

Hazardous Materials Inspection & Assessment
Asbestos, Mold, Lead Paint, Radon, PCBs
Air Quality Testing and Investigations
Industrial Hygiene, Safety & Training

January 30, 2019

Mathew Bouranis SAU 85, Sunapee School District Facilities Director 70 Lower Main Street Sunapee, NH 03782

Re: Lead in Water Testing

Pittsfield School District RPF Project No. 188980

Dear Mr. Bouranis,

On December 27, 2018, RPF Environmental, Inc. (RPF) conducted sampling of water fountains and sinks located in the Sunapee Middle High School (SMHS), the Sunapee Elementary School (SES), and the Sherburne Gymnasium (SG) for lead in water. A total of thirty-three (33) samples were collected by RPF EH&S Consultant, Dawson Gay. The results of this survey are presented in the following report and appendices. This report is subject to the Limitations presented in Appendix D.

TEST RESULTS

One first draw sample was collected at each of the eighteen (18) water fountains and sinks located at SMHS, seven (7) water fountains and sinks located throughout SES, and three (3) water fountains and sinks at the SG. In addition, a five-minute flush was conducted at the each of the mains for SMHS, SES and SG. After collection, each water sample was labeled and packaged in a cooler and delivered to Eastern Analytical, Inc. of Concord, NH. The samples were analyzed for Lead EPA method 200.8.

The concentrations of the Lead compounds detected are provided in Table 1 of Appendix A, along with the Maximum Contaminant Levels (MCLs) established by New Hampshire Statute Env-Dw 700, as applicable of 0.015 milligrams per liter of water. The full laboratory analytical results are included in Appendix B. The EPA has a guideline for safe drinking water of 0.020 milligrams per liter of water (mg/L). The following outlets were above either the NH or EPA limits, and further action is recommended:

Water outlets with lead concentration exceeding EPA or NH Drinking Water Guidelines

SMHS: Home Economics Sink Station #3

O.031 mg/L

SES: Water Fountain 2nd Floor outside Room 1301

0.036 mg/L

Corrective actions at this point would be to tag them out of service. Notify occupants, parents and staff. Sinks with aerators should be cleaned to remove any trapped lead solder. The above units should be reviewed for age and construction for possible lead content in the system. The units should be then retested with a one-liter sample drawn. Appendix E of the EPA Tool Kit for Lead in Water is included at Appendix C, and has a listing of known water devices which contained lead by model number for your review.

The remaining water fountains and sinks were below the maximum contaminant action level for lead with varying levels of lead present with a few approaching the NH DES limit.

If you have any questions or require additional information on any sample results, please feel free to contact our office. Thank you for utilizing the services of RPF for this important project.

Sincerely,

RPF Environmental, Inc.

Kara Forsythe, SMS Sr. EH&S Consultant

Can & Freight

Enclosures: Appendix A: Testing Results

Appendix B: Laboratory Results

Appendix C: EPA Tool Kit for Lead in Water – Appendix E

Appendix D: Limitations

188980 SAU 85 Lead in Water Testing 122718 Report





TABLE 1-A

Hazardous Materials Inspection & Assessment Asbestos, Mold, Lead Paint, Radon, PCBs Air Quality Testing and Investigations Industrial Hygiene, Safety & Training

SAU 85; SUNAPEE SCHOOL DISTRICT Middle/High School

LEAD IN WATER ANALYSIS RESULTS

Samples Collected: December 27, 2018

Sample ID	Sample Description	Sample Time (minutes)	Lead (mg/L)
122718 DW1	Middle/High School, Sink, near Keystone poster in kitchen, right faucet	7:24am	0.0031
122718 DW2	Middle/High School, Sink, near Keystone poster in kitchen, left faucet	7:24am	0.0044
122718 DW3	Middle/High School, Sink in kitchen near temperature poster	7:25am	0.0099
122718 DW4	Middle/High School, Water fountain, near kitchen vending machine	7:29am	0.0017
122718 DW5	Middle/High School, Water fountain, common area/lobby	7:31am	< 0.001
122718 DW6	Middle/High School, Water fountain, bathroom opposite of gym, left faucet	7:37am	< 0.001
122718 DW7	Middle/High School, Water fountain, bathroom opposite of gym, right faucet	7:38am	< 0.001
122718 DW8	Middle/High School, Water fountain by door leading to athletic fields, right faucet	7:48am	< 0.001
122718 DW9	Middle/High School, Water fountain by door leading to athletic fields, left faucet	7:49am	< 0.001
122718 DW10	Middle/High School, Water fountain in gym, right faucet	7:53am	<0.001
122718 DW11	Middle/High School, Water fountain in gym, left faucet	7:54am	<0.001
122718 DW12	Middle/High School, Water fountain outside of music room	7:59am	0.0014
122718 DW13	Middle/High School, Water fountain outside of custodians' closet, left faucet	8:03am	<0.001
122718 DW14	Middle/High School, Water fountain outside of custodians' closet, right faucet	8:03am	< 0.001
122718 DW15	Middle/High School, Sink in home economics, closest to fire blanket	8:07am	0.0088

Notes: MCL: Maximum Contaminant Level is the highest level of a contaminant that is allowed in drinking water in

accordance with NH Administrative Statute Env-Dw 700 Water Quality: Standards, Monitoring, Treatment,

