HAZARDOUS MATERIALS SURVEY
COMMERCIAL BUILDING
28 SOUTH BROADWAY
SALEM, NEW HAMPSHIRE

January 2020

Project 19039

GREEN
ENVIRONMENTAL

HAZARDOUS MATERIALS SURVEY

Commercial Property
28 South Broadway
Salem, New Hampshire

January 24, 2020

Project 19039

Prepared for:

Vanasse Hangen Brustlin
101 Walnut Street
Watertown, MA 02472
ATTN: Katherine Kudzma

Prepared by:

Green Environmental, Inc.
296 Weymouth Street, Unit C
Rockland, MA 02370
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www.greenenvironmental.com

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1.0 INTRODUCTION

Green Environmental, Inc. (GREEN) was retained by Vanasse Hangen Brustlin (VHB) to conduct a hazardous materials survey of the commercial building located at 28 South Broadway in Salem, New Hampshire. GREEN understands the surrounding area is scheduled to be redeveloped and that the existing structure will be demolished. GREEN completed this Hazardous Materials Survey to support the planned redevelopment.

1.1 Building Description

According to the Town of Salem Assessor field card and GREEN's site inspection, the building located at 28 South Broadway is an approximately 1,848 square-foot, two-story, commercial building constructed in 1947.

The building has a concrete foundation, with a wood frame construction and an asphalt shingle roof. Representative site photographs for the building are included in **Appendix A**. Floor plans are provided for reference included as **Figure 1** and **Figure 2**.

1.2 Scope of Work

GREEN was retained to conduct a Hazardous Materials Survey to document the presence of oil or hazardous materials at the subject building that may require abatement and/or special handling and disposal prior to building demolition. The Survey included assessment for the presence of asbestos and lead-based paint, and the cataloging of oils and/or hazardous materials located within the building. Bulk samples of suspect building materials were collected using destructive measures, and submitted for laboratory analysis as appropriate. The presence of lead-based paint was evaluated using an X-Ray fluorescence (XRF) field instrument.

2.0 ASBESTOS SURVEY

2.1 Regulatory Background

Regulations for asbestos exposure and/or asbestos release have been promulgated by the United States Environmental Protection Agency (EPA), U.S. Occupational Safety and Health Administration (OSHA), and New Hampshire Department of Environmental Services (NHDES).

OSHA regulates asbestos in the workplace through the Asbestos for General Industry Standard (29 Code of Federal Regulations [CFR] 1910.1001) and the removal of regulated asbestos-containing material (RACM) though the Asbestos Standard for Construction (29 CFR 1926.1101). OSHA regulations are created for the protection of the health of workers who may be occupationally exposed to asbestos. These occupations include asbestos abatement, construction activities, building maintenance, and others. OSHA requires that asbestos ACM be removed or appropriately abated prior to any work which will disturb the material, including demolition and renovation. Additionally, OSHA stipulates that thermal system insulation (TSI), surfacing materials and floor tile installed before 1980 must be presumed to be ACM unless appropriate sampling and analysis prove otherwise.

EPA and NHDES regulate ACM associated with building demolition, renovation, and abatement projects. The regulations are promulgated via the National Emission Standards for Hazardous Air Pollutants (NESHAP 40 CFR part 61) and the New Hampshire Cod of Administrative Rules (Env-A 1800). The regulations are developed to protect public health and the environment and require that buildings be inspected for asbestos prior to any demolition or renovation. Further, the regulations require that all affected friable and non-friable

ACM which is damaged or will be damaged as a result of the demolition or renovation activities be properly removed or abated prior to disturbance by the work.

