



April 09, 2017

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

Attention: Judy Nemecek, P.E. / Stephen Clout

Subject: On-Call Asbestos, Lead, Air Quality & Demolition Compliance  
Agreement No. 04.27-01(15)  
HazMat Inspection – Sign Supports at Sixteen (16) Sites, Statewide, CT  
ConnDOT Assignment No. 514-5449  
ConnDOT Project No. 170-3362  
TRC Project No. 222165.5449.00710

Dear Mr. Fox:

TRC performed a limited survey for hazardous building materials associated with sign support removals at 16 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 present at Site No. 1, Site No. 2, Site No 2A, Site No. 3, Site No. 4, Site No. 7, Site No. 8, Site No. 9, Site No. 10, Site No. 11, Site No. 12, Site No. 13 & Site No. 15.
- No detectable amounts of lead were identified at Site No. 6.
- Sign supports at Site No. 5 & Site No. 14 were galvanized (unpainted).
- Projected paint waste debris was characterized as CTDEEP/RCRA hazardous waste at Site No. 10, Site No. 11, Site No. 12 & Site No. 15.
- Projected paint waste debris was characterized as non-hazardous, non-RCRA waste at Site No. 1, Site No. 2, Site No 2A, Site No. 3, Site No. 4, Site No. 6, Site No. 7, Site No. 8, Site No. 9 & Site No. 13
- Black tar vapor barrier at the base of the sign support poles at Site No. 1 and caulking at the base of sign support poles at Site No. 2, Site No 2A, Site No. 3, Site No. 4, Site No. 7 & Site No. 9 were found to contain asbestos.
- No pigeon/bird guano accumulations were identified at any of the Sites.

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  
Task Manager

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

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



### Lead Based Paint Measurement Summary Table

Device(s): Niton XLP301-A (Serial #24792 & #25555 ) X Ray Fluorescence (XRF) Spectrum Analyzer  
 Site: Sign Supports - 16 Sites, Various Locations  
 Project #: 222165.5449.0710  
 Date(s): 10/27/16, 11/1/16 & 11/2/16  
 Inspector: Kelly Grey (Lead Inspector/RA #002267)

