

February 28, 2020

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, P.E.

Subject: On-Call Asbestos, Lead, Air Quality & Demolition Compliance

Agreement No.: 8.07-01 (18)

HazMat Inspection - Bridge Nos. 00388 & 00389, Route 17 & New London Turnpike

Interchange, Glastonbury, CT

ConnDOT Assignment No. 519-6097 ConnDOT Project No. 53-189 TRC Project No. 289951.6097.0710

Dear Mr. Fox:

TRC performed a limited survey for hazardous building materials associated with the replacement of Bridge Nos. 00388 & 00389, Route 17 & New London Turnpike Interchange in Glastonbury, Connecticut. Results of the survey identified lead paint to be present on the structural steel/metal bridge railing components and concrete abutments of Bridge Nos. 00388 & 00389. Results obtained from TCLP waste stream sampling and analysis for leachable lead from the paint on the structural steel characterized the paint waste stream at Bridge No. 00388 as CTDEEP/RCRA hazardous waste. At Bridge No. 00389, results obtained from TCLP waste stream sampling and analysis for leachable lead from the paint on the structural steel and metal bridge railing characterized the paint waste stream as CTDEEP/RCRA hazardous waste. Results obtained from TCLP waste stream sampling and analysis for leachable lead from the paint on the metal bridge railing at Bridge No. 00388 and concrete abutments at Bridge No. 00389 characterized the paint waste streams as nonhazardous, non-RCRA waste. Soft white caulking on railings (C2), soft tan caulking around base of railing supports (C3) and hard brittle black expansion joint compound on wingwalls/abutments (EJC1) at Bridge No. 00388 were sampled and found to be asbestos containing materials (ACM). At Bridge No. 00389, tan brittle caulking at base of metal railings (C1) and soft tan railing caulking (C2) were sampled and found to be ACM. Other various caulkings, expansion joint compounds, white fibrous mesh, black tar pipes and tars were sampled and found to be non-ACM. Bird/pigeon guano accumulations and mouse nests/droppings were identified in accessible areas of Bridge Nos. 00388 & 00389. No bloodborne pathogen (BBP) concerns or other hazardous/regulated items were identified. Associated laboratory data, TRC Mobile Data Solutions report and project description are attached.

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

Very Truly Yours,

TRC Reviewed By:

Stephen R. Arienti, CHMM

Zn K. Cini

Senior Project Scientist – Program Manager

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

Find RM



Lead Based Paint Measurement Summary Table

Device(s): Niton XLP301-A (Serial #25555) X Ray Fluorescence (XRF) Spectrum Analyzer

Site: Bridge Nos. 00388 & 00389, Glastonbury, CT

Project # : 289951.6097.0710
Date(s): 11/7/2019
Inspectors: Tyler MacGillivray

Number	Interior/ Exterior	Location	Bridge No.	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm²)	Precision (mg/cm²)	Depth Index	Duration (sec)	Date/Time
1			Self-Calibration										124.7	11/7/2019 11:54
2			3.6 Calibration							3.7	0.3	1.3	4.2	11/7/2019 11:56
3			1.6 Calibration							1.7	0.1	1.2	6.3	11/7/2019 11:56
4			0.3 Calibration							0.4	0.1	1.2	11.8	11/7/2019 11:57
5	Exterior	Glastonbury	Bridge No. 00389		railings		Metal	Grey	Defective	7.4	1.5	1.9	5.8	11/7/2019 11:59
6	Exterior	Glastonbury	Bridge No. 00389		railings		Metal	Grey	Defective	12.0	1.9	2.2	5.3	11/7/2019 12:00
7	Exterior	Glastonbury	Bridge No. 00389		railings		Metal	Grey	Defective	2.8	0.2	1.5	5.5	11/7/2019 12:01
8	Exterior	Glastonbury	Bridge No. 00389		railings		Metal	Grey	Defective	5.4	1.5	1.9	5.1	11/7/2019 12:01
9	Exterior	Glastonbury	Bridge No. 00389		railings		Metal	Red	Defective	7.0	1.4	1.9	5.1	11/7/2019 12:02
10	Exterior	Glastonbury	Bridge No. 00389		railings		Metal	Red	Defective	1.9	0.2	1.6	5.5	11/7/2019 12:03
11	Exterior	Glastonbury	Bridge No. 00389		railings post		Metal	Grey	Defective	3.4	0.3	1.6	5.6	11/7/2019 12:03
12	Exterior	Glastonbury	Bridge No. 00389		railings post		Metal	Grey	Defective	8.6	1.7	1.9	5.1	11/7/2019 12:04
13	Exterior	Glastonbury	Bridge No. 00389		railings post		Metal	Grey	Defective	6.9	1.4	1.8	6.5	11/7/2019 12:04
14	Exterior	Glastonbury	Bridge No. 00389		railings post		Metal	Grey	Defective	2.9	0.3	1.4	3.9	11/7/2019 12:05
15	Exterior	Glastonbury	Bridge No. 00389		beam		Metal	Grey	Intact	3.8	0.4	1.7	4.6	11/7/2019 12:19
16	Exterior	Glastonbury	Bridge No. 00389		beam		Metal	Grey	Intact	3.8	0.4	1.7	5.3	11/7/2019 12:20
17	Exterior	Glastonbury	Bridge No. 00389		beam		Metal	Grey	Intact	2.6	0.3	1.5	4.9	11/7/2019 12:20
18	Exterior	Glastonbury	Bridge No. 00389		beam		Metal	Grey	Intact	10.5	4.9	2.3	1.9	11/7/2019 12:20
19	Exterior	Glastonbury	Bridge No. 00389		beam		Metal	Grey	Intact	9.2	4.1	1.9	2.3	11/7/2019 12:21
20	Exterior	Glastonbury	Bridge No. 00389		bearing		Metal	Grey	Intact	3.6	0.7	1.8	3.2	11/7/2019 12:31
21	Exterior	Glastonbury	Bridge No. 00389		bearing		Metal	Grey	Intact	1.7	0.2	1.5	4.9	11/7/2019 12:32
22	Exterior	Glastonbury	Bridge No. 00389		bearing		Metal	Grey	Intact	3.6	0.4	1.9	4.9	11/7/2019 12:32
23	Exterior	Glastonbury	Bridge No. 00389		bearing		Metal	Grey	Intact	0.1	0.0	1.5	19.2	11/7/2019 12:33
24			3.6 Calibration							3.8	0.3	1.3	4.4	11/7/2019 14:18
25			1.6 Calibration							1.4	0.1	1.1	4.4	11/7/2019 14:19
26			0.3 Calibration							0.3	0.0	1.1	9.9	11/7/2019 14:19
27			3.6 Calibration							3.5	0.3	1.3	4.2	11/7/2019 14:20
28			1.6 Calibration							1.7	0.1	1.2	6.7	11/7/2019 14:21
29			0.3 Calibration							0.3	0.0	1.1	9.7	11/7/2019 14:21
30	Exterior	Glastonbury	Bridge No. 00388		railing		Metal	Grey	Defective	4.6	0.5	2.1	4.8	11/7/2019 14:23
31	Exterior	Glastonbury	Bridge No. 00388		railing		Metal	Grey	Defective	3.6	0.3	1.7	5.1	11/7/2019 14:23
32	Exterior	Glastonbury	Bridge No. 00388		railing		Metal	Grey	Defective	4.8	0.4	1.9	5.3	11/7/2019 14:24
33	Exterior	Glastonbury	Bridge No. 00388		railing		Metal	Red	Defective	2.6	0.3	1.7	4.8	11/7/2019 14:25
34	Exterior	Glastonbury	Bridge No. 00388		railing		Metal	Red	Defective	10.0	1.8	2.5	5.1	11/7/2019 14:25
35	Exterior	Glastonbury	Bridge No. 00388		railing post		Metal	Red	Defective	10.4	1.9	2.4	4.6	11/7/2019 14:26
36	Exterior	Glastonbury	Bridge No. 00388		railing post		Metal	Red	Defective	0.7	0.1	1.6	6.0	11/7/2019 14:27
37	Exterior	Glastonbury	Bridge No. 00388		railing post		Metal	Red	Defective	1.6	0.2	1.3	5.1	11/7/2019 14:27
38	Exterior	Glastonbury	Bridge No. 00388		railing post		Metal	Grey	Defective	3.3	0.3	1.6	4.9	11/7/2019 14:28
39	Exterior	Glastonbury	Bridge No. 00388		railing post		Metal	Grey	Defective	11.6	2.1	2.2	4.4	11/7/2019 14:28
40	Exterior	Glastonbury	Bridge No. 00388		railing post		Metal	Red	Defective	1.0	0.3	1.2	2.1	11/7/2019 14:29
41	Exterior	Glastonbury	Bridge No. 00388		railing post		Metal	Red	Defective	4.1	0.4	1.8	4.8	11/7/2019 14:29
42						VOID								
43	Exterior	Glastonbury	Bridge No. 00388		abutment		Concrete	Grey	Intact	0.0	0.0	1.0	3.7	11/7/2019 14:32



