



June 27, 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: J. Nemecek, P.E. / S. Clout

Subject: Asbestos Survey
Boiler Burner Replacement, District 3 Headquarters, New Haven, CT
ConnDOT Assignment No. 116-5404
ConnDOT Project No. 173-482
TRC Project No. 237612.5404.0910

Dear Mr. Fox:

TRC performed a limited survey for asbestos containing materials associated with the planned replacement of the existing boiler burners at District 3 Headquarters in New Haven, CT. Tan gaskets associated with the gas valve, cork-like gaskets associated with the ignition transformer, tan valve gaskets and the white inspection port gaskets were sampled and found to contain no asbestos. Lab data and project description 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
Project Manager

Reviewed by:

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

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



SUBJECT Dist. 3 DOT Hdqtrs Boiler

SHEET NO. _____ OF _____

PROJECT NO. 237612.5404.0910

DATE 6/22

BY JG/DW

CHK'D _____

NOTES

- 2 Smith Cast Iron Boilers
(appear to have been installed 8/97)
- Power Flame Inc oil burners
- Honeywell burner control w/ LCD readout (circuit boards)

ACM

- ① G₁ = Tan Gasket on Honeywell Fluid Power Gas Valve (2 ea)
- ① G₂ = Cork-like Gasket on Allanson Ignition Transformer (2 ea)
- ① G₃ = Tan Valve Gaskets (15 ea)
- ① G₄ = White Inspection Port Gasket

Haz

- 2 Honeywell controls w/circuit boards
- 2 oil filters

BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #: 0050839
 Project #: 237612.5404.0910
 Date Received: 06/23/2017
 Date Analyzed: 06/23/2017

Site: Pond Lily Boilers, New Haven, CT

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

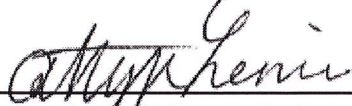

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
01	Tan (gasket)	Yes	No	--	---	ND	None
02	Tan (gasket)	Yes	No	--	---	ND	None
03	Brown (gasket)	Yes	No	--	---	ND	None
04	Brown (gasket)	Yes	No	--	---	ND	None
05	Tan (gasket)	Yes	No	--	---	ND	None
06	Tan (gasket)	Yes	No	--	---	ND	None
07	White (gasket)	Yes	No	--	80% mineral wool	ND	None
08	White (gasket)	Yes	No	--	80% mineral wool	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, 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:  Reviewed by:  Date Issued: 06/23/2017
 Cathryn Lemire, Laboratory Analyst Kathleen Williamson, Laboratory Manager

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



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

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 50839

PROJECT NUMBER		PROJECT NAME		PARAMETERS		TURNAROUND TIME											
						PLM:		8hr		24hr	X	48hr		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		
			COMP	GRAB													
237612.5404.0910	CT DOT Pond Lily Boilers New Haven, CT								PLM:		8hr		24hr	X	48hr		3day
		J. Gentile/D. Webster															
01	6/22/17	1034		X	Boiler 2	X				Tan Gasket on Honeywell Fluid Power Gas Valve (G1)							
02	6/22/17	1035		X	Boiler 1	X			X	Tan Gasket on Honeywell Fluid Power Gas Valve (G1)							
03	6/22/17	1042		X	Boiler 1	X				Cork-Like Gasket on Allanson Ignition Transformer (G2)							
04	6/22/17	1043		X	Boiler 2	X			X	Cork-Like Gasket on Allanson Ignition Transformer (G2)							
05	6/22/17	1046		X	Boiler 2	X				Tan Valve Gasket (G3)							
06	6/22/17	1048		X	Boiler 1	X			X	Tan Valve Gasket (G3)							
07	6/22/17	1055		X	Boiler 1	X				White Inspection Port Gasket (G4)							
08	6/22/17	1058		X	Boiler 1	X				White Inspection Port Gasket (G4)							

Relinquished by: (Signature) 	Date: 6/22/17	Received by: (Signature) 	Date: 6/22/17	Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) Jonathan Gentile	Time:	(Printed) 1600	Time:	(Printed)	Time:	(Printed)
Remarks:				Condition of Samples: Acceptable: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Page 1 of 1

Proscience Analytical Services, Inc.