Number	Interior/ Exterior	Location	Site No.	Structure	Feature	Material	Color	Condition	Reading (mg/cm2)	Precision (mg/cm2)	Depth Index	Duration (sec)	Date/Time
1			<b>Self-Calibration</b>									44.0	10/27/2016 10:10
2			<b>0.0 calibration</b>						0.0	0.0	1.0	3.9	10/27/2016 10:13
3			<b>0.7 calibration</b>						0.7	0.1	1.1	8.3	10/27/2016 10:13
4			<b>1.6 calibration</b>						1.5	0.1	1.1	7.2	10/27/2016 10:13
5	Exterior	sign 21226	Site 15	support pole		Metal	Green	Defective	0.2	0.1	5.9	15.5	10/27/2016 10:19
6	Exterior	sign 21226	Site 15	support pole		Metal	Green	Defective	0.2	0.1	3.5	12.2	10/27/2016 10:20
7	Exterior	sign 21226	Site 15	support pole	base	Metal	Green	Defective	0.2	0.1	4.1	11.6	10/27/2016 10:20
8	Exterior	sign 21059	Site 10	span pole		Metal	Brown	Defective	1.6	0.6	1.3	13.3	10/27/2016 11:51
9	Exterior	sign 21059	Site 10	span pole		Metal	Brown	Defective	0.3	0.1	4.3	10.0	10/27/2016 11:51
10	Exterior	sign 21059	Site 10	span pole	support	Metal	Brown	Defective	0.2	0.1	3.4	11.6	10/27/2016 11:52
11	Exterior	sign 21061	Site 11	span pole	support	Metal	Tan/Beige	Defective	0.3	0.1	5.1	15.0	10/27/2016 12:16
12	Exterior	sign 21061	Site 11	span pole		Metal	Tan/Beige	Defective	0.2	0.1	3.8	10.6	10/27/2016 12:16
13	Exterior	sign 21061	Site 11	span pole		Metal	Tan/Beige	Defective	0.3	0.1	4.3	10.5	10/27/2016 12:17
14	Exterior	sign 21483	Site 12	sign pole		Metal	Tan/Beige	Defective	0.2	0.1	2.2	8.3	10/27/2016 13:59
15	Exterior	sign 21483	Site 12	sign pole	base	Metal	Tan/Beige	Defective	0.2	0.1	2.8	11.1	10/27/2016 14:00
16			<b>0.0 calibration</b>						0.0	0.0	1.0	6.1	10/27/2016 14:23
17			<b>0.7 calibration</b>						0.7	0.1	1.0	4.5	10/27/2016 14:23
18			<b>1.6 calibration</b>						0.3	0.1	1.1	8.3	10/27/2016 14:23
19					<b>VOID</b>								
20	Exterior	sign 21506	Site 13	sign pole		Metal	Tan/Beige	Defective	0.0	0.1	7.8	11.7	10/27/2016 14:27
21	Exterior	sign 21506	Site 13	sign pole		Metal	Tan/Beige	Defective	0.0	0.0	4.6	6.7	10/27/2016 14:27
22			<b>0.0 calibration</b>						0.0	0.0	1.0	6.1	10/27/2016 15:00
23			<b>0.7 calibration</b>						0.7	0.2	1.0	3.9	10/27/2016 15:00
24			<b>1.6 calibration</b>						1.6	0.1	1.2	7.2	10/27/2016 15:01
25			<b>Self-Calibration</b>									44.1	11/1/2016 10:14
26			<b>0.0 calibration</b>						0.0	0.0	1.0	3.3	11/1/2016 10:18
27			<b>0.7 calibration</b>						0.7	0.1	1.1	11.6	11/1/2016 10:18
28			<b>1.6 calibration</b>						1.6	0.1	1.2	12.2	11/1/2016 10:18
29	Exterior	sign 20713	Site 7	span pole		Metal	Tan/Beige	Defective	0.2	0.1	2.4	10.5	11/1/2016 10:21
30	Exterior	sign 20713	Site 7	span pole		Metal	Tan/Beige	Defective	0.2	0.1	2.7	11.6	11/1/2016 10:22
31	Exterior	sign 20712	Site 8	span pole		Metal	Tan/Beige	Defective	0.2	0.1	7.7	18.8	11/1/2016 10:43
32	Exterior	sign 20712	Site 8	span pole		Metal	Tan/Beige	Defective	0.2	0.1	5.8	9.4	11/1/2016 10:43
33					<b>VOID</b>								
34	Exterior	sign 20492	Site 9	span pole	crossbeam	Metal	Tan/Beige	Defective	0.2	0.1	2.1	9.5	11/1/2016 11:01
35	Exterior	sign 20492	Site 9	span pole		Metal	Tan/Beige	Defective	0.4	0.1	4.2	18.3	11/1/2016 11:02
36	Exterior	sign 20492	Site 9	span pole		Metal	Tan/Beige	Defective	0.3	0.1	5.2	20.4	11/1/2016 11:02
37	Exterior	sign 20293	Site 1	sign pole		Metal	Tan/Beige	Defective	0.3	0.1	2.0	9.4	11/1/2016 12:22
38	Exterior	sign 20293	Site 1	sign pole		Metal	Tan/Beige	Defective	0.3	0.1	3.4	11.6	11/1/2016 12:23
39	Exterior	sign 20683	Site 2A	sign pole		Metal	Tan/Beige	Defective	0.2	0.1	3.4	6.6	11/1/2016 13:23
40	Exterior	sign 20683	Site 2A	sign pole		Metal	Tan/Beige	Defective	0.2	0.1	3.9	10.0	11/1/2016 13:23
41	Exterior	sign 20683	Site 2A	sign pole	support	Metal	Tan/Beige	Defective	0.3	0.1	3.5	7.7	11/1/2016 13:24
42	Exterior	sign 20684	Site 2	sign pole	support	Metal	Tan/Beige	Defective	0.2	0.1	3.2	11.1	11/1/2016 13:44

Lead paint includes paint found to contain any detectable amount of lead by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).