Compliance and Reporting

AL: The concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water

system must follow



TABLE 1-A

Hazardous Materials Inspection & Assessment Asbestos, Mold, Lead Paint, Radon, PCBs Air Quality Testing and Investigations Industrial Hygiene, Safety & Training

SAU 85; SUNAPEE SCHOOL DISTRICT Middle/High School

LEAD IN WATER ANALYSIS RESULTS

Samples Collected: December 27, 2018

122718 DW16	Middle/High School, Sink in home economics, kitchen station 3	8:09am	0.031					
122718 DW17	Middle/High School, Sink in home economics, kitchen station 2	8:11am	0.0083					
122718 DW18	Middle/High School, Sink in home economics, kitchen station 1	8:12am	0.0024					
122718 DW19	Middle/High School, Sink in kitchen closest to food service licenses	8:21am (5 min flush)	<0.001					
NH Statute Env-I	NH Statute Env-DW 700 Maximum Contaminant Level							

188980

Notes: MCL: Maximum Contaminant Level is the highest level of a contaminant that is allowed in drinking water in

accordance with NH Administrative Statute Env-Dw 700 Water Quality: Standards, Monitoring, Treatment,

Compliance and Reporting

AL: The concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water

system must follow



TABLE 1-B

Hazardous Materials Inspection & Assessment Asbestos, Mold, Lead Paint, Radon, PCBs Air Quality Testing and Investigations Industrial Hygiene, Safety & Training

SAU 85; SUNAPEE SCHOOL DISTRICT Elementary School

LEAD IN WATER ANALYSIS RESULTS

Samples Collected: December 27, 2018

Sample ID	Sample Description	Sample Time (minutes)	Lead (mg/L)
122718 DW21	Elementary School, Water fountain, outside of room 1203	8:30am	0.0025
122718 DW22	Elementary School, Sink, teachers' room	8:33am	< 0.001
122718 DW23	Elementary School, Water fountain, 2 nd floor, outside room 1301	8:36am	0.036
122718 DW24	Elementary School, Sink, in kitchen closest to cafeteria windows	8:41am	0.011
122718 DW25	Elementary School, Sink, middle station in kitchen	8:43am	0.0033
122718 DW26	Elementary School, Sink, kitchen hand washing station	8:45am	0.0083
122718 DW27	Elementary School, Water fountain, ground floor, outside of pre-school	8:47am	< 0.001
122718 DW28	Elementary School, Sink, ground floor, room 1103	8:55am	<0.001
NH Statute Env-l	DW 700 Maximum Contaminant Level	(5 min flush)	0.015 mg/L (AL)

188980

Notes: MCL: Maximum Contaminant Level is the highest level of a contaminant that is allowed in drinking water in

accordance with NH Administrative Statute Env-Dw 700 Water Quality: Standards, Monitoring, Treatment,

Compliance and Reporting

AL: The concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water

system must follow



TABLE 1-C

Hazardous Materials Inspection & Assessment Asbestos, Mold, Lead Paint, Radon, PCBs Air Quality Testing and Investigations Industrial Hygiene, Safety & Training

SAU 85; SUNAPEE SCHOOL DISTRICT Sherburne Gymnasium

LEAD IN WATER ANALYSIS RESULTS

Samples Collected: December 27, 2018

Sample ID	Sample Description	Sample Time (minutes)	Lead (mg/L)
122718 DW29	Sherburne Gymnasium, Water fountain by coach's office	9:01am	< 0.001
122718 DW30	Sherburne Gymnasium, Water fountain in lobby	9:03am	< 0.001
122718 DW31	Sherburne Gymnasium, Sink, coach's office	9:06am	0.0022
122718 DW32	Sherburne Gymnasium, Sink, coach's office	9:14am (5 min flush)	<0.001
NH Statute Env-D	0.015 mg/L (AL)		

188980

Notes: MCL: Maximum Contaminant Level is the highest level of a contaminant that is allowed in drinking water in

accordance with NH Administrative Statute Env-Dw 700 Water Quality: Standards, Monitoring, Treatment,

Compliance and Reporting

AL: The concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water

system must follow





Kara Forsythe RPF Environmental, Inc. 320 First NH Turnpike Northwood, NH 03261



Subject: Laboratory Report

Eastern Analytical, Inc. ID: 190633

Client Identification: Middle / High School | 188980 SAU 85

Date Received: 12/27/2018

Dear Ms. Forsythe:

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.easternanalytical.com for a copy of our NELAP certificate and accredited parameters.

The following standard abbreviations and conventions apply to all EAI reports:

Solid samples are reported on a dry weight basis, unless otherwise noted

< : "less than" followed by the reporting limit</p>

> : "greater than" followed by the reporting limit

%R: % Recovery

Eastern Analytical Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012) and New York (12072).

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample (s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director

1.4.9

Date

of pages (excluding cover letter)

SAMPLE CONDITIONS PAGE



Client: RPF Environmental, Inc.