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

TEM Bulk Chain of Custody Record

Date: 06/23/17

PO#: C237612

Analysis Type: Chatfield **EPA N.O.B** Qualitative

Client: TRC

Client Job#: 237612.5404.0910

Client Job Ref./Loc.: CT DOT- Pond Lily Boilers, New Haven, CT

Relinquished by: C. Lemire- CLemire@trcsolutions.com

Received by:

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

Samplers Name: J. Gentile/ D. Webster

Turn Around Time: <12 Hour <24 Hour **<48 Hour** <3 Day 5 Day Other:

				For Lab Use Only		
Client ID #	Lab ID#	Description	Location	Acceptable on Receipt	Comments	
02	50839	Gasket	See COC			
04	50839	Gasket				
06	50839	Gasket				
For Lab Use Only	# Spies	Total	Client #	Batch #	Results Reported	Comments



ProScience Analytical Services, Inc

Erik Plimpton
TRC Environmental Corp. (CT)
21 Griffin Road North
Windsor, CT 06095

June 28, 2017

Dear Erik Plimpton,

Results of samples you described and submitted to ProScience Analytical Services, Inc. are shown on the enclosed data sheets. The analytical results in this report apply to the items tested only.

The listed samples were prepared and analyzed in compliance with the New York State Transmission Electron Microscope Method for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples. This method is used for the determination of weight percent of asbestos in non-friable materials.

The sample is processed to remove non-asbestos interference. The remaining residue is examined using a Philips 300 transmission electron microscope equipped with selected area electron diffraction (SAED) and an Evex energy dispersive x-ray analyzer.

The following are reported: identification numbers, type of material, color or the sample, initial weight of the sample, weight percent of organic material lost by ashing, weight percent of carbonates lost by acid dissolution, weight percent of non-fibrous/non asbestos inorganic material, total weight percent of asbestos in the original sample, and the type(s) of asbestos, if any.

The EPA recognizes asbestos as the following: actinolite, amosite, anthophyllite, chrysotile, crocidolite, and tremolite. To be considered asbestos containing, a material must be determined to contain greater than one percent asbestos. Samples are retained for a period of 2 months.

The quality control data related to the samples analyzed are available for review upon the written request of the client. ProScience Analytical Services, Inc. and its personnel assume no responsibility for potential sample contamination, misuse, misinformation, or misrepresentation by the client. The enclosed results may not be used under any circumstances as product endorsement by any US government agency including NIST/NVLAP. This report may not be reproduced, except in its entirety, without permission of the ProScience Analytical Services, Inc. Laboratory Director.

Please contact me if you have any questions regarding this report or related information.

Sincerely,

Mark Derosier, Senior Analyst
Aimee Cormier, Laboratory Manager

Enclosure:

BATCH NUMBER : NT 16500 CLIENT PROJECT ID: 237612.5404.0910
Client Ref: CT DOT - Pond Lily Boilers. New Haven, CT
NVLAP Lab Code 200090-0; CT ID# PH-0209; MA ID# AA000156; ME ID# LB-055; ME ID# LA-056;
AIHA ID# 102754; VT ID# AL016876; PH ID# 218(TEM,PLM); RI ID# 186.