### Lead Based Paint Measurement Summary Table

Device(s): Niton XLP301-A (Serial #24792 & #25555 ) X Ray Fluorescence (XRF) Spectrum Analyzer  
 Site: Sign Supports - 16 Sites, Various Locations  
 Project # : 222165.5449.0710  
 Date(s): 10/27/16, 11/1/16 & 11/2/16  
 Inspector: Kelly Grey (Lead Inspector/RA #002267)

Number	Interior/ Exterior	Location	Site No.	Structure	Feature	Material	Color	Condition	Reading	Precision	Depth Index	Duration (sec)	Date/Time
									(mg/cm2)	(mg/cm2)			
43	Exterior	sign 20684	Site 2	sign pole		Metal	Tan/Beige	Defective	0.2	0.1	4.7	11.1	11/1/2016 13:44
44					VOID								
45			0.0 calibration						0.0	0.0	1.0	3.9	11/1/2016 13:56
46			0.3 calibration						0.3	0.0	1.0	11.0	11/1/2016 13:56
47			1.6 calibration						1.5	0.2	1.2	5.5	11/1/2016 13:57
48			Self-Calibration									120.1	11/2/2016 9:12
49			0.0 calibration						0.0	0.0	1.1	2.6	11/2/2016 9:14
50			0.7 calibration						0.7	0.1	1.1	4.2	11/2/2016 9:14
51			0.3 calibration						0.3	0.1	1.1	6.5	11/2/2016 9:15
52	Exterior	sign 20318	Site 6	sign pole		Metal	Tan/Beige	Defective	0.0	0.0	2.0	3.8	11/2/2016 9:18
53	Exterior	sign 20318	Site 6	sign pole		Metal	Tan/Beige	Defective	0.0	0.0	1.0	4.2	11/2/2016 9:18
54	Exterior	sign 20318	Site 6	sign pole	base	Metal	Tan/Beige	Defective	0.0	0.0	1.0	1.6	11/2/2016 9:19
55	Exterior	sign 20514	Site 3	sign pole		Metal	Tan/Beige	Defective	0.3	0.2	3.0	3.5	11/2/2016 9:54
56	Exterior	sign 20514	Site 3	sign pole		Metal	Tan/Beige	Defective	0.2	0.1	2.8	7.2	11/2/2016 9:54
57	Exterior	sign 20514	Site 3	sign pole	support pole	Metal	Tan/Beige	Defective	0.4	0.1	3.7	5.8	11/2/2016 9:55
58	Exterior	sign 20518	Site 4	sign pole	support pole	Metal	Tan/Beige	Defective	0.3	0.1	3.5	6.7	11/2/2016 10:18
59	Exterior	sign 20518	Site 4	sign pole		Metal	Tan/Beige	Defective	0.1	0.1	3.4	5.8	11/2/2016 10:19
60	Exterior	sign 20518	Site 4	sign pole		Metal	Tan/Beige	Defective	0.2	0.1	2.8	4.9	11/2/2016 10:19
61			0.0 calibration						0.0	0.0	1.0	1.4	11/2/2016 10:45
62			0.3 calibration						0.3	0.1	1.1	4.4	11/2/2016 10:45
63			1.6 calibration						1.5	0.3	1.1	3.3	11/2/2016 10:45

Lead paint includes paint found to contain any detectable amount of lead by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).



Client: Mr. David Webster  
TRC Environmental Consultants  
21 Griffin Rd., North  
Windsor, CT 06095

# Analytical Report

## CET# 6110004

Report Date: November 04, 2016  
Project: CTDOT Signs  
Project Number: 222165.5449

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



New York Certification: 11982  
Rhode Island Certification: 199

CET #: 6110004

Project: CTDOT Signs

Project Number: 222165.5449

**SAMPLE SUMMARY**

The sample(s) were received at 23.6°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
Sign 21226	6110004-01	Paint Chip	10/27/2016 9:45	10/31/2016
Sign 21059	6110004-02	Paint Chip	10/27/2016 11:05	10/31/2016
Sign 21061	6110004-03	Paint Chip	10/27/2016 11:35	10/31/2016
Sign 21483	6110004-04	Paint Chip	10/27/2016 13:10	10/31/2016
Sign 21506	6110004-05	Paint Chip	10/27/2016 14:05	10/31/2016

