



June 07, 2018

Mr. Adam Fox, P.E.
Principal Engineer
Environmental Compliance Section
Bureau of Engineering and Construction
State of Connecticut Department of Transportation
2800 Berlin Turnpike, P.O. Box 317546
Newington, CT 06131-7546

Attention: Amie Maines, P.E. / Michael Bedson, EIT

Subject: On-Call Asbestos, Lead, Air Quality & Demolition Compliance
Agreement No. 04.27-01(15)
HazMat Inspection – Sign Supports at Eleven (11) Sites, Statewide, & Sign Support No.
20343, Wallingford, CT
ConnDOT Assignment No. 514-5711
ConnDOT Project No. 170-3447
TRC Project No. 222165.5711.00710

Dear Mr. Fox:

TRC performed a limited survey for hazardous building materials associated with sign support removals at 12 Sites in various locations throughout Connecticut. Results of the survey identified the following on the sign support surfaces at the following Sites:

Sign Support Removal Sites:

- Detectable amounts of lead in paint were confirmed and/or presumed present at Site No. 1, Site No. 2 (bridge & sign support), Site No. 3B, Site 6 (bridge), Site No. 10 (sign support) and Site 11.
- No detectable amounts of lead were identified at Site No. 5, Site No. 7 (bridge), Site No. 8, Site No. 10 (bridge) and Sign Support No. 20343.
- Sign supports at Site No. 3A, Site No. 4, Site No. 6, Site No. 7A, Site No. 7B, Site No. 7C and Site No. 9A, Site No. 9B and Site No. 9C were galvanized (unpainted).
- Projected paint waste debris was characterized and/or presumed as CTDEEP/RCRA hazardous waste at Site No. 1, Site No. 2 (bridge & sign support), Site No. 6 (bridge), Site No. 10 (sign support) and Site No. 11.
- Projected paint waste debris was characterized as non-hazardous, non-RCRA waste at Site No. 3B, Site No. 5, Site No. 8 and Sign Support No. 20343.
- Grey caulking at Site No. 3A and a black gasket material at Sign Support No. 20343 were sampled and found to contain no asbestos.
- No pigeon/bird guano accumulations were identified at any of the Sites.

Note: Site Nos. 9B and 9C were taken out of ConnDOT Project No. 170-3447.

Laboratory data, inspector notes and Site No. information are attached.

If you have any questions, please call TRC at (860) 298-9692.

Very Truly Yours,

TRC

A handwritten signature in black ink, appearing to read "Stephen R. Arienti".

Stephen R. Arienti, CHMM
Senior Project Manager – Program Manager

A handwritten signature in black ink, appearing to read "Erik R. Plimpton".

Erik R. Plimpton, P.E., CHMM, CMC
Vice President – Engineer in Charge



Lead Based Paint Measurement Summary Table

Device(s): Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer

Site: ConnDOT - Sign Supports: 11 Sites, Various Locations

Project #: 222165.5711.0710

Date(s): 2/8/2018, 2/9/2018, 2/12/2018

Inspectors: David Webster (Lead Inspector #002233)