Client Designation: Middle / High School | 188980 SAU 85

Received on ice or cold packs (Yes/No): Y

EAI ID#: 190633

Acceptable temperature range (°C): 0-6

Temperature upon receipt (°C): 3.5

		Date	Date	Sample % Dry	
Lab ID	Sample ID	Received		Matrix Weight	Exceptions/Comments (other than thermal preservation)
190633.01	122718 DW1	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.02	122718 DW2	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.03	122718 DW3	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.04	122718 DW4	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.05	122718 DW5	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.06	122718 DW6	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.07	122718 DW7	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.08	122718 DW8	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.09	122718 DW9	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.1	122718 DW10	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.11	122718 DW11	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.12	122718 DW12	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.13	122718 DW13	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.14	122718 DW14	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.15	122718 DW15	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.16	122718 DW16	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.17	122718 DW17	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.18	122718 DW18	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy
190633.19	122718 DW19	12/27/18	12/27/18	aqueous	Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitability, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.

Immediate analyses, pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite, performed at the laboratory were run outside of the recommended 15 minute hold time.

All results contained in this report relate only to the above listed samples.

References include:

- 1) EPA 600/4-79-020, 1983
- 2) Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd Edition or noted Revision year.
- 3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- 4) Hach Water Analysis Handbook, 4th edition, 1992

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LABORATORY REPORT

EAI ID#: 190633

Client: RPF Environmental, Inc.

Client Designation: Middle / High School | 188980 SAU 85

Sample ID:	122718 DW1	122718 DW2	122718 DW3	122718 DW4					
Lab Sample ID:	190633.01	190633.02	190633.03	190633.04					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	12/27/18	12/27/18	12/27/18	12/27/18	Analytical		Date of		
Date Received:	12/27/18	12/27/18	12/27/18	12/27/18	Matrix	Units	Analysis	Method	Analyst
Lead	0.0031	0.0044	0.0099	0.0017	AqTot	mg/L	1/2/19	200.8	DS

Sample ID:	122718 DW5	122718 DW6	122718 DW7	122718 DW8					
•									
Lab Sample ID:	190633.05	190633.06	190633.07	190633.08					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	12/27/18	12/27/18	12/27/18	12/27/18	Analytical		Date of		
Date Received:	12/27/18	12/27/18	12/27/18	12/27/18	Matrix	Units	Analysis	Method	Analyst
Lead	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	1/2/19	200.8	DS

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LABORATORY REPORT

EAI ID#: 190633

Client: RPF Environmental, Inc.

Client Designation: Middle / High School | 188980 SAU 85

Sample ID:	122718 DW9 12	2718 DW10	122718 DW11	122718 DW12					
Lab Sample ID:	190633.09	190633.1	190633.11	190633.12					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	12/27/18	12/27/18	12/27/18	12/27/18	Analytical		Date of		
Date Received:	12/27/18	12/27/18	12/27/18	12/27/18	Matrix	Units	Analysis	Method	Analyst
Lead	< 0.001	< 0.001	< 0.001	0.0014	AqTot	mg/L	1/2/19	200.8	DS

Sample ID:	122718 DW13	122718 DW14	122718 DW15	122718 DW16					
Lab Sample ID:	190633.13	190633.14	190633.15	190633.16					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	12/27/18	12/27/18	12/27/18	12/27/18	Analytical		Date of		
Date Received:	12/27/18	12/27/18	12/27/18	12/27/18	Matrix	Units	Analysis	Method	Analyst
Lead	< 0.001	< 0.001	0.0088	0.031	AqTot	mg/L	1/2/19	200.8	DS



Lead

LABORATORY REPORT

EAI ID#: 190633

Client: RPF Environmental, Inc.

Client Designation: Middle / High School | 188980 SAU 85

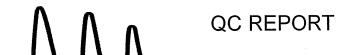
Sample ID: 122718 DW17 122718 DW18 122718 DW19

Lab Sample ID: 190633.19 190633.17 190633.18 Matrix: aqueous aqueous aqueous

0.0083

Date Sampled: 12/27/18 Analytical Date of 12/27/18 12/27/18

Matrix **Analysis** Method Analyst Units Date Received: 12/27/18 12/27/18 12/27/18 1/2/19 0.0024 < 0.001 AqTot mg/L 200.8 DS



EAI ID#: 190633

Client: RPF Environmental, Inc.

Client Designation: Middle / High School | 188980 SAU 85

			Date of						
Parameter Name	Blank	LCS	LCSD	Units 4	Analysis	Limits	RPD	Method	
Lead	< 0.001	0.20 (99 %R)	N	A mg/L	1/2/19	85 - 115	5 20	200.8	
Lead	1 0.001	0.20 (00 7011)		,g. =					

Samples were analyzed within holding times unless noted on the sample results page. Instrumentation was calibrated in accordance with the method requirements. The method blanks were free of contamination at the reporting limits. The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria. Exceptions to the above statements are flagged or noted above or on the QC Narrative page. */! Flagged analyte recoveries deviated from the QA/QC limits.

Kara Forsythe RPF Environmental, Inc. 320 First NH Turnpike Northwood, NH 03261



Subject: Laboratory Report

Eastern Analytical, Inc. ID: 190634

Client Identification: Sunapee Elementary | 188980 SAU 85

Date Received: 12/27/2018

Dear Ms. Forsythe:

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.easternanalytical.com for a copy of our NELAP certificate and accredited parameters.

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< : "less than" followed by the reporting limit

> : "greater than" followed by the reporting limit

%R: % Recovery

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The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample (s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director

Lorraine Olashaw, Lab Director

Date

of pages (excluding cover letter)

SAMPLE CONDITIONS PAGE



Client: RPF Environmental, Inc.