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 #: 237612.5404.0910
Client Reference: CT DOT - Pond Lily Boilers, New Haven, CT
PO #: C237612
Client #: 297
Client Name: TRC Environmental Corp. (CT)

Batch: **NT 16500**
Method: NOB
Date Received: 6/26/2017
Date Analyzed: 6/28/2017
Date of Report: 6/28/2017

LAB ID	Field ID	Description:	Color	Initial Weight	% Asbestos Types						% Other Non-asb.	% Organic	% Carb.	Total % Asbestos	Analyzed / Charged	Preped / Charged
					CHR	AMO	ACT	CRO	ANT	TRE						
NT124334	02	Tan Gasket		.0169	.00	.00	.00	.00	.00	.00	22.49	76.92	.59	ND	Yes	No
NT124335	04	Cork-Like Gasket		.0437	.00	.00	.00	.00	.00	.00	11.22	85.35	3.43	ND	Yes	No
NT124336	06	Tan Valve Gasket		.0301	.00	.00	.00	.00	.00	.00	18.94	79.73	1.33	ND	Yes	No

Comments:

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


Mark Derosier, Analyst

NT/6500

Proscience Analytical Services, Inc.

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

TEM Bulk Chain of Custody Record

Date: 06/23/17

PO#: C237612

Analysis Type: Chatfield EPA N.O.B Qualitative

Client: TRC

Client Job#: 237612.5404.0910

Client Job Ref./Loc.: CT DOT- Pond Lily Boilers, New Haven, CT

Relinquished by: C. Lemire- CLemire@trcsolutions.com

Received by: *Proscience with Co 6/26/17 8:30*

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

Samplers Name: J. Gentile/ D. Webster

Turn Around Time: <12 Hour <24 Hour <48 Hour <3 Day 5 Day Other:

				For Lab Use Only		
Client ID #	Lab ID#	Description	Location	Acceptable on Receipt	Comments	
02	50839	Gasket	See COC			
04	50839	Gasket				
06	50839	Gasket				
For Lab Use Only	# Spies	Total	Client #	Batch #	Results Reported	Comments



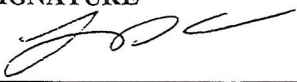
21 GRIFFIN ROAD NORTH
 WINDSOR, CONNECTICUT 06095
 TELEPHONE (860) 298-9692
 FAX (860) 298-6380

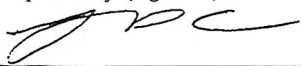

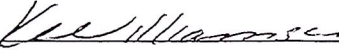
ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

NT 16500

Edition: October 2009
 Supersede Previous Edition

LAB ID #. 50839

PROJECT NUMBER 237612.5404.0910		PROJECT NAME CT DOT Pond Lily Boilers New Haven, CT		PARAMETERS				TURNAROUND TIME								
								PLM:	8hr	24hr	X	48hr	3day			
SIGNATURE 		INSPECTOR J. Gentile/D. Webster		PLM EPA 600/R93/I16 (POSITIVE STOP)	PLM EPA 600/R93/I16 (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 COMP GRAB						SAMPLE LOCATION							
01	6/22/17	1034		X	Boiler 2	X					Tan Gasket on Honeywell Fluid Power Gas Valve (G1)					
02	6/22/17	1035		X	Boiler 1	X			X		Tan Gasket on Honeywell Fluid Power Gas Valve (G1)					
03	6/22/17	1042		X	Boiler 1	X					Cork-Like Gasket on Allanson Ignition Transformer (G2)					
04	6/22/17	1043		X	Boiler 2	X			X		Cork-Like Gasket on Allanson Ignition Transformer (G2)					
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06	6/22/17	1048		X	Boiler 1	X			X		Tan Valve Gasket (G3)					
07	6/22/17	1055		X	Boiler 1	X					White Inspection Port Gasket (G4)					
08	6/22/17	1058		X	Boiler 1	X					White Inspection Port Gasket (G4)					

Relinquished by: (Signature) 	Date: 6/22/17	Received by: (Signature) <i>6/22/17</i> 	Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) Jonathan Gentile	Time:	(Printed) <i>1600</i> 	(Printed)	Time:	(Printed)
Remarks:			Condition of Samples: _____ Acceptable: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Page 1 of 1