Number	Interior/ Exterior	Sign No.	Site No.	Structure	Feature	Material	Color	Condition	Reading (mg/cm2)	Precision (mg/cm2)	Depth Index	Duration (sec)	Date/Time
1													
2									0.0	0.0	1.0	80.3	2/8/2018 10:49
3									0.8	0.1	1.1	2.0	2/8/2018 10:51
4									1.6	0.1	1.2	7.0	2/8/2018 10:51
5	Exterior	sign 20084	Site 3B	support beam		Metal	Green	Intact	0.3	0.1	1.5	8.4	2/8/2018 11:17
6	Exterior	sign 20084	Site 3B	support base		Metal	Green	Intact	0.4	0.1	1.9	5.0	2/8/2018 11:17
7	Exterior	sign 20264	Site 2	bridge mount support beam		Metal	Grey	Intact	8.6	3.1	1.7	2.8	2/8/2018 11:47
8	Exterior	sign 20264	Site 2	bridge girder		Metal	Grey	Intact	13.8	1.9	2.3	4.5	2/8/2018 11:52
9	Exterior	sign 20694	Site 5	sign support beam		Metal	Tan/beige	Intact	0.0	0.0	1.0	2.0	2/8/2018 14:28
10	Exterior	sign 20694	Site 5	sign support base		Metal	Tan/beige	Intact	0.0	0.0	1.0	1.7	2/8/2018 14:29
11	Exterior	sign 20694	Site 5	sign support cross beam		Metal	Tan/beige	Intact	0.0	0.0	1.9	1.7	2/8/2018 14:29
12									0.0	0.0	1.0	2.5	2/8/2018 14:58
13									0.7	0.2	1.1	3.4	2/8/2018 14:58
14									1.5	0.1	1.1	7.3	2/8/2018 14:58
15									0.0	0.0	1.0	80.3	2/8/2018 14:58
16									0.0	0.0	1.0	2.0	2/8/2018 14:58
17									0.7	0.1	1.1	4.5	2/8/2018 10:45
18									1.6	0.1	1.2	5.8	2/8/2018 10:46
19									0.0	0.1	4.0	3.1	2/8/2018 11:03
20	Exterior	sign 21470	Site 7	girder		VOID	Green	Intact	0.0	0.1	4.0	3.1	2/8/2018 11:03
21													
22													
23													
24	Exterior	sign 21470	Site 7	girder		VOID	Green	Intact	0.0	0.0	1.5	1.7	2/8/2018 11:04
25	Exterior	sign 21781	Site 8	support beam		Metal	Grey	Intact	0.0	0.0	1.9	3.6	2/8/2018 11:43
26	Exterior	sign 21781	Site 8	cross beam		Metal	Grey	Intact	0.0	0.0	1.8	1.7	2/8/2018 11:43
27	Exterior	sign 21781	Site 8	cross beam		Metal	Grey	Intact	0.0	0.0	1.0	1.7	2/8/2018 11:43
28									0.0	0.0	1.0	2.0	2/8/2018 13:09
29									0.8	0.1	1.2	6.7	2/8/2018 13:09
30									1.6	0.1	1.1	5.9	2/8/2018 13:09
31									0.0	0.0	1.0	82.1	2/8/2018 10:18
32									0.0	0.0	1.0	2.2	2/8/2018 10:20
33									0.7	0.2	1.1	2.8	2/8/2018 10:20
34									1.3	1.0	1.0	0.3	2/8/2018 10:20
35									1.2	0.3	1.0	1.9	2/8/2018 10:20
36	Exterior	sign 21124	Site 11	Sign Pole		Metal	Green	Intact	0.2	0.1	2.9	7.5	2/8/2018 10:23
37	Exterior	sign 21124	Site 11	Sign Pole		Metal	Green	Intact	0.3	0.1	2.9	7.2	2/8/2018 10:24
38	Exterior	sign 21389B	Site 10	outer girder		Metal	Green	Intact	0.0	0.0	1.0	3.1	2/8/2018 11:38
39	Exterior	sign 21389B	Site 10	outer girder		Metal	Green	Intact	0.0	0.0	1.0	1.7	2/8/2018 11:38
40	Exterior	sign 21389B	Site 10	outer girder		Metal	Green	Intact	0.0	0.0	3.1	4.7	2/8/2018 11:40
41									0.0	0.0	1.0	2.5	2/8/2018 11:51
42									0.7	0.1	1.0	3.9	2/8/2018 11:51
43									1.6	0.1	1.2	7.2	2/8/2018 11:52



Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8020302



Report Date: February 16, 2018
Project: CTDOT Signs
Project Number: 222165.5711

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903



New York NELAP Accreditation: 11982
Rhode Island Certification: 199

CET #: 8020302

Project: CTDOT Signs

Project Number: 222165.5711

SAMPLE SUMMARY

The sample(s) were received at 22.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Bridge Girder Sign 21470	8020302-01	Paint Chip	2/09/2018 10:04	02/13/2018
03 Sign 21389B Bridge Girder	8020302-02	Paint Chip	2/12/2018 10:45	02/13/2018
05 Sign 21781 Sign Pole	8020302-03	Paint Chip	2/09/2018 10:47	02/13/2018
07 Sign 20084 Sign Pole	8020302-04	Paint Chip	2/08/2018 10:21	02/13/2018
08 Sign 20264 Bridge Girder	8020302-05	Paint Chip	2/08/2018 10:54	02/13/2018
09 Sign 20694 Sign Pole	8020302-06	Paint Chip	2/08/2018 13:30	02/13/2018
11 Sign 21124 Sign Pole	8020302-07	Paint Chip	2/12/2018 9:32	02/13/2018

Analyte: Total Lead [EPA 6010C]