**Analyte: TCLP Lead [EPA 6010C]**

**Analyst: SS**

**Prep: EPA 3005A-1311**

**Matrix: Extract**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110004-01	Sign 21226 <i>Site 15</i>	<b>5.3</b>	0.013	mg/L	1	B6K0346	11/03/2016	11/03/2016 17:41	
6110004-02	Sign 21059 <i>Site 10</i>	<b>5.1</b>	0.013	mg/L	1	B6K0346	11/03/2016	11/03/2016 17:54	
6110004-03	Sign 21061 <i>Site 11</i>	<b>12</b>	0.013	mg/L	1	B6K0346	11/03/2016	11/03/2016 17:59	
6110004-04	Sign 21483 <i>Site 12</i>	<b>7.0</b>	0.013	mg/L	1	B6K0346	11/03/2016	11/03/2016 18:03	
6110004-05	Sign 21506 <i>Site 13</i>	<b>0.20</b>	0.013	mg/L	1	B6K0346	11/03/2016	11/03/2016 18:08	

CET #: 6110004

Project: CTDOT Signs

Project Number: 222165.5449

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

Sincerely,



David Ditta  
Laboratory Director

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.

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 the specified detection 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 #: 6110004

Project: CTDOT Signs

Project Number: 222165.5449

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
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**No certified Analyses included in this Report**

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
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6110004

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

Edition: November 2013  
Supersede Previous Edition

### TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER		PROJECT NAME		PARAMETERS					TURNAROUND TIME						
222165.5449		DOT Sign Pole Survey							24hr	48hr	X	3day	5day		
INSPECTOR: (SIGNATURE)		(PRINTED)		RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	MATERIAL						
David Webster		David Webster													
FIELD SAMPLE NUMBER	DATE	TIME	TYPE		SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	MATERIAL				
			COMP	GRAB											
1	10/27/16	0945	X		Sign 21226				X		Paint chips (green)				
2	10/27/16	1105	X		Sign 21059				X		Paint chips (Tan/beige)				
3	10/27/16	1135	X		Sign 21061				X		Paint chips (Tan/beige)				
4	10/27/16	1310	X		Sign 21483				X		Paint chips (Tan/beige)				
5	10/27/16	1405	X		Sign 21506				X		Paint chips (Tan/beige)				

Relinquished by: (Signature) David Webster	Date: 10/28/16	Received by: (Signature) Roberto Perdomo	Relinquished by: (Signature) David Webster	Date: 10-31-16	Received by: (Signature) Roberto Perdomo
(Printed) David Webster	Time: 1145	(Printed) Roberto Perdomo	(Printed) Roberto Perdomo	Time: 1730	(Printed)
TEMP N 28.6°					Page 1 of 1



80 Lupes Drive  
Stratford, CT 06615



Tel: (203) 377-9984  
Fax: (203) 377-9952  
e-mail: cet1@cetlabs.com

Client: Ms. Kelly Grey  
TRC Environmental Consultants  
21 Griffin Rd., North  
Windsor, CT 06095

# Analytical Report

## CET# 6110146

Report Date: November 10, 2016  
Project: CTDOT  
Project Number: DOT Sign Poles  
PO Number: 222165.5449

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



New York Certification: 11982  
Rhode Island Certification: 199

CET # : 6110146

Project: CTDOT

Project Number: DOT Sign Poles

**SAMPLE SUMMARY**

The sample(s) were received at 26.9°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Sign Pole 20318	6110146-01	Paint Chip	11/02/2016 9:15	11/03/2016
02 Sign Pole 20713	6110146-02	Paint Chip	11/02/2016 10:00	11/03/2016
03 Sign Pole 20712	6110146-03	Paint Chip	11/02/2016 10:15	11/03/2016
04 Sign Pole 20492	6110146-04	Paint Chip	11/02/2016 10:25	11/03/2016
05 Sign Pole 20293	6110146-05	Paint Chip	11/02/2016 12:30	11/03/2016
06 Sign Pole 20683	6110146-06	Paint Chip	11/02/2016 13:30	11/03/2016
07 Sign Pole 20684	6110146-07	Paint Chip	11/02/2016 13:55	11/03/2016
09 Sign Pole 20514	6110146-08	Paint Chip	11/02/2016 10:00	11/03/2016
10 Sign Pole 20518	6110146-09	Paint Chip	11/02/2016 10:35	11/03/2016