Lead Based Paint Measurement Summary Table

Device(s): Niton XLP301-A (Serial #25555) X Ray Fluorescence (XRF) Spectrum Analyzer

Site: Bridge Nos. 00388 & 00389, Glastonbury, CT

Project # : 289951.6097.0710
Date(s): 11/7/2019
Inspectors: Tyler MacGillivray

Number	Interior/ Exterior	Location	Bridge No.	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm ²)	Precision (mg/cm²)	Depth Index	Duration (sec)	Date/Time
44	Exterior	Glastonbury	Bridge No. 00388		abutment		Concrete	Grey	Intact	0.0	0.0	1.0	3.5	11/7/2019 14:32
45	Exterior	Glastonbury	Bridge No. 00388		abutment		Concrete	Grey	Intact	0.0	0.0	1.0	3.7	11/7/2019 14:32
46	Exterior	Glastonbury	Bridge No. 00388		beam		Metal	Grey	Defective	2.2	0.2	1.5	4.4	11/7/2019 14:49
47	Exterior	Glastonbury	Bridge No. 00388		beam		Metal	Grey	Defective	2.2	0.3	1.4	3.7	11/7/2019 14:50
48	Exterior	Glastonbury	Bridge No. 00388		i beam		Metal	Grey	Defective	1.7	0.4	1.3	2.3	11/7/2019 14:50
49	Exterior	Glastonbury	Bridge No. 00388		i beam		Metal	Grey	Defective	2.7	0.2	1.5	5.3	11/7/2019 14:51
50	Exterior	Glastonbury	Bridge No. 00388		bearing		Metal	Grey	Defective	15.5	2.4	2.1	3.9	11/7/2019 14:53
51			3.6 Calibration							3.8	0.3	1.3	7.2	11/7/2019 15:41
52			1.6 Calibration							1.7	0.2	1.2	5.3	11/7/2019 15:41
53			0.3 Calibration							0.3	0.1	1.1	8.1	11/7/2019 15:42



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

Client:

Mr. Erik Plimpton

TRC Environmental Consultants

21 Griffin Rd., North Windsor, CT 06095

Analytical Report CET# 9110234

Report Date:November 14, 2019 Project: Bridge 00388, 00389

Project Number: 289951.6897.0710

Connecticut Laboratory Certificate: PH 0116 Massachusetts Laboratory Certificate: M-CT903 Rhode Island Laboratory Certificate: 199



New York NELAP Accreditation: 11982 Pennsylvania Certificate: 68-02927 CET #: 9110234

Project: Bridge 00388, 00389 Project Number: 289951.6897.0710

SAMPLE SUMMARY

The sample(s) were received at 23.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01	9110234-01	Paint Chip	11/07/2019	11/08/2019
02	9110234-02	Paint Chip	11/07/2019	11/08/2019
03	9110234-03	Paint Chip	11/07/2019	11/08/2019
04	9110234-04	Paint Chip	11/07/2019	11/08/2019
05	9110234-05	Paint Chip	11/07/2019	11/08/2019

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
9110234-01	01	1.5	0.013	mg/L	1	B9K1324	11/13/2019	11/13/2019 19:15	
9110234-02	02	170	0.052	mg/L	4	B9K1324	11/13/2019	11/14/2019 13:37	
9110234-03	03	70	0.026	mg/L	2	B9K1324	11/13/2019	11/14/2019 13:42	
9110234-04	04	6.1	0.013	mg/L	1	B9K1324	11/13/2019	11/13/2019 19:30	
9110234-05	05	0.27	0.013	mg/L	1	B9K1324	11/13/2019	11/13/2019 19:35	

CET#: 9110234

Project: Bridge 00388, 00389

Project Number: 289951.6897.0710

CASE NARRATIVE

No collection times provided by client on chain of custody for the following samples: 9110234-01 through -05.