Analyst: SS

Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8020302-01	01 Bridge Girder Sign 21470	ND	0.10	%	1	B8B1606	02/16/2018	02/16/2018 13:16	S:K 7
8020302-02	03 Sign 21389B Bridge Girder	ND	0.10	%	1	B8B1606	02/16/2018	02/16/2018 13:20	S:K 10
8020302-03	05 Sign 21781 Sign Pole	ND	0.10	%	1	B8B1606	02/16/2018	02/16/2018 13:25	S:K 8
8020302-06	09 Sign 20694 Sign Pole	ND	0.10	%	1	B8B1606	02/16/2018	02/16/2018 13:29	S:K 5

Analyte: TCLP Lead [EPA 6020A]

Analyst: CED

Prep: EPA 3005A-1311

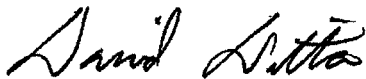
Matrix: Extract

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8020302-04	07 Sign 20084 Sign Pole	1.1	0.013	mg/L	1	B8B1513	02/15/2018	02/15/2018 14:31	S:K 38
8020302-05	08 Sign 20264 Bridge Girder	290	0.013	mg/L	1	B8B1513	02/15/2018	02/15/2018 14:36	S:K 2
8020302-07	11 Sign 21124 Sign Pole	6.8	0.013	mg/L	1	B8B1513	02/15/2018	02/15/2018 14:41	S:K 11

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

This technical report was reviewed by Robert Blake



David Ditta
Laboratory Director



Project Manager

Report Comments:

Sample Result Flags:

- E- The result is estimated, above the calibration range.
- H- The surrogate recovery is above the control limits.
- L- The surrogate recovery is below the control limits.
- B- The compound was detected in the laboratory blank.
- P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
- D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
- + - The Surrogate was diluted out.
- *C1 - The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
- *C2 - The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
- *F1 - The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
- *F2 - The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
- I - The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit

RL is the Reporting Limit.

All analyses were performed in house unless a Reference Laboratory is listed.

Samples will be disposed of 30 days after the report date.

CET # : 8020302

Project: CTDOT Signs

Project Number: 222165.5711

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>EPA 6010C in Solid</i>	
Lead	CT
<i>EPA 6020A in Water</i>	
Lead	NY,CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018
NY	New York Certification (NELAC)	11982	04/01/2018



8020302

21 GRIFFIN ROAD NORTH

WINDSOR, CONNECTICUT 06095

TELEPHONE (860) 298-9692

FAX (860) 298-6380

TCLP CHAIN OF CUSTODY

Edition: November 2013
Supersede Previous Edition

PROJECT NUMBER

PROJECT NAME

LAB ID #.

222105.5711

Various Sgrage around CT

TURNAROUND TIME

TCLP	24hr	48hr	3day	5day
Total Pb			X	

INSPECTOR: (SIGNATURE)

(PRINTED)

Zachary Smith

MATERIAL

FIELD SAMPLE NUMBER	DATE	TIME	TYPE		SAMPLE LOCATION	RCRA I	RCRA Pb, A CD	8 RCRA M	TCLP P	SPLP P	MATERIAL
			COMP	GRAB							
01	2/9/18	1004	X		bridge girder - Sign 21170						green paint
02	2/9/18	1004	X		"				X		"
03	2/12/18	1045	X		Sign 213818 - bridge girder						green paint
04	2/12/18	1045	X		"				X		"
05	2/9/18	1047	X		Sign 21781 - Sign pole						grey paint
06	2/9/18	1047	X		"				X		"
07	2/8/18	1021	X		Sign 20084 - Sign pole				X		green paint
08	2/8/18	1054	X		Sign 20264 - bridge girder				X		green paint
09	2/8/18	1330	X		Sign 20694 - Sign pole					X	Tan/beige paint
10	2/8/18	1330	X		"				X		"
11	2/12/18	0932	X		Sign 21124 - Sign pole				X		green paint

Relinquished by: (Signature)

Date:

Received by: (Signature)

Relinquished by: (Signature)

Date:

Received by: (Signature)

(Printed)

Time:

(Printed)

(Printed)

Time:

(Printed)

Zachary Smith

1300

K.B. Davis

K.B. Davis

1510

Zachary Smith

Analyze Total Pb first, then if total Pb is positive analyze TCLP (Example: if it is positive then do 02)
Send results to E@rington@TRCSolutions.com

