

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

March 12, 2019

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

Re: Lead in Water Re-Test RPF Project No. 188980

Dear Mr. Bouranis,

On February 8, 2019, RPF Environmental, Inc. (RPF) conducted re-sampling of the kitchen sink at the Sunapee Middle High School (SMHS) and the drinking fountain outside room 1301 at the Sunapee Elementary School (SES) for lead in water after the sink components had been replaced. Two samples were collected by RPF EH&S Consultant, Kara Forsythe. The results of this survey are presented in the following report and appendices. This report is subject to the Limitations presented in Appendix C.

## **TEST RESULTS**

One first draw sample was collected at the Home Economic kitchen sink #3 labeled at the SMHS and sample collected in the water fountain in the hallway outside room 1301 at the SES. After collection, the 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 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. As you can see in the enclosed results, the samples were below the State f NH Statute ENV-Dw700. 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).

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.

Cara & Forghte

Kara Forsythe, SMS Sr. EH&S Consultant Enclosures: Appendix A: Testing Results Appendix B: Laboratory Results Appendix C: Limitations

188980 SAU 85 Lead in Water Re-Test 020819 Rpt

APPENDIX A



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

## TABLE 1

## SAU 85, SUNAPEE SCHOOL DISTRICT Lead in Drinking Water Re-Test

## LEAD IN WATER ANALYSIS RESULTS

## Samples Collected: February 8, 2019

Sample ID	Sample Description	Lead (mg/L)
020819DW01 SMHS	Kitchen Sink #13	0.0010
020819DW100 SES	Hallway outside room 1301	0.0046
Maximum Contaminan	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

ug/L: Micrograms per Liter

mg/L: Milligrams per Liter

**APPENDIX B** 



Eastern Analytical, Inc.

professional laboratory and drilling services

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



Subject: Laboratory Report

Eastern Analytical, Inc. ID: 191952 Client Identification: SAU 85 188980 / RETEST Date Received: 2/8/2019

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
- > : "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,

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Lorraine Olashaw, Lab Director

# of pages (excluding cover letter)

# SAMPLE CONDITIONS PAGE

EAI ID#: 191952

Client: RPF Environmental, Inc.

Client Designation: SAU 85 188980 / RETEST

### Received on ice or cold packs (Yes/No): N Temperature upon receipt (°C): 16.8 Acceptable temperature range (°C): 0-6 Date Sample % Dry Date Received Sampled Matrix Weight Exceptions/Comments (other than thermal preservation) Lab ID Sample ID 191952.01 020819DW 01 SMHS Kit. Sink Adheres to Sample Acceptance Policy 2/8/19 2/8/19 aqueous #13 191952.02 020819 DW100 SES O/S 1301 2/8/19 Adheres to Sample Acceptance Policy 2/8/19 aqueous

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

Eastern Analytical, Inc.

www.easternanalytical.com | 800.287.0525 | customerservice@easternanalytical.com

LABORATORY REPORT

EAI ID#: 191952

## Client: RPF Environmental, Inc.

Client Designation: SAU 85 188980 / RETEST

Sample ID:	020819DW 01 SMHS Kit. Sink #13	020819 DW100 SES O/S 1301				
Lab Sample ID:	191952.01	191952.02				
Matrix:	aqueous	aqueous	Amelatical		Dete of	
Date Sampled:	2/8/19	2/8/19	Analytical Matrix	Units	Date of Analysis	Method Analyst
Date Received:	2/8/19	2/8/19	Watik	Units	Analysis	Methou Analyst
Lead	0.0010	0.0046	AqTot	mg/L	2/8/19	200.8 DS

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## QC REPORT

EAI ID#: 191952

## Client: RPF Environmental, Inc.

Client Designation: SAU 85 188980 / RETEST

			Date of					
Parameter Name	Blank	LCS	LCSD	Units Analysis		Limits RPD		Method
Lead	< 0.001	0.97 (97 %R)	N	A mg/L	2/8/19	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 C** 

## 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 reguirements 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/cm<sup>2</sup> 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.

### RPF Service Limitations (cont.)

- 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. 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.