CET #: 6110146  
 Project: CTDOT  
 Project Number: DOT Sign Poles

Analyte: Total Lead [EPA 6010C]

Analyst: SS

Prep: EPA 3050B

Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110146-01	01 Sign Pole <i>Site 6</i> 20318	ND	0.10	%	1	B6K0502	11/05/2016	11/05/2016 16:57	

Analyte: TCLP Lead [EPA 6010C]

Analyst: SS

Prep: EPA 3005A-1311

Matrix: Extract

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6110146-02	02 Sign Pole <i>Site 7</i> 20713	1.4	0.013	mg/L	1	B6K0822	11/08/2016	11/10/2016 09:13	
6110146-03	03 Sign Pole <i>Site 8</i> 20712	0.36	0.013	mg/L	1	B6K0822	11/08/2016	11/10/2016 09:18	
6110146-04	04 Sign Pole <i>Site 9</i> 20492	1.9	0.013	mg/L	1	B6K0822	11/08/2016	11/10/2016 09:22	
6110146-05	05 Sign Pole <i>Site 1</i> 20293	1.8	0.013	mg/L	1	B6K0822	11/08/2016	11/10/2016 09:27	
6110146-06	06 Sign Pole <i>Site 2A</i> 20683	2.2	0.013	mg/L	1	B6K0822	11/08/2016	11/10/2016 09:31	
6110146-07	07 Sign Pole <i>Site 2</i> 20684	0.41	0.013	mg/L	1	B6K0822	11/08/2016	11/10/2016 09:36	
6110146-08	09 Sign Pole <i>Site 3</i> 20514	2.0	0.013	mg/L	1	B6K0822	11/08/2016	11/10/2016 09:41	
6110146-09	10 Sign Pole <i>Site 4</i> 20518	2.4	0.013	mg/L	1	B6K0822	11/08/2016	11/10/2016 09:54	

CET # : 6110146

Project: CTDOT

Project Number: DOT Sign Poles

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

Sincerely,



David Ditta  
Laboratory Director

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.
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- I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

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ND is None Detected at the specified detection 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 # : 6110146

Project: CTDOT

Project Number: DOT Sign Poles

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	09/30/2016



6110146



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

Edition: November 2013  
Supersede Previous Edition

### TCLP CHAIN OF CUSTODY

PROJECT NUMBER		PROJECT NAME		PARAMETERS						LAB ID #.				
222165.5449		DOT Sign Poles								TURNAROUND TIME				
										24hr	48hr	X	3day	5day
										24hr	48hr		3day	5day
INSPECTOR: (SIGNATURE)			(PRINTED)			RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Lead	Paint chip	MATERIAL	
<i>Kelly Gray</i>			Kelly Gray											
FIELD SAMPLE NUMBER	DATE	TIME	TYPE		SAMPLE LOCATION									
			COMP	GRAB										
1	11/2/16	0915	X		Sign Pole #: 20318						X	Paint		
2	11/1/16	1000	X		Sign Pole #: 20713			X						
3	11/1/16	1015	X		Sign Pole #: 20712			X						
4	11/1/16	1025	X		Sign Pole #: 20492			X						
5	11/1/16	1230	X		Sign Pole #: 20293			X						
6	11/1/16	1330	X		Sign Pole #: 20683			X						
7	11/1/16	1355	X		Sign Pole #: 20684			X						
8	11/2/16	0915	X		Sign Pole #: 20318			X						
9	11/2/16	1000	X		Sign Pole #: 20514			X						
10	11/2/16	1035	X		Sign Pole #: 20518			X						