Client Designation: Sunapee Elementary | 188980 SAU 85

Received on ice or cold packs (Yes/No): Y

EAI ID#: 190634

Acceptable temperature range (°C): 0-6

Temperature upon receipt (°C): 3.5

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
190634.01	122718 DW21	12/27/18	12/27/18	aqueous		Adheres to Sample Acceptance Policy
190634.02	122718 DW22	12/27/18	12/27/18	aqueous		Adheres to Sample Acceptance Policy
190634.03	122718 DW23	12/27/18	12/27/18	aqueous		Adheres to Sample Acceptance Policy
190634.04	122718 DW24	12/27/18	12/27/18	aqueous		Adheres to Sample Acceptance Policy
190634.05	122718 DW25	12/27/18	12/27/18	aqueous		Adheres to Sample Acceptance Policy
190634.06	122718 DW26	12/27/18	12/27/18	aqueous		Adheres to Sample Acceptance Policy
190634.07	122718 DW27	12/27/18	12/27/18	aqueous		Adheres to Sample Acceptance Policy
190634.08	122718 DW28	12/27/18	12/27/18	aqueous		Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitability, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.

Immediate analyses, pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite, performed at the laboratory were run outside of the recommended 15 minute hold time.

All results contained in this report relate only to the above listed samples.

References include:

- 1) EPA 600/4-79-020, 1983
- 2) Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd Edition or noted Revision year.
- 3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- 4) Hach Water Analysis Handbook, 4th edition, 1992

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LABORATORY REPORT

EAI ID#: 190634

Client: RPF Environmental, Inc.

Client Designation: Sunapee Elementary | 188980 SAU 85

Sample ID:	122718 DW21 122718 DW22		122718 DW23	122718 DW24					
Lab Sample ID:	190634.01	190634.02	190634.03	190634.04					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	12/27/18	12/27/18	12/27/18	12/27/18	Analytical		Date of		
Date Received:	12/27/18	12/27/18	12/27/18	12/27/18	Matrix	Units	Analysis	Method	Analyst
Lead	0.0025	< 0.001	0.036	0.011	AqTot	mg/L	1/2/19	200.8	DS

Sample ID:	122718 DW25	122718 DW26	122718 DW27	122718 DW28					
Lab Sample ID:	190634.05	190634.06	190634.07	190634.08					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	12/27/18	12/27/18	12/27/18	12/27/18	Analytical		Date of		
Date Received:	12/27/18	12/27/18	12/27/18	12/27/18	Matrix	Units	Analysis	Method	Analyst
Lead	0.0033	0.0083	< 0.001	< 0.001	AqTot	mg/L	1/2/19	200.8	DS



EAI ID#: 190634

Client: RPF Environmental, Inc.

Client Designation: Sunapee Elementary | 188980 SAU 85

			Date of						
Parameter Name	Blank	LCS	LCSD	Units Analysis	Limits RPD	Method			
Lead	< 0.001	0.19 (96 %R)	N	IA mg/L 1/2/19	85 - 115 20	200.8			

 $Samples \ were \ analyzed \ within \ holding \ times \ unless \ noted \ on \ the \ sample \ results \ page.$

Instrumentation was calibrated in accordance with the method requirements.

The method blanks were free of contamination at the reporting limits.

The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.

Exceptions to the above statements are flagged or noted above or on the QC Narrative page.

^{*/!} Flagged analyte recoveries deviated from the QA/QC limits.



professional laboratory and drilling services

Kara Forsythe RPF Environmental, Inc. 320 First NH Turnpike Northwood, NH 03261



Subject: Laboratory Report

Eastern Analytical, Inc. ID: 190635

Client Identification: Sherburne Gymnasium | 188980 SAU 85

Date Received: 12/27/2018

Dear Ms. Forsythe:

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.easternanalytical.com for a copy of our NELAP certificate and accredited parameters.

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The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample (s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Courrie Cashan	(.4.19	4
Lorraine Olashaw, Lab Director	Date	# of pages (excluding cover letter)

SAMPLE CONDITIONS PAGE



EAI ID#: 190635

Client: RPF Environmental, Inc.

Client Designation: Sherburne Gymnasium | 188980 SAU 85

Temperature upon receipt (°C): 3.5

Received on ice or cold packs (Yes/No): Y

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Date Received Sampled	Sample % Dry I Matrix Weight	Exceptions/Comments (other than thermal preservation)
190635.01	122718 DW29	12/27/18 12/27/18	aqueous	Adheres to Sample Acceptance Policy
190635.02	122718 DW30	12/27/18 12/27/18	aqueous	Adheres to Sample Acceptance Policy
190635.03	122718 DW31	12/27/18 12/27/18	aqueous	Adheres to Sample Acceptance Policy
190635.04	122718 DW32	12/27/18 12/27/18	aqueous	Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitability, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.

Immediate analyses, pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite, performed at the laboratory were run outside of the recommended 15 minute hold time.

All results contained in this report relate only to the above listed samples.

References include:

- 1) EPA 600/4-79-020, 1983
- 2) Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd Edition or noted Revision year.
- 3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- 4) Hach Water Analysis Handbook, 4th edition, 1992

Lead

LABORATORY REPORT

EAI ID#: 190635

1/2/19

200.8 DS

Client: RPF Environmental, Inc.