2018 22/11



Client: Mr. Stephen Arienti
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 8050653



5711

Report Date: May 22, 2018
Project: CTDOT Signs
Project Number: 222165.5711.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903



New York NELAP Accreditation: 11982
Rhode Island Certification: 199

CET # : 8050653

Project: CTDOT Signs

Project Number: 222165.5711.0710

SAMPLE SUMMARY

The sample(s) were received at 24.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01	8050653-01	Paint Chip	5/08/2018 10:00	05/18/2018

Analyte: Total Lead [EPA 6010C]

Analyst: SS

Prep: EPA 3051A

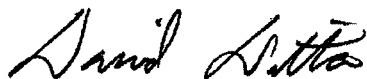
Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8050653-01	01	ND	0.10	%	1	B8E2127	05/21/2018	05/22/2018 12:24	

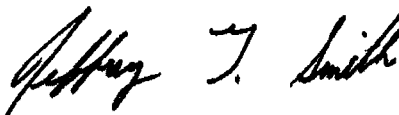
All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

This technical report was reviewed by Jeffrey Smith



David Ditta
Laboratory Director



Project Manager

Report Comments:

Sample Result Flags:

- E- The result is estimated, above the calibration range.
- H- The surrogate recovery is above the control limits.
- L- The surrogate recovery is below the control limits.
- B- The compound was detected in the laboratory blank.
- P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
- D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
- + - The Surrogate was diluted out.
- *C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
- *C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
- *F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
- *F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
- I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit

RL is the Reporting Limit.

All analyses were performed in house unless a Reference Laboratory is listed.

Samples will be disposed of 30 days after the report date.

CET #: 8050653
Project: CTDOT Signs
Project Number: 222165.5711.0710

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>EPA 6010C in Solid</i>	
Lead	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018



***Edition: November 2013
Supersede Previous Edition***

FAX (860) 298-6380

LAB ID #.

PROSECUTOR'S NAME
CPOT - Sir
Staden.de
Replacement

TURNAROUND TIME				
7821	(X)	24hr		4

70421	24hr	48hr	3day	5day
70420	24hr	48hr	3day	5day

(PRINTED)
Stephen A. Frost, Secy
H. H. H. H. H. H.

[illegible]

Received by: (Signature)

(Printed)

100

* Analyze O2 only if detectable lead is found in O1



*Edition: October 2009
Supersede Previous Edition*

21 GRIFFIN ROAD NORTH

WINDSOR, CONNECTICUT 06095

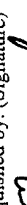

TELEPHONE (860) 298-9692

FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID#. 51925

[illegible]

Relinquished by: (Signature) 	Date: 2/12/18	Received by: (Signature) 	2/12/18	Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) Zachary Smith	Time: 1300	(Printed) Catherine Lewis	1312	(Printed)	Time:	(Printed)
Remarks: Send results to EPlimpton@TRCSolutions.com				Condition of Samples: Acceptable: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Comments:		
						Page 1 of 7



BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #: 0051925
Project #: 222165.5711.0710
Date Received: 02/12/2018
Date Analyzed: 02/12/2018

Site: Sign 20797, Bridgeport, CT

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

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
01	Grey (caulk)	Yes	No	--	---	ND	None
02	Grey (caulk)	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, 2018. 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:

Cathryn Lemire, Laboratory Analyst

Reviewed by:

Kathleen Williamson, Laboratory Manager

Date Issued

02/12/2018

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

950C1-AN

TEM Bulk Chain of Custody Record

Other:

Z. Smith

For Lab Use Only

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 #: 222165.5711.0710
Client Reference: CT DOT - Sign 20797, Bridgeport, CT
PO #: C222165
Client #: 297
Client Name: TRC Environmental Corp. (CT)

Batch: NT 17056
Method: NOB
Date Received: 2/13/2018
Date Analyzed: 2/16/2018
Date of Report: 2/16/2018

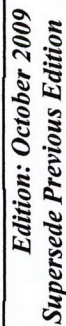
LAB ID	Field ID	Description:	Color	Initial Weight	% Asbestos Types						% Other Non-asb.	% Organic	% Carb.	Total % Asbestos	Analyzed /		Preped / Charged
					CHR	AMO	ACT	CRO	ANT	TRE					Yes	No	
NT128663	2	Grey Rubbery Caulk		.3041	.00	.00	.00	.00	.00	.00	13.85	67.21	18.94	ND	Yes	No	