NESHAP defines three types of ACM:

- Friable ACM: ACM that can be reduced to power by hand pressure requiring removal prior to renovation or demolition (e.g., thermal system insulation (TSI), plaster, joint compound, ceiling tiles).
- Category I non-friable ACM: ACM that is not friable and does not require removal prior to demolition, unless these materials have become friable, will become friable if disturbed, or are in poor condition; must be removed prior to renovation (e.g., resilient floor covering, packings, gaskets, asphalt roofing).
- Category II non-friable ACM: ACM that is not friable and does not require removal prior to demolition, unless these materials have become friable, will become friable if disturbed, or are in poor condition; must be removed prior to renovation (all other non-friable ACM).

RACM is friable ACM and non-friable ACM that may become friable during demolition or renovation activities. Practically speaking, both Category I non-friable ACM and Category II non- friable ACM will become friable in a typical commercial demolition or renovation scenario and must be abated prior to the work.

2.2 Sample Collection and Analysis

Bulk samples were collected based on type and quantity of each suspect material following the sampling guidelines set forth in the Asbestos Hazard Emergency Response Act (AHERA 40 CFR 763.86). Green inspected for materials among those defined as suspect ACM by EPA's AHERA regulation which include:

- Thermal system insulation (TSI) (e.g., pipe/boiler lagging, duct insulation);
- Surfacing materials (e.g., spray-on insulation, texturing materials, plaster), and;
- Miscellaneous materials (e.g., ceiling tiles, transite panels, flooring, vibration joints, drywall).

Fiberglass, foam glass, rubber, wood products, plastic products, glass and steel were not sampled since they are not considered suspect ACM.

The asbestos survey was conducted by Mr. Luke Krzyzewski, New Hampshire Accredited Asbestos Inspector AI100882. A copy of personnel accreditation is included as **Appendix B**. A total of 51 bulk samples were collected from the 28 South Broadway building on January 15, 2020. The samples were collected using hand tools, and sampling equipment was cleaned between the collection of each sample. Each sample location was wet with water prior to sampling to avoid creating dust during sampling. Bulk samples were placed in individual air tight plastic bags and transferred to Asbestos Identification Laboratory of Woburn, Massachusetts for analysis via EPA 600/R-93/116 and/or EPA Interim Method 600/M4-82-020 methods using Polarized Light Microscopy (PLM). Asbestos Identification Laboratory is licensed by the National Voluntary Laboratory Accreditation Program (NVLAP) (#200919-00) for bulk asbestos analysis. The field survey, chain of custody documentation and laboratory certificates of analysis are included in **Appendix C**. In accordance with NESHAP and NHDES regulations, materials are considered asbestos-containing if they contain greater than 1% asbestos as determined by PLM.

The following is a list of materials that were determined to be **non-asbestos-containing**:

Interior:

- Gray Floor Tile Black Mastic
- 9" Black Floor Tile Black Mastic
- Joint Compound
- Skim Coat on Brick
- Fiberboard
- 9" Brown Floor Tile Black Mastic
- Drywall
- Plaster Skim and Base Coat
- Textured Ceiling

Exterior:

- Black Siding Paper (top layer)
- Roof Paper
- Exterior Window Glazing
- Asphalt Shingle

The following is a list of materials that were determined to be **asbestos-containing**:

- Gray Floor Tile
- 9" Black Floor Tile
- Cement Siding (exterior)
- 9" Brown Floor Tile
- Black Sink Coating

The following is a list of materials that were determined to contain **trace (<1%) asbestos**:

- Black Siding Paper (bottom layer)

Based on the review of analytical data associated with the above bulk sample collection, asbestos was **positively** identified at the 28 South Broadway building. Please refer to **Appendix E** which summarizes the materials, locations, and estimated quantities that tested positive for asbestos at the 4 South Broadway building. Site photographs are included in **Appendix A**. Floor plans are provided for reference included as **Figure 1** and **Figure 2**.
Materials containing trace amounts (less than 1%) of asbestos are not fully regulated as an ACM in New Hampshire, however, they must still be handled in accordance with OSHA 1926.1101 and per current NHDES regulations, must be disposed of under an asbestos waste shipment record as asbestos-containing waste material.