Client Designation: Sherburne Gymnasium | 188980 SAU 85

< 0.001

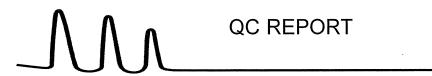
< 0.001

Sample ID:	122718 DW29 1	22718 DW30	122718 DW31	122718 DW32				
	¥.							
Lab Sample ID:	190635.01	190635.02	190635.03	190635.04				
Matrix:	aqueous	aqueous	aqueous	aqueous				
Date Sampled:	12/27/18	12/27/18	12/27/18	12/27/18	Analytical		Date of	
Date Received:	12/27/18	12/27/18	12/27/18	12/27/18	Matrix	Units	Analysis	Method Analyst

< 0.001

AqTot mg/L

0.0022



EAI ID#: 190635

Client: RPF Environmental, Inc.

Client Designation: Sherburne Gymnasium | 188980 SAU 85

		Date of						
Parameter Name	Blank	LCS	LCSD		Units Analysis	Limits	RPD	Method
Lead	< 0.001	0.19 (97 %R)	1	NA	mg/L 1/2/19	85 - 115	20	200.8

Samples were analyzed within holding times unless noted on the sample results page.

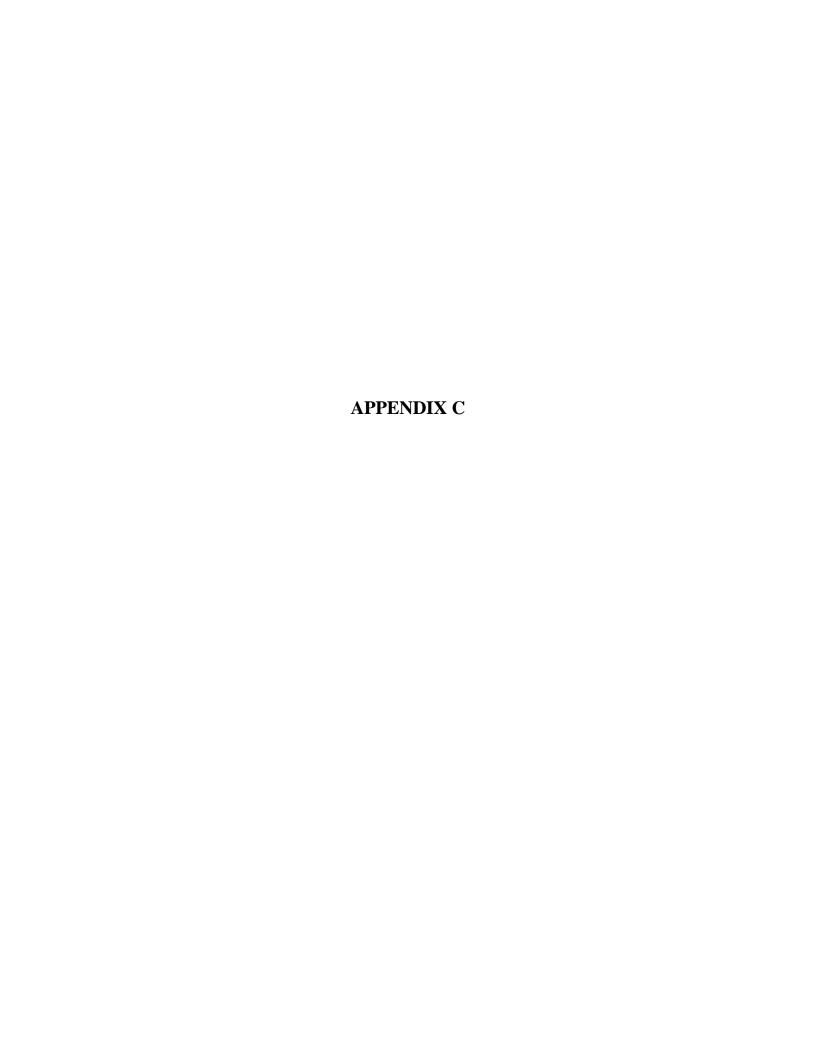
Instrumentation was calibrated in accordance with the method requirements.

The method blanks were free of contamination at the reporting limits.

The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.

Exceptions to the above statements are flagged or noted above or on the QC Narrative page.

^{*/!} Flagged analyte recoveries deviated from the QA/QC limits.



Appendix E – Water Cooler Summary

The Lead Contamination Control Act (LCCA), which amended the Safe Drinking Water Act, was signed into law on October 31, 1988 (P.L. 100-572). The potential of water coolers to supply lead to drinking water in schools and child care centers was a principal focus of this legislation. Specifically, the LCCA mandated that the Consumer Product Safety Commission (CPSC) order the repair, replacement, or recall and refund of drinking water coolers with lead-lined water tanks. In addition, the LCCA called for a ban on the manufacture or sale in interstate commerce of drinking water coolers that are not lead-free. Civil and criminal penalties were established under the law for violations of this ban. With respect to a water cooler that may come in contact with drinking water, the LCCA defined the term "lead-free" to mean:

"not more than 8 percent lead, except that no drinking water cooler which contains any solder, flux, or storage tank interior surface which may come in contact with drinking water shall be considered lead-free if the solder, flux, or storage tank interior surface contains more than 0.2 percent lead."