Comments:

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





Mark Derosier, Analyst



ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

TELEPHONE (860) 298-9692

LAB ID #: 52264

Relinquished by: (Signature) 	Date: 05/13/18	Received by: (Signature) 	5/14/18	Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) Hilton Hernandez	Time: 21:50	(Printed) Steve Arienti	1000	(Printed)	Time:	(Printed)
Remarks: Results to Steve Arienti & Hilton Hernandez				Condition of Samples: Acceptable: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Comments:		
				Page 1 of 1		



BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #: 0052264
Project #: 222165.5711.0710
Date Received: 05/14/2018
Date Analyzed: 05/14/2018

Site: Cantilever Post I-91 NB, Wallingford, CT

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

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
01	Black (gasket material)	Yes	No	--	---	ND	None
02	Black (gasket material)	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, 2018. 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:

Kathleen Williamson, Laboratory Manager

Reviewed by:

Cathryn Lemire, Approved Signatory

Date Issued

05/14/2018

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
AZ #A20944

MA #AA000052
HI #L-09-004

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

22 Cummings Park, Woburn, MA 01801 Ph. 781-935-3212 Fax 781-932-4857
TEM Bulk Chain of Custody Record

Date: 05/15/18

PO#: C222165

Client: TRC

Client Job#: 222165.5711.0710

Client Job Ref./Loc.: CT DOT-Cantilever Post I-91 NB, Wallingford, CT

Relinquished by: **K Williams- KWilliamson@trcsolutions.com**

Received by: Donna Lovitt-Cole 5/16/18 9:30

Report to: E. Plimpton- EPlimpton@trcsolutions.com & SArienti@trcsolutions.com

Samplers Name: H. Hernandez

Analysis Type:	Chatfield	EPA N.O.B	Qualitative
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Turnaround Time:	<12 Hour	<24 Hour	<48 Hour	<3 Day	5 Day	Other:

[illegible]

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 #: 222165.5711.0710
Client Reference: CT DOT - Cantilever Post I-91 NB, Wallingford, CT
PO #: C222165
Client #: 297
Client Name: TRC Environmental Corp. (CT)

Batch: NT 17217
Method: NOB
Date Received: 5/16/2018
Date Analyzed: 5/18/2018
Date of Report: 5/18/2018

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						
NT129659	02	Black Gasket Material		.1109	.00	.00	.00	.00	56.90	22.00	21.10	ND	Yes	No

Comments:

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


Mark Derostier, Analyst



SUBJECT

DOT Sign Pole Survey

20797- Site 3, I-95 SB, Bridgeport

- Galvanized pole
- C1- Grey rubbery chunk located at base around 6 bolts
- Photos 1 and 2

20084- Site 3, I-95 NB, Bridgeport

- TCLP taken (+)
- No suspect ACM
- Photos 3 and 4

20264- Site 2, I-95 SB, Westport

- Sign / girders both +, TCLP taken is of girders (+)
- No suspect ACM
- Photos 5 and 6

20011- Site 1, I-95 NB, Greenwich

- Inaccessible due to fence
- No embankment to view underside, however sign pole attached to unpainted concrete
- Paint observed on sign support pole looks similar to 20264
- No suspect ACM observed
- Photo 7 and 8

21148- Site 4, Rt 69, Waterbury

- Galvanized pole
- No suspect ACM
- Photo 9 and 10

20694- Site 5, I-69 WB, Meriden

- TCLP taken (-)
- No suspect ACM
- Photo 11, 12, and 13



SUBJECT

DOT Sign Pole Survey

21023 - Site 6, Rt 5, Berlin

- Galvanized pole
- Sign is attached to painted girder, however inaccessible due to road / not enough of an embankment.
- No suspect ACM
- Photos 14, 15, 16, 21

21470A - Site 7A, I-91 SB, Rocky Hill

- Unpainted metal
- No suspect ACM
- Photo 17 and 20

21470B - Site 7B, I-91 SB, Rocky Hill

- Unpainted metal
- No suspect ACM
- Photo 18 and 20

21470C - Site 7C, I-91 SB, Rocky Hill

- Unpainted metal
- No suspect ACM
- Photo 19 and 20

General note for 21470 attached to painted girder. TCLP taken of girder (-)

21781 - Site 8, Rt 50B, Farmington

- TCLP taken (-)
- No suspect ACM
- Photo 22, 23, 24

21656 - Site 9A, I-84 WB, East Hartford

- Galvanized
- No suspect ACM (particle board / filler wood material found at expansion joints)
- Photo 32 and 33