CET #: 9110234

Project: Bridge 00388, 00389

Project Number: 289951.6897.0710

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

R Blake J

Daniel Sitta

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- Analyte exceeds method limits from second source standard in Initial Calibration Verification (ICV). No 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

Reporting Limit (RL) is the limit of detection for an analyte after any adjustment made for dilution or percent moisture.

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

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

CET #: 9110234

Project: Bridge 00388, 00389

Project Number: 289951.6897.0710

CERTIFICATIONS

Analyte Certifications

EPA 6020A in Water

Lead

CT

 $Complete\ Environmental\ Testing\ operates\ under\ the\ following\ certifications\ and\ accreditations:$

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2020

Edition: November 2013 Supersede Previous Edition



- TCLFCHAIN OF CUSTODY

WINDSOR, CONNECTICUT 06095

21 GRIFFIN ROAD NORTH

TELEPHONE (860) 298-9692

Sday Sday 61811 3day 3day Page 1 of 2 Received by: (Signature) MATERIAL 48hr 48hr TURNAROUND TIME LAB ID#. 24hr 24hr \$ Shionti Thumpanies, com 16.5 15.00 Paist GREG CHANT SPLP Pb Relinquished by: Algnapur PARAMETERS **ТСГЬ** ЪР X 8 RCRA Metals (Printed) RCRA Pb, AS, CR, to Effinitional trumpaniescom KCKY bp Beams, I seums, paclestals Beams, predestals, Ibeams CABC CHURY under Bridge co389 Posts Railings, Railing Posts under Bridge 00388 Concrete abutment SAMPLE LOCATION unely Bridge 00384 Tyler Macallinay Received by: (Signature) or Bridge 00388 on 13ridgy 50389 Railings, Railing Bridge 00388 Bridge 00389 PROJECT NAME (PRINTED) 15:36 11-7-14 CEVB TYPE Date: COMB TIME 289951.6897.0710 INSPECTOR: (SIGNATURE) results Tyler Madeilliwizy P1-L-01 DATE PROJECT NUMBER Relinquished by: (Signature) FAX (860) 298-6380 Send SAMPLE NUMBER FIELD 0 U 03 07 8 0

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

ASBESTOS BULK SAMPLING

Supersede Previous Edition Edition: October 2009

CHAIN OF CUSTODY

TELEPHONE (860) FAX (860) 298-6380	1 ELEPHONE (860) 298-9692 FAX (860) 298-6380	2696-									LAB ID#. 541(04)	
PROJECT	PROJECT NUMBER			PRO	PROJECT NAME					S	TURNAROUND TIME	Γ
789951 6097	70		100	Con	ConnDOT - Bridge 00388, 567 New		PARAMETERS	ETER	S		PLM: 8hr 24hr X 48hr 3day	ay
			74 <u>-</u> 20	Son C	London Tpke, Glastonbury, CT						TEM: 24hr X 48hr 3day 5day	ay
SIGNAŢUŖE	IRE /		1.27	ISN	INSPECTOR		(1				10	
when	May Sun	7		Lyle	Tyler Macgillivray,Tyler Noll		duction	200 200 200 200 200 200 200 200 200 200	(%0			
			TYPE)E			on oir		I> 3			
FIELD SAMPLE NUMBER	DATE	TIME	COMP	CEVB	SAMPLE LOCATION	PLM EPA 6	PLM EPA 6 W/ gravimetr (POSITIV	VAPLYZE	% I< 3I)	(IE BEW RE	MATERIAL	
9.2	2.1	1		8	9)			8		Т
-	11/7/2019	12:40		×	South side top level	×				X	C1 - Hard white brittle caulk	
2	11/7/2019	15:23		×	North side top level	×					C1 - Hard white brittle caulk	
3	11/7/2019	12:42		×	South side top level	X				X	C2 - Soft white railing caulk	
4	11/7/2019	15:23		×	North side top level	X				200	C2 - Soft white railing caulk	
5	11/7/2019	12:43		X	South side top level	X				X	C3 - Soft tan caulk	
9	11/7/2019	15:23		X	North side top level	Х					C3 - Soft tan caulk	
7	11/7/2019	12:38		×	South side top level	×				X	EJC-1 - Hard brittle black expansion joint compound	
8	11/7/2019	12:47		×	North side top level	×					EJC-1 - Hard brittle black expansion joint compound	
6	11/7/2019	13:07		×	West side lower level	×				X	EJC-2 - Soft black / grey expansion joint compound	
10	11/7/2019	13:12		×	East side lower level	×				. M. (2)	EJC-2 - Soft black / grey expansion joint compound	
11	11/7/2019	15:22		×	West side lower level	×					M-1 - White fibrous mesh	
12	11/7/2019	15:22		×	West side lower level	×				:00.2h	M-1 - White fibrous mesh	

Relinquished by: (Signature)	Date:	Received by: (Signature)	11/7/19	11/7/19 Relinquished by: (Signature)	Date:	Received by: (Signature)	
Was More	11/7/2019	MAN					
(Printed)	Time:	(Printed)	1540 (Printed)	(Printed)	Time:	(Printed)	
Tyler MacGillivray		1(, 10 min		,			
Remarks: ~		(), 1, 1,		Condition of Samples:			
Messe send resurts to SARET	into to 5	SAGED		Acceptable: Yes Comments:	No	Page 1 of 2	

♦TAC

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

Relinquished by: (Signature)	Date: Received by: (Signature)	PILLYI	11/7/19 Relinquished by: (Signature)	Date:	Received by: (Signature)
Printed)	Time: (Printed)	18/18/	(Printed)	Time:	(Printed)
Tyler MacGillivray	// omiss	5			
Remarks:			Condition of Samples:		
Please Sond (cs	Plass sond rowlts to SABEP		Acceptable: Yes	No I	Page 2 of 2