Another component of the LCCA was the requirement that EPA publish and make available to the states a list of drinking water coolers, by brand and model, that are not lead-free. In addition, EPA was to publish and make available to the states a separate list of the brand and model of water coolers with a lead-lined tank. EPA is required to revise and republish these lists as new information or analyses become available.

Based on responses to a Congressional survey in the winter of 1988, three major manufacturers, the Halsey Taylor Company, EBCO Manufacturing Corporation, and Sunroc Corporation, indicated that lead solder had been used in at least some models of their drinking water coolers. On April 10, 1988, EPA proposed in the *Federal Register* (at 54 *FR* 14320) lists of drinking water coolers with lead-lined tanks and coolers that are not lead-free. Public comments were received on the notice, and the list was revised and published on January 18, 1990 (Part III, 55 *FR* 1772). *See Table E-2 for a list of water coolers and lead components.*

Prior to publication of the January 1990 list, EPA determined that Halsey Taylor was the only manufacturer of water coolers with lead-lined tanks.¹ Table E-1 presents a listing of model numbers of the Halsey Taylor drinking water coolers with lead-lined tanks that had been identified by EPA as of January 18, 1990.

¹Based upon an analysis of 22 water coolers at a US Navy facility and subsequent data obtained by EPA, EPA believes the most serious cooler contamination problems are associated with water coolers that have lead-lined tanks.

Since the LCCA required the CPSC to order manufacturers of coolers with lead-lined tanks to repair, replace or recall and provide a refund of such coolers, the CPSC negotiated such an agreement with Halsey Taylor through a consent order published on June 1, 1990 (at 55 FR 22387). The consent agreement calls on Halsey Taylor to provide a replacement or refund program that addresses all the water coolers listed in Table E-2 as well as "all tank-type models of drinking water coolers manufactured by Halsey Taylor, whether or not those models are included on the present or on a future EPA list." Under the consent order, Halsey Taylor agreed to notify the public of the replacement and refund program for all tank type models.

SPECIAL NOTE:

Experience indicates that newly installed brass plumbing components containing 8 percent or less lead, as allowed by the SDWA, can contribute high lead levels to drinking water for a considerable period after installation. U.S. water cooler manufacturers have notified EPA that since September 1993, the components of water coolers that come in contact with drinking water have been made with non-lead alloy materials. These materials include stainless steel for fittings and water control devices, brass made of 60 percent copper and 40 percent zinc, terillium copper, and food grade plastic.

Currently, a company formerly associated with Halsey Taylor, Scotsman Ice Systems, has assumed responsibility for replacement of lead-line coolers previously marketed by Halsey Taylor. See below for the address of Scotsman Ice Systems.

Scotsman Ice Systems
775 Corporate Woods Parkway
Vernon Hills, IL 60061
PH: (800) SCOTSMAN or 800-726-8762
PH: (847) 215-4500

<u>Table E-1</u> <u>Halsey Taylor Water Coolers With Lead-Lined Tanks</u>²

The following six model numbers have one or more units in the model series with leadlined tanks:

<u>WM8A</u> <u>WT8A</u> <u>GC10ACR</u> <u>GC10A</u> <u>GC5A</u> <u>RWM13A</u>

The following models and serial numbers contain lead-lined tanks:

WM14A Serial No. WM14A Serial No. WT11A Serial No. 222650

843034 843006

WT21A Serial No. WT21A Serial No. LL14A Serial No. 64346908

<u>64309550</u> <u>64309542</u>

²Based upon an analysis of 22 water coolers at a US Navy facility and subsequent data obtained by EPA, EPA believes the most serious cooler contamination problems are associated with water coolers that have lead-lined tanks.

<u>Table E-2</u> <u>Water Coolers With Other Lead Components</u>

EBCO Manufacturing

All pressure bubbler water coolers with shipping dates from 1962 through 1977 have a bubbler valve containing lead. The units contain a single, 50-50 tin-lead solder joint on the bubbler valve. Model numbers for coolers in this category are not available.

The following models of pressure bubbler coolers produced from 1978 through 1981 contain one 50-50 tin-lead solder joint each.

CP3	DP15W	DPM8	<u>7P</u>	<u>13P</u>	DPM8H	DP15M	DP3R	DP8A
DP16M	DP5S	<u>C10E</u>	<u>PX-10</u>	DP7S	DP13SM	DP7M	DP7MH	DP7WMD
<u>WTC10</u>	DP13M-60	DP14M	CP10-50	CP5	CP5M	DP15MW	DP3R	<u>DP14S</u>
DP20-50	DP7SM	DP10X	DP13A	DP13A-50	EP10F	DP5M	DP10F	CP3H
<u>CP3-50</u>	DP13M	DP3RH	DP5F	<u>CP3M</u>	EP5F	<u>13PL</u>	DP8AH	<u>DP13S</u>
<u>CP10</u>	DP20	DP12N	DP7WM	DP14A-50/60				

Halsey Taylor

1. Lead solder was used in these models of water coolers manufactured between 1978 and the last week of 1987:

WMA-1	SCWT/SCWT-A	<u>SWA-1</u>	DC/DHC-1
S3/5/10D	BFC-4F/7F/4FS/7FS	S300/500/100D	

2. The following coolers manufactured for Haws Drinking Faucet Company (Haws) by Halsey Taylor from November 1984 through December 18, 1987, are not lead-free because they contain 2 tin-lead solder joints. The model designations for these units are as follows:

HC8WT	HC14F	HC6W	HWC7D	HC8WTH	<u>HC14F</u> <u>H</u>	HC8W	HC2F	HC14WT
HC14FL	HC14W	HC2FH	HC14WTH	HC8FL	HC4F	HC5F	HC14WL	HCBF7D
<u>HC4FH</u>	<u>HC10F</u>	HC16WT	HCBF7HO	HC8F	HC8FH	HC4W	HWC7	

If you have one of the Halsey Taylor water coolers noted in Table E-2, contact Scotsman Ice Systems (address and phone noted above) to learn more about the requirements surrounding their replacement and rebate program.