SUBJECT DOT Sign Pole Survey

21613A, Site 9B, I-84 EB, East Hartford
 - Unpainted metal (rusted heavily)
 - No suspect ACM observed
 - Photo 25, 26, and 31

21613E-Site 9C, I-84 WB, East Hartford
 - Unpainted metal (heavily rusted)
 - No suspect ACM observed
 - Photo 27, 30, and 31

21912C-Site 9C, I-84 WB, East Hartford
 - Unpainted metal (heavily rusted)
 - No suspect ACM
 - Photo 29, 30, 31

21912F-Site 9C, I-84 WB, East Hartford
 - Unpainted metal (heavily rusted)
 - No suspect ACM
 - Photo 29, 30, 31

21124-Site 11, R+L WB, Colchester
 - TCLP taken (+)
 - No suspect ACM
 - Photo 34, 35

21389B-Site 10, I-91 NB, Enfield
 - Unable to access sign pole paint different from girders - A metallic/silver coating
 - TCLP taken of girders pole attaches to (-) (negative) (no suspect ACM)
 - No suspect ACM
 - Photo 36, 37, 38, 39
 - Note: interior girders were + for pb. Just took TCLP where newer replacement paint was found to be - and was the only girder where sign pole attached to.

- General Note
 for 21613, 21912
 attached to
 steel girder
 however steel
 girder is
 unpainted.

SHEET NO. 1 OF 1PROJECT NO. 222165.5711.00710DATE 05/08/18BY HHCHK'D SUBJECT CT-DOT Sign 791NB 15.64 milesWallingford (Sign No. 20343)

- cantilever sign near Ex 15 RTE 68 Yalesville Durham sign
- mile
- No Accu on base, painted off white yellow
- has ^{electrical} cover w/ black gasket @ base. Sampled for Accu ~ 0.5 SF
- HH takes pictures
- XRF Reading 0.00 +/- 0.02

Design Report – Project 170-3447

This project is for the replacement of overstressed sign supports at 11 sites at various locations statewide. The work includes the removal of the existing overhead or cantilever sign support and the installation of a new overhead or cantilever sign support in the same vicinity. This project also includes replacement of the existing sign face and replacement or upgrade of guiderail where necessary. It is anticipated that the majority of the work can be accomplished utilizing short term lane and shoulder closures.

PROJECT 0170-3447: Statewide Replacement of Overhead Sign Supports at Various Locations

Record of Existing Surface Coatings

Proposed Site#	Existing Support No.	Town	Route	Approx. Mile Point	Existing Type of Support	Recommended Replacement Structure	Existing Surface Coating & Year (From Bridge Safety Report)
1.	20011	Greenwich	I-95 NB	5.05	Bridge Mounted	Cantilever	Paint Year Built: 1983
2.	20264	Westport	I-95 SB	19.21	Bridge Mounted	Cantilever	Hot Dipped Galvanized Coating Year Built: Unknown
3A. 3B.	20797 20084	Bridgeport Bridgeport	I-95 SB I-95 NB	30.6 30.6	Monotube Cantilever	Truss	Hot Dipped Galvanized Coating Paint Year Built: 1996 Year Built: Unknown
4.	21148	Waterbury	RTE 69 SB	16.2	Cantilever	No Replacement	Hot Dipped Galvanized Coating Year Built: 1997
5.	20694	Meriden	I-691 WB	1.66	Monotube	Monotube	Paint Galvanized Coating Year Built: Unknown
6.	21023	Berlin	RTE 5 SB	24.11	Bridge Mounted	Side Mounted	Hot Dipped Galvanized Coating Year Built: 1993
7A. 7B. 7C.	21470A 21470B 21470C	Rocky Hill Rocky Hill Rocky Hill	I-691 EB	28.79	Bridge Mounted	Monotube	Hot Dipped Galvanized Coating Year Built: Unknown
8.	21781	Farmington	RTE 508 EB & WB	0.3	Truss	Truss	Paint Galvanized Coating Year Built: 1985
9A. 9B. 9C.	21656 21613A 21613E	East Hartford East Hartford East Hartford	I-84 WB I-84 EB I-84 WB	65.00 64.32 64.32	Truss Bridge Mounted Bridge Mounted	Truss Repair Repair	Hot Dipped Galvanized Coating None None Year Built: 1993 Year Built: 1988 Year Built: Unknown
10.	21389B	Enfield	I-91 NB	55.55	Bridge Mounted	No Replacement	Hot Dipped Galvanized Coating Year Built: 1993
11.	21124	Colchester	RTE 2 WB	23.97	Truss	Cantilever	Paint galvanized coating Year Built: Unknown

