASTEWATER, SOLID WASTE/SOIL**

Examination for:  
**TRACE METALS**

**PAINT, SOIL, DUST WIRES**

Examination for:  
**LEAD**

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

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

THIS CERTIFICATE EXPIRES DECEMBER 31, 2008 AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH  
DATED AT HARTFORD, CONNECTICUT, THIS 29th DAY OF DECEMBER 2004



*Edwin J. Blaszczynski*

FH-0208

DIRECTOR, DIVISION OF ENVIRONMENTAL HEALTH

## **APPENDIX C**

# **ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORMS**


**TRC**

21 GRIFFIN ROAD NORTH  
WINDSOR, CONNECTICUT 06095  
TELEPHONE (860) 298-9692  
FAX (860) 298-6399

# ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: September 2005  
Supersede Previous Edition

LAB ID #. **23089**

PROJECT NUMBER 43500-00001		PROJECT NAME CT DPW - 30 Trinity Street, Hartford, CT		PARAMETERS					TURNAROUND TIME									
INSPECTOR: (SIGNATURE) 		(PRINTED) Stephen Arienti		PLM NY NOB 198.1 (w/ gravimetric reduction) (POSITIVE STOP)					PLM NY NOB 198.4 (IF PLM SERIES NEG)									
FIELD SAMPLE NUMBER	DATE	TIME	TYPE		SAMPLE LOCATION					PLM EPA 600/R93/116 (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	PLM:	24hr	48hr	3day	5day
			COMP	GRAB										24hr	48hr	3day	5day	
01	11/30/06	0945			Room 110	X	X	X	X	X	X	X	X	X				
02	11/30/06	0945			Room 110	X	X	X	X	X	X	X	X	X				
03	11/30/06	0945			Room 110	X				X		X	X	X				
04	11/30/06	0945			Front foyer (top layer)	X				X		X	X	X				
05	11/30/06	0945			Front foyer (2 <sup>nd</sup> layer)	X				X		X	X	X				

MATERIAL



Grey floor tile & black mastic (FT1)

Blue cove base & glue (CB1)

Yellow carpet glue (CG1)

12"X12" tan floor tile & yellow mastic (FT2)

Light grey floor tile & black mastic (FT3)

Relinquished by: (Signature) 	Date: 11/30/06	Received by: (Signature) 	Date: 11/30/06	Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) Stephen Arienti	Time: 1045	(Printed) 1115	Time: 1045	(Printed)	Time:	(Printed)
Remarks:	Condition of Samples: <u>OK</u> Acceptable: Yes <u>    </u> No <u>    </u>		Comments:		Page 1 of 1	



# APPENDIX D

## PLM LABORATORY ANALYSIS DATA

**TRC ENVIRONMENTAL CORPORATION**  
Environmental Chemistry Laboratory  
21 Griffin Road North  
Windsor, CT 06095  
(860) 298-6308

**BULK ASBESTOS ANALYSIS REPORT**

CLIENT: CT Department of Public Works

Site: 30 Trinity Street, Hartford, CT  
Lab Log #: 33089  
Project #: 43500-5450-00001  
Date Received: 11/30/06  
Date Analyzed: 11/30/06

**RESULTS**

Sample No.	Color	Homogeneous	Multi-Layered	Layer No.	Other Matrix Mat'ls	Asbestos %	Asbestos Type
01	Black (mastic)	No	Yes	1	--	3%	Chrysotile
01	Grey (tile)	No	Yes	2	--	10%	Chrysotile
02	Beige (glue)	No	Yes	1	--	ND<1%	None
02	Blue (cove base)	No	Yes	2	--	ND<1%	None
03	Yellow	Yes	No	--	--	ND<1%	None
04	Yellow (mastic)	No	Yes	1	--	ND<1%	None
04	Beige (tile)	No	Yes	2	--	ND<1%	None
05	Black (mastic)	No	Yes	1	--	5%	Chrysotile
05	Grey (tile)	No	Yes	2	--	5%	Chrysotile

Reporting limit- asbestos present at 1%  
ND<1% - asbestos was not detected  
Trace- asbestos was observed at level of less than 1%

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, negative results must 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), and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116), July 1993, R.L. Perkins and B.W. Harvey which utilizes 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, 2007. TRC is an American Industrial Hygiene Association (AIHA) accredited lab for PLM effective through February 1, 2008. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and the QC data related to the samples is available upon written request from the 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.

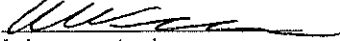
NVLAP Lab Code 101424-0  
NY #10980


**TRC LABORATORY ASBESTOS ANALYTICAL CERTIFICATIONS**

AIHA #100122 CT #PH-0426 ME LA-0075, LB-0071 MA #AA000052  
RI #AAL-007C3 TX #300354 VT #AL014538 VA #3333 000283

Analyst: Kathleen Williamson

QC Analyst: Kathleen Williamson

Reviewed by:   
Laboratory Analyst

Approved   
Signatory: Henry J. Laliberte  
Laboratory Manager

Date Issued: 12/01/06

**APPENDIX E**

**TEM 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

Client #: 297  
 Client Project: 43500-00001  
 Client Reference: 30 Trinity Street, Hartford, CT  
 Client Name: TRC Environmental Corp. (CT)

Method: TEM NOB  
 Batch: NT 8623  
 Date Analyzed: 12/5/2006  
 Date Received: 12/4/2006  
 Date of Report: 12/5/2006

LAB ID	Field ID	Description:	Initial Sample Weight	Color	% Asbestos Types						Total % Asbestos	Preped/Charged				
					CHR	AMO	ACT	CRO	ANT	TRE			% Other Non-asb.	% Organic Carb.	% Analyzed /Charged	
NT66764	02 G	Glue	.1753		.00	.00	.00	.00	.00	.00	.00	36.68	11.64	ND	Yes	No
NT66765	02	Blue cove base	.5211		.00	.00	.00	.00	.00	.00	.00	57.17	40.86	ND	Yes	No
NT66766	03	Yellow carpet glue	.0823		.18	.00	.00	.00	.00	.00	.00	57.84	6.08	TR	Yes	No
NT66767	04 M	Yellow mastic	.0280		.12	.00	.00	.00	.00	.00	.00	36.79	38.57	TR	Yes	No
NT66768	04	12x12 tan floor tile	.6824		.00	.00	.00	.00	.00	.00	.00	17.83	76.19	ND	Yes	No

**Comments:**

Mike Zappala, Analyst

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