LIMITATIONS

- 1. The observations and conclusions presented in the Report were based solely upon the services described herein, and not on scientific tasks or procedures beyond the RPF Environmental, Inc. Scope of Work (SOW) as discussed in the proposal and/or agreement. The conclusions and recommendations are based on visual observations and testing, limited as indicated in the Report, and were arrived at in accordance with generally accepted standards of industrial hygiene practice and asbestos professionals. The nature of this survey or monitoring service was limited as indicated herein and in the report or letter of findings. Further testing, survey, and analysis is required to provide more definitive results and findings.
- 2. For site survey work, observations were made of the designated accessible areas of the site as indicated in the Report. While it was the intent of RPF to conduct a survey to the degree indicated, it is important to note that not all suspect ACBM material in the designated areas were specifically assessed and visibility was limited, as indicated, due to the presence of furnishings, equipment, solid walls and solid or suspended ceilings throughout the facility and/or other site conditions. Asbestos or hazardous material may have been used and may be present in areas where detection and assessment is difficult until renovation and/or demolition proceeds. Access and observations relating to electrical and mechanical systems within the building were restricted or not feasible to prevent damage to the systems and minimize safety hazards to the survey team.
- 3. Although assumptions may have been stated regarding the potential presence of inaccessible or concealed asbestos and other hazardous material, full inspection findings for all asbestos and other hazardous material requires the use of full destructive survey methods to identify possible inaccessible suspect material and this level of survey was not included in the SOW for this project. For preliminary survey work, sampling and analysis as applicable was limited and a full survey throughout the site was not performed. Only the specific areas and /or materials indicated in the report were included in the SOW. This inspection did not include a full hazard assessment survey, full testing or bulk material, or testing to determine current dust concentrations of asbestos in and around the building. Inspection results should not be used for compliance with current EPA and State asbestos in renovation/demolition requirements unless specifically stated as intended for this use in the RPF report and considering the limitations as stated therein and within this limitations document.
- 4. Where access to portions of the surveyed area was unavailable or limited, RPF renders no opinion of the condition and assessment of these areas. The survey results only apply to areas specifically accessed by RPF during the survey. Interiors of mechanical equipment and other building or process equipment may also have asbestos and other hazardous material present and were not included in this inspection. For renovation and demolition work, further inspection by qualified personnel will be required during the course of construction activity to identify suspect material not previously documented at the site or in this survey report. Bordering properties were not investigated and comprehensive file review and research was not performed.
- 5. For lead in paint, observations were made of the designated accessible areas of the site as indicated in the Report. Limited testing may have been performed to the extent indicated in the text of the report. In order to conduct thorough hazard assessments for lead exposures, representative surface dust testing, air monitoring and other related testing throughout the building, should be completed. This type of in depth testing and analysis was beyond the scope of services for the initial inspection. For lead surveys with XRF readings, it is recommended that surfaces found to have LBP or trace amount of lead detected with readings of less than 4 mg/cm² be confirmed using laboratory analysis if more definitive results are required. Substrate corrections involving destructive sampling or damage to existing surfaces (to minimize XRF read-through) were not completed. In some instances, destructive testing may be required for more accurate results. In addition, depending on the specific thickness of the paint films on different areas of a building component, differing amounts of wear, and other factors, XRF readings can vary slightly, even on the same building component. Unless otherwise specifically stated in the scope of services and final report, lead testing performed is not intended to comply with other state and federal regulations pertaining to childhood lead poisoning regulations.