Relinquished by: (Signature) <i>Kelly Gray</i>	Date: 11/2/16	Received by: (Signature) <i>Robert Pergamano</i>	Relinquished by: (Signature) <i>Robert Pergamano</i>	Date: 11/3/16	Received by: (Signature) <i>[Signature]</i>
(Printed) Kelly Gray	Time: 1500	(Printed) Robert Pergamano	(Printed) Robert Pergamano	Time: 1730	(Printed)
Run sample 8 only if sample 1 comes back with detectable lead.					Page 1 of 1


*Robert Pergamano 11-3-16*

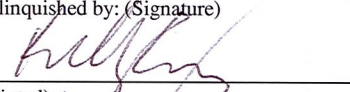



21 GRIFFIN ROAD NORTH  
WINDSOR, CONNECTICUT 06095  
TELEPHONE (860) 298-9692  
FAX (860) 298-6380

## ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 49391

PROJECT NUMBER		PROJECT NAME		PARAMETERS				TURNAROUND TIME					
								PLM:	8hr	24hr	48hr	X	3day
222165.5449 , 0710		DOT Sign Poles						TEM:	24hr	48hr	3day		5day
SIGNATURE			INSPECTOR			MATERIAL							
			K. Grey										
FIELD SAMPLE NUMBER	DATE	TIME	TYPE		SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)			
			COMP	GRAB									
1	11/1/16	1020		X	Sign pole number: 20713	x					C1- Gray Brittle caulk under base pads	<i>Site 7</i>	
2	11/1/16	1020		X	Sign pole number: 20713		x				C1- Gray Brittle caulk under base pads	<i>Site 7</i>	
3	11/1/16	1116		X	Sign pole number: 20492	x					C2- Light gray brittle caulk under base plate	<i>Site 9</i>	
4	11/1/16	1117		X	Sign pole number: 20492		x				C2- Light gray brittle caulk under base plate		
5	11/1/16	1333		X	Sign pole number: 20683	x					C3- Tan caulk under base plate	<i>Site 2A</i>	
6	11/1/16	1336		X	Sign pole number: 20683		x				C3- Tan caulk under base plate		
7	11/1/16	1350		X	Sign pole number: 20684	x					C4- Light tan caulk under metal base plate	<i>Site 2</i>	
8	11/1/16	1350		X	Sign pole number: 20684		x				C4- Light tan caulk under metal base plate		
9	11/2/16	1101		X	Sign pole number: 20514	x					C5- White Caulk under metal base plate	<i>Site 3</i>	
10	11/2/16	1101		X	Sign pole number: 20514		x				C5- White Caulk under metal base plate		
11	11/2/16	1130		X	Sign pole number: 20518	X					C6- White caulk under metal base plate	<i>Site 4</i>	
12	11/2/16	1130		X	Sign pole number: 20518		x				C6- White caulk under metal base plate		

Relinquished by: (Signature) 	Date: <u>11/2/16</u>	Received by: (Signature) <u>11/2/16</u> 	Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) <u>Kelly Gray</u>	Time: <u>1430</u>	(Printed) <u>1600</u> <u>Kelly Gray</u>	(Printed)	Time:	(Printed)
Remarks:			Condition of Samples: Acceptable: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Page 1 of 2



21 GRIFFIN ROAD NORTH  
WINDSOR, CONNECTICUT 06095  
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## ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 49391

PROJECT NUMBER		PROJECT NAME		PARAMETERS					TURNAROUND TIME						
									PLM:	8hr	24hr	48hr	X	3day	
SIGNATURE		INSPECTOR		PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL						
FIELD SAMPLE NUMBER	DATE	TIME	TYPE												SAMPLE LOCATION
222165.5449		DOT Sign Poles							TEM:	24hr	48hr	3day		5day	
		K. Grey													
13	11/1/16	1225	X	Sign pole number: 20293	x					VB1- Black tar vapor barrier on metal / concrete base					
14	11/1/16	1227	X	Sign pole number: 20293		x				VB1- Black tar vapor barrier on metal / concrete base					