Industrial Hygiene Laboratory 21 Griffin Road North Windsor, CT 06095 (860) 298-6308



CLIENT:

CT Department of Transportation

Lab Log #:

0054464

Project #:

289951.6097.0710

Date Received:

11/07/2019

Date Analyzed:

11/07/2019

Site:

Bridge 00388, 567 New London Turnpike, Glastonbury, CT-Revised

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

Sample No.	Color	Homogenous	Multi- Layered	Layer No.		her Matrix Materials	Asbestos %	Asbestos Type
1	White (caulk)	Yes	No				ND	None
2	White (caulk)	Yes	No				ND	None
3	White (caulk)	Yes	No				5%	Chrysotile
4							NA/PS	
5	Tan (caulk)	Yes	No				5%	Chrysotile
6							NA/PS	
7	Black (expansion joint compound)	Yes	No		30%	cellulose	ND	None
8	Black (expansion joint compound)	Yes	No		30%	cellulose	ND	None
9	Black/Grey (expansion joint compound)	Yes	No		20%	cellulose	ND	None
10	Black/Grey (expansion joint compound)	Yes	No		20%	cellulose	ND	None
11	White (fibrous mesh)	Yes	No		60%	cellulose	ND	None
12	White (fibrous mesh)	Yes	No		60%	cellulose	ND	None
13	Black (pipe tar)	Yes	No		10%	cellulose	ND	None
14	Black (pipe tar)	Yes	No		10%	cellulose	ND	None



Page 2 of 2 54464.CT-DOT.doc

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

Sample No. Color Homogenous Multi-	Other Matrix	Asbestos	Asbestos
Layered Layered	Materials	%	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, 2020. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2020. 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.

K. Weilean Reviewed by:

Date Issued

11/07/2019

Proscience Analytical Services, Inc.

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

NTT866

TEM Bulk Chain of Custody Record

Analysis Type: Chatfield EPA N.O.B Qualitative

Date: 11/12/19

C289951 PO#:

TRC Client:

Client Job#:

Client Job Ref./Loc.: CTDOT- Bridge 00388, 567 New London Turnpike, Glastonbury, CT 289951.6097.0710

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

Latela (24 of 4-100 "11119 9.35 E. Plimpton- EPlimpton@trecompanies.com & SArienti@trecompanies.com Received by: Report to:

T. Noll & T. MacGillivray Samplers Name: <12 Hour

Turnaround Time:

<48 Hour <24 Hour

Other:

5 Day

<3 Day

For Lab Use Only	Location Acceptable Comments on Receipt	See COC	p	p								th # Results Reported Comments
	Description	Caulk	Expansion Joint Compound	Expansion Joint Compound	Tar							Client # Batch #
	Lab ID#	54464	54464	54464	54464							# Spies Total
	Client ID#	1	7	6	13							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

Client Project #:

289951.6097.0710 CT DOT - Bridge 00388, 567 New London Tumpike, Glastonbury, CT Client Reference:

NT 18066 NOB 11/11/2019 11/13/2019

Batch: Method:

Date Received: Date Analyzed:

Laboratory Report

C289951

₩ ₩

Client #:

TRC Companies. Inc. (CT) Client Name:

Cuchi yanic		ind companies, like. (C1)											മ്	Date of Report:		11/13/2019	
LABID	Field ID	Description:	Color	Initial		%	% Asbestos Types	s Types			% Other	%	%	Total % Analyzed / Preped /	Analyzed /	Preped /	
				Weight	유	AMO	ACT	CRO	ANT	TRE	Jon-asb.	Organic	Carb	CRO ANT TRE Non-ash Organic Carb Ashesfoe	Charged	Charged	
NT135887 1		Hark White Brittle Caulk		.4654	00.	8	80.	8	8	8	52.79	45,04 2.17	2.17	Q) S	
NT135888 7		Hard Brittle Black Expansion Joint Compound	THE OWN DAY AND ADDRESS OF THE PARTY.	.1999	1.93	00	8	80.	8	8	17.33	75.34	5.40	1.93	Yes	Š	
NT135889 9		Soft Black/Grey Expansion Joint Compound		2456	73	8	8	0.	00.	80:	4.52	92.18	3.30	T.	Yes	Ž	
NT135890 13		Soft Black Pipe Tar	Access to	2803	8.	80.	8.	8	8	8	3.68	94.86	1.46	Q	Yes	å	

Comments:

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

Mark Derosier, Analyst

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

ASBESTOS BULK SAMPLING

Edition: October 2009 Supersede Previous Edition

CHAIN OF CUSTODY

289951.6097	I NOSECT MUMBEN		_	PRO	PROJECT NAME						TURNAROUND TIME	
207731.007	ŗ		_	Conn	ConnDOT - Bridge 00389, 563-565		PARAMETERS	ETER	S		PLM: 8hr 24hr X 48hr	3day
			-	Vew	New London Tpke, Glastonbury, CT						TEM: 24hr X 48hr 3day	5day
SIGNATU	RE 11 1.			INSP	INSPECTOR							
Soft 1	Common			Fyler	Tyler Macgillivray,Tyler Noll		duction					
			TYPE	Æ			on oir	_				
FIELD SAMPLE NUMBER	DATE	TIME	COMP	СВАВ	SAMPLE LOCATION	(POSITIV	PLM EPA (W/ gravimeti	VAVEASE	MI< 4I)	LEW NY	MAIEKIAL	
1	11/7/2019	11:03		×	East side top level	×				×	C1 - Tan brittle caulk	
2	11/7/2019	11:03		X	West Side top level	Х			3		C1 - Tan brittle caulk	
3	11/7/2019	14:59		×	East Side top level	X				X	C2 - Soft tan railing caulk	
4	11/7/2019	14:59		×	West side top level	Х					C2 - Soft tan railing caulk	
5	11/7/2019	10:31		×	North side ground level	X				X	EJC-1 - Grey / black expansion joint compound	pun
9	11/7/2019	10:38		X	North side ground level	X				47.5	EJC-1 - Grey / black expansion joint compound	pun
7	11/7/2019	10:32		×	North side ground level	Х				×	EJC-2 - Grey / brown brittle expansion joint compound	_
8	11/7/2019	10:37		×	North side ground level	X					EJC-2 - Grey / brown brittle expansion joint compound	
6	11/7/2019	10:35	S 51	×	South side ground level	X				X	EJC-3 - Black expansion joint compound	
10	11/7/2019	10:35	10/105	×	South side ground level	X					EJC-3 - Black expansion joint compound	
П	11/7/2019	10:37	ur. X	X	South Side ground level	X				×	EJC-4 - Black expansion joint compound	

