

January 24, 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:

Jason Coite, P.E. / Mandy Socolosky

Subject:

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

Agreement No. 04.27-01(15)

HazMat Inspection - Bridge No. 00255, I-395 over Route 85, Waterford, CT

ConnDOT Assignment No. 514-5699 ConnDOT Project No. 152-158 TRC Project No. 222165.5699.0710

Dear Mr. Fox:

TRC performed a limited survey for hazardous building materials associated with the rehabilitation of Bridge No. 00255, I-395 over Route 85 in Waterford, Connecticut. Results of the survey identified lead paint to be present on the structural steel/metal bridge components of Bridge No. 00255. The railings were identified as galvanized (unpainted). Results obtained from TCLP waste stream sampling and analysis for leachable lead from the paint on the structural steel/metal bridge components characterized the paint waste stream at Bridge No. 00255 as CTDEEP/RCRA hazardous waste. At Bridge No. 00255, the black expansion joint material (EJ1) between the parapet wall sections & wing walls was sampled and found to contain asbestos. Grey rubbery caulking on the topside of the bridge and grey metallic caulking under the guardrail pedestals were also sampled and no detectable levels of asbestos were identified. Two (2) potential universal waste (UW) and Connecticut Regulated Waste (CRW) luminaire light fixtures were attached to the underside of the bridge. Bird/pigeon guano accumulations were observed in accessible areas of the bridge. No items of bloodborne pathogens (BBP) concern were identified. Associated laboratory data, inspector notes, project descriptions and site maps are attached.

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

Very Truly Yours,

TRC

Stephen R. Arienti, CHMM

Find RM

20 K. Cini

Senior Project Scientist – Project Manager

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



Lead Based Paint Measurement Summary Table

Device(s): Niton XLP301-A (Serial #7709) X Ray Fluorescence (XRF) Spectrum Analyzer Site: ConnDOT - Bridge No. 00255, I-395 over Route 85, Waterford, CT Project #: 222165.5699.0710
Date(s): 12/22/2017
Inspectors: David Webster (CTDPH License #002233)

Structure
Girder
Girder
Girder
Girder
Rocker Pad
Rocker Pad
Rocker Pad
Rocker Pad
VOID

80 Lupes Drive Stratford, CT 06615



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

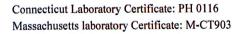
Analytical Report CET# 7120729

Report Date:December 29, 2017

Project: CTDOT

Project Number: Bridge 0255, Waterford

PO Number: 222165.5699.0710





New York NELAP Accreditation: 11982 Rhode Island Certification: 199 CET #: 7120729 Project: CTDOT

Project Number: Bridge 0255, Waterford

SAMPLE SUMMARY

The sample(s) were received at 20.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
1 Steel Girders/Rocker	7120729-01	Paint Chip	12/22/2017 11:15	12/27/2017

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
7120729-01	1 Steel Girders/Rocker	570	0.013	mg/L	1	B7L2823	12/28/2017	12/28/2017 17:29	

CET #: 7120729 Project: CTDOT

Project Number: Bridge 0255, Waterford

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 Blah J

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.

David Sitta

- 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 #:7120729 Project: CTDOT

Project Number: Bridge 0255, Waterford

CERTIFICATIONS

Certified Analyses included in this Report

Analyte Certifications

EPA 6020A in Water

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

TRC

21 GRIFFIN ROAD NORTH

TELEPHONE (860) 298-9692 FAX (860) 298-6380 WINDSOR, CONNECTICUT 06095

PROJECT NUMBER

NUMBER SAMPLE /FIELD

DATE

TIME

TYPE

RCRA Pb

8 RCRA Metals

TCLP Pb

SPLP Pb

MATERIAL

COMP

GRAB

SAMPLE LOCATION

2/22/17

Steelsings/Booker

tain parc

Relinquished by: (Signature)

12/26/1

Time: 4051

GREC

C-11014

200

(Printed) 02 KO

Chody

Time:

(Pkinted)

1635

Page 1 of 1

Date:

Received by: (Signature)

please email epimptonaticsolutions comand Sanentiaticsolutions com

TCLP CHAIN OF CUSTODY

200165.5699,0710 INSPECTOR: (SIGNATURE) PROJECT NAME CTOOT
Bridge 0355, waterford, or (PRINTED) RCRA Pb, AS, CR, CD **PARAMETERS** TURNAROUND TIME 24hr 24hr LAB ID#. 48hr 48hr 3day 3day 5day 5day

Page 5 of 5

Supersede Previous Edition

Edition: November 2013

Q

W/m// 2010 6 3/23 Cd 63 121 3day 5day Edition: October 2009 Supersede Previous Edition 51724 TURNAROUND TIME 48hr 3day MATERIAL CA PCOSION hiligh 24hr 48hr LAB ID #. Shr. 24hr PLM: TEM: (IE DTW SEBIES NEC) **TEW NA NOB 198'4** (E>1% & <10%) PARAMETERS ASBESTOS BULK SAMPLING POINT COUNT YNYTASE BA TYAEK CHAIN OF CUSTODY (w/ gravimetric reduction)
(POSITIVE STOP) **b**FW **Eby** 600/**B**63/116 (FOSITIVE STOP) polota (Harry th) SAMPLE LOCATION of corss 3 13.ch.00255 PROJECT NAME INSPECTOR CEVE COMB WINDSOR, CONNECTICUT 06095 200165.54 09,000 13851 2553 2000 TIME -22-11-350 TELEPHONE (860) 298-9692 FAX (860) 298-6380 21 GRIFFIN ROAD NORTH DATE PROJECT NUMBER SIGNATURE SAMPLE NUMBER FIELD