Plimpton, Erik

From: Bedson, Michael F. <Michael.Bedson@ct.gov>
Sent: Tuesday, April 3, 2018 7:45 AM
To: Plimpton, Erik
Cc: Arienti, Stephen
Subject: FW: Project 0170-3447 I Hazardous/Contaminated Materials Screening Request

Erik/Steve,

Just received the 60% design package for Project #0170-3447 (5711), and I noticed that a sign post replacement was added back in November, and I don't think that info reached me until now. It was a cantilever sign that was struck by a truck and is now just a vertical post. I know the investigation has been completed and the report is in progress, but if you could please go out and conduct a brief investigation of this post and add it to the report it would be much appreciated.



Z
TBS

From: Bhandari, Saroj
Sent: Tuesday, April 03, 2018 7:33 AM

To: Bedson, Michael F.

Subject: FW: Project 0170-3447 I Hazardous/Contaminated Materials Screening Request

Michael,

Please see the request below. It would be great if your department can investigate this site which is part of the parent project 0170-3447.

If you have any further question, feel free to reach out to me.

Thanks!

Saroj

From: Bhandari, Saroj

Sent: Monday, November 06, 2017 8:10 AM

To: Fox, Adam G.

Subject: RE: Project 0170-3447 I Hazardous/Contaminated Materials Screening Request

Correction – It is in I-91 N.B. and NOT in I-95 N.B.

Sorry!

-Saroj

From: Bhandari, Saroj

Sent: Friday, November 03, 2017 4:23 PM

To: Fox, Adam G.

Subject: RE: Project 0170-3447 I Hazardous/Contaminated Materials Screening Request

Adam,

Please see the information below.

SN# 20343

Recommended Replacement Structure : Cantilever

Existing Surface Coating – **Paint Galvanized Coating**

Year Built – Unknown

Location – Wallingford

Route – **I-95-NB** I – 91 N.B

Mile point – 15.64

Attached is the KMZ for Google Earth & Photos.

Thanks and have a good weekend!

Saroj

From: Fox, Adam G.

Sent: Friday, November 03, 2017 4:09 PM

To: Bhandari, Saroj

Subject: RE: Project 0170-3447 I Hazardous/Contaminated Materials Screening Request

I think I know of the one you are talking about. Can you just send over the location and any info you have on the sign support? I think it is galvanized.

Adam Fox, P.E.

Principal Engineer

Environmental Compliance, Contract Development & Permit Coordination

CONNECTICUT DEPARTMENT OF TRANSPORTATION

2800 Berlin Turnpike

Newington, CT 06131

P: 860.594.3404

F: 860.594.2465

From: Bhandari, Saroj

Sent: Friday, November 03, 2017 4:00 PM

To: Fox, Adam G.

Subject: RE: Project 0170-3447 I Hazardous/Contaminated Materials Screening Request

Adam,

A new sign support structure fell into Project 170-3447 to be replaced which was stuck by a Truck in Wallingford last year. What is the best procedure to amend the request below and include this structure for Hazardous/Contaminated Materials Screening?

Thanks,

Saroj Bhandari

Transportation Engineer

Division of Traffic – Project Design Unit

Connecticut Department of Transportation

Phone: (860) 594-2897 | Email: Saroj.bhandari@ct.gov

"Be the change you wish to see in the world" - Gandhi

From: Bhandari, Saroj

Sent: Tuesday, October 17, 2017 3:41 PM

To: Fox, Adam G.

Cc: Makuch, Mark F.; Conroy, Lisa N.; Massini, James A.

Subject: Project 0170-3447 I Hazardous/Contaminated Materials Screening Request

Good Afternoon Adam,

Please see the link below for the Hazardous/Contaminated Material Screening Request for Project 0170-3447 (Statewide Replacement of Overhead Sign Supports on Various Routes).

Please review and provide project documents as indicated.

[Project 170-3447 TR FINAL 0170-3447.pdf](#)

Thank you,

Saroj Bhandari

Transportation Engineer

Division of Traffic – Project Design Unit

Connecticut Department of Transportation