Relinquished by: (Signature)	Date: 11/7[4	Received by: (Signature)	11/7/19 Rel	11/7/19 Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) Tyler MacGillivray	Time:	(Arinted)	Pri (Pri	Printed)	Time:	(Printed)
Remarks: Please send results to SA and EP	SA and EP			Condition of Samples: Acceptable: Yes Comments:	o _N	Page 1 of 2

♦ TRC

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

CHAIN OF CUSTODY

					12-		LAB ID #.	0 #.				
		-					TUR	NAR -				
			ConnDOT — Bridge 00389, 563-565 PARAMETERS	ETERS	1997	PLM:	8hr	- 1		X 48hr		3day
	- 1	_	INEW London 1 pke, Glastonbury, C.1			TEM:	24hr	X 4	48hr	3day		5day
		_		,	(
			TOP)	IN								
	Г '	TYPE	S H 8000/N	con				7		5		
TIME		COMP	SAMPLE LOCATION PLM EPA (POSITIVE PLM EPA (POSITI	VAVLYZE ANALYZE	LEW NY			YI.	MAIERIAL	∄		
10:37			X South side ground level X			EJC-4 - Black expansion joint compound	ck expan	noisi	joint c	moduo	Pi	
11:34			X north side lower level pedestal X			M-1 - Fibrous white / orange pedestal mesh	us white	/ ora	nge pe	destal n	ıesh	
11:35			X north side lower level pedestal X			M-1 - Fibrous white / orange pedestal mesh	us white	/ ora	nge pe	destal n	nesh	
10:27			X North side ground level X		×	T-1 - Black tar pipe	tar pipe					
10:27			X South Side ground level X			T-1 - Black tar pipe	tar pipe					
11:11			X West Side top level X		X	T-2 - Hard flexible black tar	lexible b	lack	tar			
11:11			X West side top level X			T-2 - Hard flexible black tar	lexible b	lack	tar			
11:09			X West side top level X		X	T-3 - Hard black / white flexible tar	olack / w	hite f	lexible	e tar		
11:10			X West side top level X			T-3 - Hard black / white flexible tar	olack / w	hite 1	lexible	e tar		

Relinquished by: (Signature)	Date: 11/7/19	Received by: (Signature)	11/7/119	11/7/19 Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed)	Time:	(Pymted)	ohSl	JS40 (Printed)	Time:	(Printed)
Tyler MacGillivray		1. (amire				
Remarks: Please send results to SA and EP	SA and EP)		Condition of Samples:		
				Acceptable: YesComments:	_No	Page 2 of 2

Industrial Hygiene Laboratory 21 Griffin Road North Windsor, CT 06095 (860) 298-6308



CLIENT:

CT Department of Transportation

Lab Log #:

0054465

Project #:

289951.6097.0710

Date Received:

11/07/2019

Date Analyzed:

11/07/2019

Site:

Bridge 00389, 563-565 New London Turnpike, Glastonbury, CT -Revised

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

Sample No.	Color	Homogenous	Multi- Layered	Layer No.		her Matrix Materials	Asbestos %	Asbestos Type
1	Tan (caulk)	Yes	No				5%	Chrysotile
2						- -	NA/PS	
3	Tan (caulk)	Yes	No				3%	Chrysotile
4							NA/PS	
5	Grey/Black (expansion joint compound)	Yes	No		10%	cellulose	ND	None
6	Grey/Black (expansion joint compound)	Yes	No		10%	cellulose	ND	None
7	Grey/Brown (expansion joint compound)	Yes	No	-	30%	cellulose	ND	None
8	Grey/Brown (expansion joint compound)	Yes	No		30%	cellulose	ND	None
9	Black (expansion joint compound)	Yes	No		40%	cellulose	ND	None
10	Black (expansion joint compound)	Yes	No		40%	cellulose	ND	None
11	Black (expansion joint compound)	Yes	No		20%	cellulose	ND	None
12	Black (expansion joint compound)	Yes	No		20%	cellulose	ND	None
13	White/Orange (pedistal mesh)	Yes	No		60%	cellulose	ND	None
14	White/Orange (pedistal mesh)	Yes	No		60%	cellulose	ND	None
15	Black (tar pipe)	Yes	No		30%	cellulose	ND	None
16	Black (tar pipe)	Yes	No		30%	cellulose	ND	None
17	Black (tar)	Yes	No				ND	None



Page 2 of 2 54465.CT-DOT.doc

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 (tar)	Yes	No			ND	None
19	Black/White (tar)	Yes	No			ND	None
20	Black/White (tar)	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

Kathleen Williamson, Laboratory Manager

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, 2020. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2020. 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:

Reviewed by:

Date Issued

11/12/2019

Proscience Analytical Services, Inc.

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

TEM Bulk Chain of Custody Record

Analysis Type: Chatfield EPA N.O.B Qualitative

NT/8065

Date: 11/12/19

C289951 PO#:

TRC Client: 289951.6097.0710 Client Job#:

Client Job Ref./Loc.: CTDOT- Bridge 00389, 563-565 New London Turnpike, Glastonbury, CT

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

Received by:

fleels (acit (cle 11/11/9 435) E. Plimpton-<u>EPlimpton@trecompanies.com</u> & SArienti@trecompanies.com

T. Noll & T. MacGillivray Samplers Name:

Report to:

Turnaround Time:

<24 Hour <12 Hour

S Day <48 Hour

5 Day

Other:

For Lab Use Only	Comments												Comments	
	Acceptable on Receipt													
	Location	See COC											Results Reported	
	ıtion	t Compound	t Compound	t Compound	t Compound	pe							Batch #	
	Description	Expansion Joint Compound	Expansion Joint Compound	Expansion Joint Compound	Expansion Joint Compound	Tar Pipe	Tar	Tar					Client #	
	Lab ID#	54465	54465	54465	54465	54465	465	54465					Total	
1	Lal	54	54	54	54	54	54	54					# Spies	
	Client ID #	\$	7	6	11	15	17	19					For Lab Use Only	

ProScience Analytical Services, Inc.