- 6. Air testing is to be considered a "snap shot" of conditions present on the day of the survey with the understanding that conditions may differ at other times or dates or operational conditions for the facility. Results are also limited based on the specific analytical methods utilized. For phase contrast microscopy (PCM) total airborne fiber testing, more sensitive asbestos-specific analysis using transmission electron microscopy (TEM) can be performed upon request.
- 7. For asbestos bulk and dust testing, although polarize light microscopy (PLM) is the method currently recognized in State and federal regulations for asbestos identification in bulk samples, some industry studies have found that PLM may not be sensitive enough to detect all of the asbestos fibers in certain nonfriable material, vermiculate type insulation, soils, surface dust, and other materials requiring more sensitive analysis to identify possible asbestos fibers. In the event that more definitive results are requested, RPF recommends that confirmation testing be completed using TEM methods or other analytical methods as may be applicable to the material. Detection of possible asbestos fibers may be made more difficult by the presence of other non-asbestos fibrous components such as cellulose, fiber glass, etc., by binder/matrix materials which may mask or obscure fibrous components, and/or by exposure to conditions capable of altering or transforming asbestos. PLM can show significant bias leading to false negatives and false positives for certain types of materials. PLM is limited by the visibility of the asbestos fibers. In some samples the fibers may be reduced to a diameter so small or masked by coatings to such an extent that they cannot be reliably observed or identified using PLM.
- 8. For hazardous building material inspection or survey work, RPF followed applicable industry standards; however, RPF does not warrant or certify that all asbestos or other hazardous materials in or on the building has been identified and included in this report. Various assumptions and limitations of the methods can result in missed materials or misidentification of materials due to several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to fully inspect, assumptions regarding the determination of homogenous groups of suspect material, assumptions regarding attempts to conduct representative sampling, and potential for varying mixtures and layers of material sampled not being representative of all areas of similar material.
- 9. Full assessments often requires multiple rounds of sampling over a period of time for air, bulk material, surface dust and water. Such comprehensive testing was beyond the scope of RPF services. In addition clearance testing for abatement, as applicable, was based on the visual observations and limited ambient area air testing as indicated in the report and in accordance with applicable state and federal regulations. The potential exists that microscopic surface dust remains with contaminant present even in the event that the clearance testing meets the state and federal requirements. Likewise for building surveys, visual observations are not sufficient alone to detect possible contaminant in settled dust. Unless otherwise specifically indicated in the report, surface dust testing was not included in the scope of the RPF services.
- 10. For abatement or remediation monitoring services: RPF is not responsible for observations and test for specific periods of work that RPF did not perform full shift monitoring of construction, abatement or remediation activity. In the event that problems occurred or concerns arouse regarding contamination, safety or health hazards during periods RPF was not onsite, RPF is not responsible to provide documentation or assurances regarding conditions, safety, air testing results and other compliance issues. RPF may have provided recommendations to the Client, as needed, pertaining to the Client's Contractor compliance with the technical specifications, schedules, and other project related issues as agreed and based on results of RPF monitoring work. However, actual enforcement, or waiving of, contract provisions and requirements as well as regulatory liabilities shall be the responsibility of Client and Client's Contractor(s). Off-site abatement activities, such as waste transportation and disposal, were not monitored or inspected by RPF.
- 11. For services limited to clearance testing following abatement or remediation work by other parties: The testing was limited to clearance testing only and as indicated in the report and a site assessment for possible environmental health and safety hazards was not performed as part of the scope of this testing. Client, or Client's abatement contractor as applicable, was responsible for performing visual inspections

of the work area to determine completeness of work prior to air clearance testing by RPF.

- 12. For site work, including but not limited to air clearance testing services, in which RPF did not provide full site safety and health oversight, abatement design, full shift monitoring of all site activity, RPF expresses no warranties, guarantees or certifications of the abatement work conducted by the Client or other employers at the job site(s), conditions during the work, or regulatory compliance, with the exception of the specific airborne concentrations as indicated by the air clearance test performed by RPF during the conditions present for the clearance testing. Unless otherwise specifically noted in the RPF Report, visual inspections and air clearance testing results apply only to the specific work area and conditions present during the testing. RPF did not perform visual inspections of surfaces not accessible in the work area due to the presence of containment barriers or other obstructions. In these instances, some contamination may be present following RPF clearance testing and such contamination may be exposed during and after removal of the containment barriers or other obstructions following RPF testing services. Client or Client's Contractor is responsible for using appropriate care and inspection to identify potential hazards and to remediate such hazards as necessary to ensure compliance and a safe environment.
- 13. The survey was limited to the material and/or areas as specifically designated in the report and a site assessment for other possible environmental health and safety hazards or subsurface pollution was not performed as part of the scope of this site inspection. Typically, hazardous building materials such as asbestos, lead paint, PCBs, mercury, refrigerants, hydraulic fluids and other hazardous product and materials may be present in buildings. The survey performed by RPF only addresses the specific items as indicated in the Report.
- 14. For mold and moisture survey services, RPF services did not include design or remediation of moisture intrusion. Some level of mold will remain at the site regardless of RPF testing and Contractor or Client cleaning efforts. RPF testing associated with mold remediation and assessments is limited and may or may not be representative of other surfaces and locations at the site. Mold growth will occur if moisture intrusion deficiencies have not been fully remedied and if the site or work areas are not maintained in a sufficiently dry state. Porous surfaces in mold contaminated areas which are not removed and disposed of will likely result in future spore release, allergen sources, or mold contamination.
- 15. Existing reports, drawings, and analytical results provided by the Client to RPF, as applicable, were not verified and, as such, RPF has relied upon the data provided as indicated, and has not conducted an independent evaluation of the reliability of these data.
- 16. Where sample analyses were conducted by an outside laboratory, RPF has relied upon the data provided, and has not conducted an independent evaluation of the reliability of this data.
- 17. All hazard communication and notification requirements, as required by U.S. OSHA regulation 29 CFR Part 1926, 29 CFR Part 1910, and other applicable rules and regulations, by and between the Client, general contractors, subcontractors, building occupants, employees and other affected persons were the responsibility of the Client and are not part of the RPF SOW.
- 18. The applicability of the observations and recommendations presented in this report to other portions of the site was not determined. Many accidents, injuries and exposures and environmental conditions are a result of individual employee/employer actions and behaviors, which will vary from day to day, and with operations being conducted. Changes to the site and work conditions that occur subsequent to the RPF inspection may result in conditions which differ from those present during the survey and presented in the findings of the report.