Relinquished by: (Signature) 	Date: 11/2/16	Received by: (Signature) <u>11/2/16</u> 	Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) Kelly Grey	Time: 1430	(Printed) 1600 William	(Printed)	Time:	(Printed)
Remarks:			Condition of Samples: Acceptable: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Page 2 of 2



**BULK ASBESTOS ANALYSIS REPORT**

CLIENT: CT Department of Transportation

Lab Log #: 0049391  
 Project #: 222165.45449.0710  
 Date Received: 11/02/2016  
 Date Analyzed: 11/03/2016

Site: DOT Sign Poles

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

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
1	Grey (caulk)	Yes	No	--	---	5%	Chrysotile
2	--	--	--	--	--	NA/PS	--
3	Light Grey (caulk)	Yes	No	--	---	5%	Chrysotile
4	--	--	--	--	--	NA/PS	--
5	Tan (caulk)	Yes	No	--	---	5%	Chrysotile
6	--	--	--	--	--	NA/PS	--
7	Light Tan (caulk)	Yes	No	--	---	5%	Chrysotile
8	--	--	--	--	--	NA/PS	--
9	White (caulk)	Yes	No	--	---	5%	Chrysotile
10	--	--	--	--	--	NA/PS	--
11	White (caulk)	Yes	No	--	---	5%	Chrysotile
12	--	--	--	--	--	NA/PS	--
13	Black (tar vapor barrier)	Yes	No	--	---	10%	Chrysotile
14	--	--	--	--	--	NA/PS	--

**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



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

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
------------	-------	------------	---------------	-----------	------------------------	------------	---------------

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, 2018. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and QC data related to the samples is available upon written request from client.

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

Analyzed by: K. Williamson Reviewed by: Cathryn Lemire **Date Issued**  
 Kathleen Williamson, Laboratory Manager Cathryn Lemire, Approved Signatory 11/03/2016

**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

300-250  
0-35



SUBJECT

Sign Pole Survey

SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
PROJECT NO. 222105.5449  
DATE 10/27/16  
BY K Greig + D Webster  
CHK'D \_\_\_\_\_

Sign 21226 - 95 South Exit 75 (RT 1)  
- span pole across 4 lanes  
- No SACM  
- Painted -  $\sim 0.2 \pm 0.1$

Site 15

Sign 21059 - 9 South Exit 28 1/2 mile  
- span pole across 3.5 lanes  
- No SACM  
- Painted  $< 1.0 pb$

Site 10

Sign 21061 - 9 South Exit 27/28  
- span pole across 5 lanes  $\rightarrow$  split  
- No SACM  
- Painted  $< 1.0 pb$

Site 11

Sign 21483 - 91 North Exit 24 (1/2 mile)  
- sign support on right  
- No SACM  
- Painted  $< 1.0 pb$

Site 12

Sign 21506 - Rt 3 South 91 1/4 miles  
- sign support on right  
- No SACM  
- Painted  $< 1.0$

Site 13

Sign 21646 - 84 West Exit 64  
- span pole on bridge - attached to bridge  
- galvanized  
- No SACM

Site 14



SUBJECT

DOT Sign Poles

SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_

PROJECT NO. \_\_\_\_\_

DATE 11/1/16

BY K Gray + D Webster

CHK'D \_\_\_\_\_

Sign 20713 - 691 East - Exit 11 91 north

- span pole over 3 lanes
- painted < 1.0 lead
- C1 - gray brittle caulk under base pads (x4)
- No SACM VB on concrete

Site 7

Sign 20712 - 691 East - Exit 10 91 south

- span pole over 3 lanes
- painted < 1.0 lead
- No SACM visible

Site 8

Sign 20492 - Rt 15 SB Exit 67W from 691 East

- painted < 1.0
- span pole over 3 lanes
- C2 - light gray brittle caulk under base plate (x4)
- No SACM VB on concrete


Site 9

Sign 20293 - 95 SB Exit 5 mile

- painted greenish < 1.0
- cantilever sign pole
- VB 1 - black tar vapor barrier on metal/concrete base

Site 1

Sign 20683 Rt 7 SB between Exit 1 & 95

- span pole sides - no top 
- painted < 1.0
- C3 - tan caulk under base plate (x4)
- No SACM on concrete