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

289951.6097.0710 CT DOT - Bridge 00389, 563-565 New London Tumpike, Glastonbury, CT Client Reference: Client Project #:

NT 18065 NOB

Batch: Method:

Laboratory Report

11/13/2019 11/11/2019

Date Received: Date Analyzed: Date of Report:

11/13/2019

C289951

Client #: ₩ 0d

TRC Companies, Inc. (CT) 297 Client Name:

V-M				Initial		%	Asbest	% Asbestos Types	·	1	% Other	8	*	Total %	Analyzed /	Preped /
LAB ID	Field ID	Description:	5000	Weight	CHR.	AMO	ACT	CRO	ANT	TRE	Non-asb.	Organic	Carb.	Asbestos	Charged	Charged
NT135880 5	5	Grey/Black Expansion Joint Compound		.2646	.26	00.	80	00.	8.	8	5.10	91.31	3.59	瓦	Yes	2
NT135881 7	4	Grey/Brown Expansion Joint Compound		2214	8	8	8.	8	8	8.	21.28	70.05	8.67	Q.	Yes	2
NT135882 9	6	Black Expansion Joint Compound		.2891	ģ	8	8	8	8	8	2.04	96.13	1.83	표	Yes	2
NT135883 11	A A STATE OF CHARACTERS (ST.	Black Expansion Joint Compound	- On the above as discussions -	5755	8.	8,	8	00'	80,	8	2.19	95.46	2.35	ᅜ	Yes	2
NT135884	12	Black Tar Pipe	PERSONAL INC.	.2655	8	8	8	8	8	8	3,99	94.24	1.77	Q	Yes	No.
NT135885 17	17 00.717 (1.00.00.00.00.00.00.00.00.00.00.00.00.00	Hard Flexible Black Tar	AND THE PROPERTY OF THE PROPERTY AND THE	.3570	80.	8.	8	8	8.	8	16.35	59.22	24.43	T	Yes	Š
NT135886 19	13	Hard Black/ White Flexible Tar	1	1.2261	80	8	8	8	8	8	10.47	78.67	10,86	8	Yes	Š

Comments:

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

Aimee Cormier, Analyst

ConnDOT, Bridge 00388, Hartford, , Glastonbury, 06033, CT, US, New London Tpke, 567

Created	2019-11-07 16:46:54 UTC by Tyler MacGillivray
Updated	2019-11-07 20:35:30 UTC by Tyler MacGillivray
Location	41.7069624737293, -72.5971675012937
Status	Survey Complete

Job Information

Site Name	Bridge 00388
Address	567 New London Tpke Glastonbury, CT 06033
TRC Project Number	289951.6897
Project Manager	Erik Plimpton, Stephen Arienti
Inspector(s)	Tyler Macgillivray, Tyler Noll
Client	ConnDOT
Type of Asbestos Survey	Reno/Demo
Additional Analysis for NOB Materials (Calc)	TEM NY NOB 198.4
PLM Turnaround Time (TAT)	48-hour
TEM Turnaround Time (TAT)	48-hour
Date	2019-11-07

Overview Photo











Surveys Performed

Asbestos, Bridge/Signs/Light Pole/Traffic Signal Items, XRF

Asbestos Section

(2), EJC-1, Hard brittle black expansion joint compound , 2

Representative Photos



South side top level

Sample Location	South side top level	
Analyze by Layer	No	
Asbestos Bulk Analysis	PLM EPA 600/R93/116	
Grab or Composite	Grab	
Date	2019-11-07	
Time	12:38	

Sample Location Photo



North side top level

Sample Location	North side top level	
Analyze by Layer	No	
Asbestos Bulk Analysis	PLM EPA 600/R93/116	
Grab or Composite	Grab	
Date	2019-11-07	
Time	12:47	

Sample Location Photo



Material Information

Sampled or Assumed?	Sampled
Material Acronym	EJC-1
Material Description	Hard brittle black expansion joint compound
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Count	(2)
Total Count (number only)	2

(2), EJC-2, Soft black / grey expansion joint compound , $2\,$

Representative Photos



West side lower level

Sample Location	West side lower level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	13:07

East side lower level

Sample Location	East side lower level	
Analyze by Layer	No	
Asbestos Bulk Analysis	PLM EPA 600/R93/116	
Grab or Composite	Grab	
Date	2019-11-07	
Time	13:12	

Sample Location Photo



Material Information

Sampled or Assumed?	Sampled
Material Acronym	EJC-2
Material Description	Soft black / grey expansion joint compound
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Count	(2)
Total Count (number only)	2

(2), C, 1, Hard white brittle caulk, 2



South side top level

Sample Location	South side top level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	12:40

Sample Location Photo



North side top level

Sample Location	North side top level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116

Grab or Composite	Grab
Date	2019-11-07
Time	15:23

Material Information

Sampled or Assumed?	Sampled
Material Acronym	C, 1
Material Description	Hard white brittle caulk
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Count	(2)
Total Count (number only)	2

(2), C, 2, Soft white railing caulk, 2

Representative Photos



South side top level

Sample Location	South side top level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	12:42



North side top level

Sample Location	North side top level	
Analyze by Layer	No	
Asbestos Bulk Analysis	PLM EPA 600/R93/116	
Grab or Composite	Grab	
Date	2019-11-07	
Time	15:23	

Material Information

Sampled or Assumed?	Sampled
Material Acronym	C, 2
Material Description	Soft white railing caulk
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Count	(2)
Total Count (number only)	2

(2), C, 3, Soft tan caulk, 2



South side top level

Sample Location	South side top level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	12:43

North side top level

Sample Location	North side top level	
Analyze by Layer	No	
Asbestos Bulk Analysis	PLM EPA 600/R93/116	
Grab or Composite	Grab	
Date	2019-11-07	
Time	15:23	

Material Information

Sampled or Assumed?	Sampled
Material Acronym	C, 3
Material Description	Soft tan caulk
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Count	(2)
Total Count (number only)	2

(2), T-1, Soft black pipe tar, 2

Representative Photos

Date

Time



West side lower levelSample LocationWest side lower levelAnalyze by LayerNoAsbestos Bulk AnalysisPLM EPA 600/R93/116Grab or CompositeGrab