	Received by: (Signature) 12/20/14	(Printed) 1000	Page 1 of 7
4	Received by: (Signature) 13/27/17 Relinquished by: (Signature)	afther (2001 130 All My Conice 130 All My Conice	Condition of Samples: Acceptable: YesNo
	Relinquished by: (Signature) Out 17-22	(Printed) Time: (No. 2 Wibte 1136	Remarks:

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



BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #:

0051724

Project #:

222165.5699.0710

Date Received:

12/26/2017

Date Analyzed:

01/02/2018

Site:

Bridge 00255

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

Sample No.	Color	Homogenous	Multi- Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
1	Black (expansion joint)	Yes	No			ND	None
2	Black (expansion joint)	Yes	No			ND	None
3	Light Grey (caulk)	Yes	No		·	ND	None
4	Light Grey (caulk)	Yes	No			ND	None
5	Light Grey (caulk)	Yes	No			ND	None
6	Light 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:

Reviewed by:

Date Issued

01/02/2018

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

NT16971

Date: 12/29/17

P0#: C222165

Client:

Client Job#: 222165.5699.0710 Client Job Ref./Loc.: CT DOT- Bridge 00255

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

Received by: Dreen Journal 1/3/18 9.05

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

Samplers Name: D. Webster

<12 Hour

Turn Around Time:

<24 Hour

<48 Hour

<3 Day

5 Day

Other:

Comments		Results Reported	Batch #	Client #	Total	# Spies	For Lab Use Only
		,					
				:			
			k	Caull	51724	51	6
				Caull	724	51	4
		See COC	ı Joint	Expansion Joint	51724	51	2
Comments	Acceptable on Receipt	Location	tion	Description	Lab ID#	La	Client ID#
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 #: Client Reference: 222165.5699.0710 CT DOT - Bridge 00255 C222165

PO # Client #:

TRC Environmental Corp. (CT)

Client Name:

Date of Report:	Date Analyzed:	Date Received:	Method:	Batch:
1/5/2018	1/5/2018	1/2/2018	NOB	NT 16971

S	Yes	N	.29	.46	99.25	.00	.8	.8	.00	.0	.00	1.1154 .00 .00		Lt Grey Caulk		NT128290 6
N _o	Yes	8	12.10	48.55 39.35 12.10		.00 .00	.8	.0	.00	.00	.00 .00	.6821		Lt Grey Rubbery Caulk		NT128289 4
8	Yes	3.37	2.68	63.66	.00 30.29 63.66 2.68	.06	.00	.00	.8	.8	.9303 3.37 .00 .00	.9303		Black Expansion Joint		NT128288 2
Charged	Charged	Asbestos	Carb.	Organic	Non-asb.	TRE	ANT	CRO	ACT	AMO	CHR	Weight	Color	Description:	rieid iD	E C
Preped /	Analyzed /	Initial % Asbestos Types % Other % % Total % Analyzed / Preped /	%	%	% Other		š	os Type	Asbest	.9		Initial	1	The special control of the special spe	!	;

Comments:

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

Aimee Cormier, Analyst

Page 1 of 1



SUBJECT Bridge 00255

SHEET NO	/ OF
PROJECT N	NO. 222165_5699.0710
DATE\	12-22-17
ву/)	5/66

CHK'D

NZ * EST (17218) 103 Con 103 General Notes te ESIGLE) (379) (S) E. Driet Poss - Small amount of ghand Williams 100 Joy 5 9 7



	Rode	50055
SUBJECT	101.090	00 250

SHEET NO.	OF
PROJECT NO. 2	722/65 5699,0710
DATE /2-2	22-17
BY 10 /	LL
CHK'D	

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-0n	1/2 St. 1/4 Gir -TEL1			peds t on							
1/5 - A - Z	Z Alhanal Light	pigeo.	n eg	and a	abou	e Cogli	printer,	lot.			
	See	File	for	photos							

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

subject:

State Bridge Program

State Project No. 152-158

Bridge No. 00255

Interstate 395 over Route 85

Waterford

memorandum

date:

December 7, 2016

to:

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

Andrew J. Cardinali
Transportation Supervising Engineer
Bureau of Engineering and Construction

Hazardous/Contaminated Materials Screening

This project consists of the following:

- Replace the existing 7.25" thick reinforced concrete deck with an 8.5" thick precast reinforced concrete deck panels. Install a new spray applied waterproofing membrane and wearing surface.
- Eliminate the raised median and install a new median barrier between northbound and southbound roadways.
- Replace the existing expansion bearings and one line of fixed bearings at the pier to account for fixity changes for a continuous deck.
- Repair and fully paint the steel superstructure and patch the substructure.
- Remove a minimum of 5' of soil embankment in front of the south abutment to alleviate functional obsolescence due to lateral clearance.

Excavation is anticipated for the replacement of Bridge No. 00255. Modification to the slope embankment in front of the south abutment will provide adequate lateral clearance and remove the function obsolescence designation.

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 January 2, 2016 for the initial screening would be appreciated. Please provide this office with the results of the screening evaluation for use in developing and advancing this project. Should a lead investigation or other hazardous material investigation be required, please provide the results, including all special provisions, by September 6, 2017, the due-date for the semi-final plans.

Time expended for the completion of these activities should be charged to Project No. 152-158. If you have any questions or require additional information, please contact Ms. Veronica Calin, Transportation Engineer III, at Ext. 3226.

Attachments

Ricky D. Mears / rdm

cc: Rabih M. Barakat – Andrew J. Cardinali – Veronica M. Calin Donald P. Wurst – Anand Seshadri – Ricky D. Mears (CME)