Site 2A

Sign 20684 - Rt 7 SB Between Exit 1 + 95 - 95 S Exit

- span pole w/ top across 3 lanes
- paint < 1.0
- C4 - light tan caulk under <sup>metal</sup> base plate (x4)
- No SACM on concrete
- Electrical conduit lines go over to other side of highway

Site 2



SUBJECT DOT Sign Posts

SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_

PROJECT NO. \_\_\_\_\_

DATE 11/2/16

BY K Gray + D Webster

CHK'D \_\_\_\_\_

Sign 20318 - 91 NB Exit 8 3/4 mile

- Cantilever
- Painted 0.0 ± 0.02
- No stem

Site 6

Sign 20514 - Rt 8 NB Exit 5 1 mile

- Over head across 5 lanes
- ★ - Painted > 0.1
- CG - white caulk under metal base plate
- No VB

Site 3

Sign 20518 R 8 NB Rt 8/15 1/2 mi

- Overhead across 5 lanes
- Painted > 0.1
- CG - white caulk under metal base plate
- No VB

Site 4

Sign 20533 Rt 8 NB Exit 14 1/2 mile

- spans over 4 lanes (both directions)
- galvanized
- No stem
- calibration? at base plate

Site 5

## PROJECT 170-3362: 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.	20293	Stamford	I-95 SB	6.60	Cantilever	Cantilever	Paint	Year Built = Unknown
✓ 2.	20684	Norwalk	7 SB	.60	Truss	Monotube	Paint	Year Built = Unknown
✓ Add on (20)	20683	Norwalk	7 SB	.84	Truss	Monotube	Paint	Year Built = Unknown
✓ 3.	20514	Bridgeport	8 NB	1.74	Truss	Monotube	Paint	Year Built = 1970
✓ 4.	20518	Bridgeport	8 NB	3.22	Truss	Monotube	Paint Galvanized Coating	Year Built = Unknown
✓ 5.	20533	Shelton	8 NB/SB	11.76	Cruciform	Monotube	Hot Dipped Galvanized	Year Built = Unknown
✓ 6.	20318	New Haven	I-91 NB	1.97	Cantilever	Cantilever	Paint Galvanized Coating	Year Built = Unknown
✓ 7.	20713	Meriden	I-691 EB	0.00	Truss	Monotube	Paint	Year Built = Unknown
✓ 8.	20712	Meriden	I-691 EB	0.53	Truss	Monotube	Paint	Year Built = Unknown
✓ 9.	20492	Meriden	15 SB	64.81	Truss	Monotube	Paint	Year Built = Unknown
✓ 10.	21059	New Britain	9 SB	37.05	Truss	Monotube	Paint	Year Built = Unknown
✓ 11.	21061	New Britain	9 SB	36.35	Truss	Monotube	Paint galvanized coating	Year Built = Unknown
✓ 12.	21483	Rocky Hill	I-91 NB	31.15	Cantilever	Cantilever	Paint galvanized coating	Year Built = 1988 In the photo log, the sign exist since 1985
✓ 13.	21506	Glastonbury	3 SB	12.67	Cantilever	No Replacement	Paint galvanized coating	Year Built = 1995
✓ 14.	21646	Vernon	I-84 WB	72.99	Truss	2 Cantilever	Hot dipped galvanized	Year Built = Unknown
✓ 15.	21226	East Lyme	I-95 SB	88.27	Truss	Monotube	Paint galvanized coating	Year Built = Unknown

## **Design Report – Project 170-3362**

This project is for the replacement of overstressed sign supports at 15 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.

Sign support structure no. 20683 (Route 7 SB, Mile 0.842 in Norwalk) was struck by a Contractor's vehicle in 2012 and was removed shortly thereafter due to structural damage. The Office of Maintenance is pursuing reimbursement for replacement of the structure through the Contractor's insurance company. If funding can be procured in time, a new project number would be obtained for replacement of structure no. 20683 and it would be advertised with Project No. 0170-3362 under one Contract. Because of the structure's close proximity to support structure no. 20684, it is requested that the environmental assessment of structure no. 20683 be included with this review.