2019-11-07

13:05

Sample Location Photo



East side lower level

Sample Location	East side lower level	
Analyze by Layer	No	
Asbestos Bulk Analysis	PLM EPA 600/R93/116	
Grab or Composite	Grab	
Date	2019-11-07	
Time	13:08	

Sample Location Photo



Material Information

Sampled or Assumed?	Sampled
Material Acronym	T-1
Material Description	Soft black pipe tar
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Count	(2)
Total Count (number only)	2

(2), M-1, White fibrous mesh, 2



West side lower level

Sample Location	West side lower level	
Analyze by Layer	No	
Asbestos Bulk Analysis	PLM EPA 600/R93/116	
Grab or Composite	Grab	
Date	2019-11-07	
Time	15:22	

West side lower level

Sample Location	West side lower level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	15:22

Material Information

Sampled or Assumed?	Sampled
Material Acronym	M-1
Material Description	White fibrous mesh
Is Material a Non-Friable Organically Bound (NOB)	No
Total Count	(2)
Total Count (number only)	2

XRF Section

Niton XRF Model No.	25555
XRF Survey Completed	Yes
XRF Data Downloaded	Yes
XRF Shots >1.0 on non-metallic building materials	No
Date Data Downloaded	2019-11-07

Bridge/Signs/Light Pole/Traffic Signal Items

Bridge 00388

Bridge/Sign/Light Pole/Traffic Signal No.	Bridge 00388
General Notes	No ladder access on the underside
Accessibility	Accessible
Paint on Structure (s)?	Yes
Paint on what Components/Structure(s)?	Painted railing and I beams
Suspect Asbestos Containing Materials Identified on Structure	Yes
Guano Present?	Yes
Homeless Activity	No
Bloodborne Pathogen Concerns?	No
Mice/Mouse Nests/Droppings	Yes
Mice/Nests/Droppings Locations	North west corner

General Information

Signature

Tyle mands

Signed 2019-11-07 20:24:35 UTC

Asbestos Samples Submitted to TRC Lab	Yes
Date Submitted to Lab	2019-11-07
App Name	WinBSI HBM Survey 1.0

Generate Report Documentation

Select one or more documents below to be generated. Once completed in the cloud, they will be sent to the listed email address. Please report any difficulties or errors to Justin Coleman.

What documents should be generated?	Asbestos chain-of-custody
Where should the document(s) be sent?	tmacgillivray@trcsolutions.com
Generate Documents	N/A

ConnDOT, Bridge 00389, Hartford, , Glastonbury, 06033, CT, US, New London Tpke, 563–565

Created	2019-11-07 15:22:24 UTC by Tyler MacGillivray
Updated	2019-11-07 23:40:51 UTC by Tyler MacGillivray
Location	41.7069334304349, -72.5973198004743
Status	Survey Complete

Job Information

•	
Site Name	Bridge 00389
Address	563–565 New London Tpke Glastonbury, CT 06033
TDC Desired Manufacture	
TRC Project Number	289951.6897
Project Manager	Erik Plimpton, Stephen Arienti
Inspector(s)	Tyler Macgillivray, Tyler Noll
Client	ConnDOT
Type of Asbestos Survey	Reno/Demo
Additional Analysis for NOB Materials (Calc)	TEM NY NOB 198.4
PLM Turnaround Time (TAT)	48-hour
TEM Turnaround Time (TAT)	48-hour
Date	2019-11-07

Overview Photo

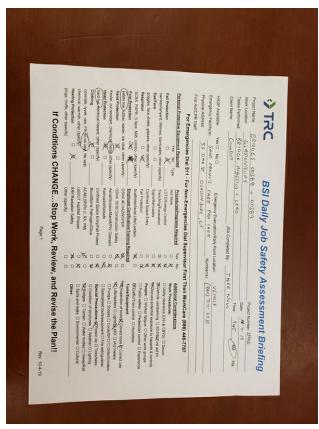














Surveys Performed

Asbestos, XRF, Bridge/Signs/Light Pole/Traffic Signal Items, Hazardous Materials Inventory

(2), C, 1, Tan brittle caulk, 2

Representative Photos



East side top level

•	
Sample Location	East side top level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	11:03

West Side top level

Sample Location	West Side top level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	11:03

Material Information

Sampled or Assumed?	Sampled
Material Acronym	C, 1
Material Description	Tan brittle caulk
Is Material a Non-Friable Organically Bound (NOB)	Yes

Homogeneous Area	24 railing posts
Total Count	(2)
Total Count (number only)	2

(2), C, 2, Soft tan railing caulk, 2

East Side top level

Sample Location	East Side top level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	14:59

West side top level

Sample Location	West side top level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	14:59

Material Information

Sampled or Assumed?	Sampled
Material Acronym	C, 2
Material Description	Soft tan railing caulk
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Count	(2)
Total Count (number only)	2

(2), T-1, Black tar pipe, 2



North side ground level

Sample Location	North side ground level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	10:27



South Side ground level

Sample Location	South Side ground level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	10:27



Material Information

Sampled or Assumed?	Sampled
Material Acronym	T-1
Material Description	Black tar pipe
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Count	(2)
Total Count (number only)	2

(2), T-2, Hard flexible black tar, 2

West side top level

Sample Location	West side top level	
Analyze by Layer	No	
Asbestos Bulk Analysis	PLM EPA 600/R93/116	
Grab or Composite	Grab	
Date	2019-11-07	
Time	11:11	

West Side top level

Sample Location	West Side top level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07

Time 11:11

Material Information

Sampled or Assumed?	Sampled
Material Acronym	T-2
Material Description	Hard flexible black tar
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Count	(2)
Total Count (number only)	2

(2), T-3, Hard black / white flexible tar, 2

Representative Photos



West side top level

Sample Location	West side top level	
Analyze by Layer	No	
Asbestos Bulk Analysis	PLM EPA 600/R93/116	
Grab or Composite	Grab	
Date	2019-11-07	
Time	11:09	



West side top level

Sample Location	West side top level	
Analyze by Layer	No	
Asbestos Bulk Analysis	PLM EPA 600/R93/116	
Grab or Composite	Grab	
Date	2019-11-07	
Time	11:10	



Material Information

Sampled or Assumed?	Sampled
Material Acronym	T-3
Material Description	Hard black / white flexible tar
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Count	(2)
Total Count (number only)	2

(2), EJC-1, Grey / black expansion joint compound , $2\,$



North side ground level

Sample Location	North side ground level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	10:31



North side ground level

Sample Location	North side ground level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	10:38

Material Information

Sampled or Assumed?	Sampled
Material Acronym	EJC-1
Material Description	Grey / black expansion joint compound
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Count	(2)
Total Count (number only)	2

($\bf 2$), EJC-2, Grey / brown brittle expansion joint compound, $\bf 2$



North side ground level

Sample Location	North side ground level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	10:32



North side ground level

Sample Location	North side ground level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	10:37

Material Information

Sampled
EJC-2
Grey / brown brittle expansion joint compound
Yes
(2)
2

($\bf 2$), EJC-3, Black expansion joint compound , $\bf 2$



South side ground level

Sample Location	South side ground level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	10:35



South side ground level

Sample Location	South side ground level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	10:35

Material Information

Sampled or Assumed?	Sampled
Material Acronym	EJC-3
Material Description	Black expansion joint compound
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Count	(2)
Total Count (number only)	2

(2), EJC-4, Black expansion joint compound , 2



South Side ground level

Sample Location	South Side ground level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	10:37



South side ground level

Sample Location	South side ground level
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	10:37

Material Information

Sampled		
EJC-4		
Black expansion joint compound		
Yes		
25 LF		
(2)		
2		

(2), M-1, Fibrous white / orange pedestal mesh , $2\,$



north side lower level pedestal

Sample Location	north side lower level pedestal
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	11:34



north side lower level pedestal

Sample Location	north side lower level pedestal
Sample Location	Horar side tower level pedestal
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-11-07
Time	11:35

Material Information

Sampled or Assumed?	Sampled
Material Acronym	M-1
Material Description	Fibrous white / orange pedestal mesh
Is Material a Non-Friable Organically Bound (NOB)	No
Total Count	(2)
Total Count (number only)	2

XRF Section

Aut Section	
25555	
Yes	
Yes	
No	
2019-11-07	

Bridge/Signs/Light Pole/Traffic Signal Items

00389

Bridge/Sign/Light Pole/Traffic Signal No.	00389
Accessibility	Accessible
Paint on Structure (s)?	Yes
Paint on what Components/Structure(s)?	Painted railings
Suspect Asbestos Containing Materials Identified on Structure	Yes
Guano Present?	Yes
Guano Locations	Underside abutments
Guano Square Footage	75

Guano Photos



Homeless Activity	No	
Bloodborne Pathogen Concerns?	No	
Mice/Mouse Nests/Droppings	No	

General Information

Signature

Tylen Mary

Signed 2019-11-07 20:17:57 UTC

Asbestos Samples Submitted to TRC Lab	Yes
Date Submitted to Lab	2019-11-07
App Name	WinBSI HBM Survey 1.0

Generate Report Documentation

Select one or more documents below to be generated. Once completed in the cloud, they will be sent to the listed email address. Please report any difficulties or errors to Justin Coleman.

What documents should be generated?	Asbestos chain-of-custody
Where should the document(s) be sent?	tmacgillivray@trcsolutions.com
Generate Documents	N/A

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

Transportation Principal Engineer

Bureau of Engineering and Construction

subject:

State Bridge Program Project No. 53-189

Bridge No. 00388

Route 17 NB over Route 17SB Ramp 007 and Route 17SB Ramp 007 over New London Turnpike

Glastonbury

m e m o r a n d u m

date:

January 23, 2017

to:

Adam G. Fox

from:

Andrew Cardinal Office Service Lordinal Conference Conf

Andrew J. Cardinali

Transportation Supervising Engineer Bureau of Engineering and Construction

Hazardous/Contaminated Materials Screening

This project consists of the following repairs:

• Removal of the superstructure of Bridge No. 00388, and the superstructure and substructure (to the footings) of Bridge No. 00389 (Route 17 SB Ramp 007 over New London Turnpike);

Filling in of existing Bridge No. 00388 span under Route 17 NB and construction of new roadway

to match existing Route 17 NB lane configuration on top of filled span;

• Removal of the at-grade pavement that makes up Route 17 SB Ramp 007 between the Route 17 street in mainline and the ramp's tie-in to the intersection of New London Turnpike, Williams Street E and an at the array Oak Street.

• Reconfigure Route 17 SB Ramp 005 at intersection with New London Turnpike to accommodate to Rouse 1 17 SI left-turning traffic. Add signalization to the intersection. Add a left turn on northbound New 2 traffic. Add London Turnpike at this intersection for traffic turning onto the Route 17 SB On-ramp and widefi to applie at this the roadway in this area to accommodate the left turn lane. Sidewalks will be constructed and by the historic crosswalks will be installed to provide sidewalk connectivity along New London Turnpike crosswalks will be installed.

• Install new traffic signal at intersection of New London Turnpike, Oak Street and Williams StiEttow traffic signal account for removal of Ramp 007.

Roadway excavation on Route 17 SB Ramp 005 is anticipated for reconfiguration of the ramp intersection with New London Turnpike. Roadway excavation is also anticipated on New London Turnpike for the construction of new sidewalks and the widening of the roadway to accommodate a left turn lane. The pavement of the existing Route 17 SB Ramp 007 will be removed and the area will be prepared for seeding. Excavation will be necessary at Bridge No. 00389 which will be demolished down to the footings and the soil retained by the existing abutments will be regraded.

Additional information is attached for your use in generating the screening evaluation for the subject bridge:

- Location Map
- Limits of Work

Please provide this office with the results of the screening evaluation for use in developing and advancing this project.

A reply by February 27, 2017 for the initial screening would be appreciated. Should a lead investigation or other hazardous material investigation be required, please provide the results, including all special provisions, by February 20, 2018. Time expended for the completion of these activities should be charged to Project No. 53-189. If you have any questions or require additional information, please contact Ms. Dobieslawa A. Kania, Transportation Engineer III, at Ext. 3389.

Attachments

Rachelle L. Clark/rlc/dak

cc: Rabih M. Barakat - Andrew J. Cardinali - Dobieslawa A. Kania

Project Location Map