3.0 LEAD BASED PAINT SURVEY

3.1 Regulatory Background

The Occupational Safety and Health Administration (OSHA) worker protection rule has established a permissible exposure limit (PEL) of 0.050 milligrams per cubic meter for airborne lead. OSHA worker protection rules are applicable for any amount of lead. The Resource Conservation and Recovery Act (RCRA) regulates wastes containing lead as hazardous wastes if the leachable lead in the waste exceeds 5 parts per million (ppm) by Toxicity Characteristic Leachate Procedure (TCLP).

The United States Department of Housing and Urban Development (HUD) has established a threshold for in- lace paint of 1 mg/cm^2 lead as measured by X-ray fluorescence (XRF), above which paint is considered lead-containing. Although HUD guidelines are only directly applicable to residential buildings, the threshold is useful as a guideline for identifying exposure and waste disposal issues in non-residential buildings.

3.2 Sample Analysis

A Lead Based Paint (LBP) Survey was conducted on January 15, 2020 by Mr. David Pesce, New Hampshire Lead Inspector and Risk Assessor No. RA-00059, utilizing an XRF. This is a non-destructive analytical technique used to determine the elemental composition of materials. XRF analyzers determine the chemistry of a sample by measuring the fluorescent (or secondary) X-ray emitted from a sample when it is excited by a primary X-ray source. This release of energy is then registered by the detector in the XRF instrument, which in turn categorizes the energies by element.

The investigation included a survey of painted surfaces for the presence of lead-based paint (LBP) throughout the building. No elevated levels of lead were identified during the survey. Please refer to the field inspection log sheets, included as **Appendix F,** which identifies the locations of elevated lead painted surfaces.

The purpose of the LBP survey was to assist the owner and/or contractor in OSHA compliance for worker protection during the planned renovation of the subject building. Survey results may also assist with characterization of construction debris/waste prior to disposal.

4.0 OTHER HAZARDOUS MATERIALS

4.1 Oil, Paints & Cleaners

No cleaning, maintenance supplies, or paints were noted within the property building.

4.2 Mercury Containing Devices

No mercury containing thermostats were identified within the building.

4.3 Fluorescent Lights & Ballasts

Fluorescent light fixtures were noted throughout the building. Fluorescent lighting tubes can contain both mercury and lead, and have special handling and disposal requirements. Under federal regulations used fluorescent lamp becomes a waste on the day that it is discarded. The disposal of fluorescent lighting tubes is regulated under the Resource Conservation and Recovery Act (RCRA).

Additionally, fluorescent light ballasts manufactured prior to 1979 may contain polychlorinated biphenyls (PCBs). PCB-based oils were used as insulating oil in many types of ballast to provide cooling and electrical isolation. PCBs are regulated by the EPA and also have special handling and disposal requirements, depending on the concentration.

Each light fixture should be inspected for "No PCBs" labeling, prior to removal. Lighting ballasts which contain PCBs should be segregated from non-PCB containing ballasts and properly disposed. Ballasts with no labeling should be considered PCB. The fluorescent tubes should be transported off-site for recycling. Please refer to **Appendix G,** for approximate quantities and locations of fluorescent lights and ballasts.

4.4 Refrigerants

GREEN observed one refrigerator and one air conditioning unit within the building. All refrigerants should be recovered and properly reclaimed prior to dismantling or disposal in accordance with federal law 40 CFR Part 82 Subpart F. Please refer to **Appendix G,** for approximate quantities and locations of refrigerants.

4.5 Emergency Equipment

Emergency lights were observed within the subject building. Batteries associated with these units are an alkaline, NiMH and NiCAD source. The batteries should be either recycled or properly disposed, prior to being disturbed. Emergency exit signs can also contain radioactive components requiring proper disposal. Several dry chemical fire extinguishers were noted in the building. These should be properly recycled prior if disturbed. Please refer to **Appendix G,** for approximate quantities and locations of emergency equipment.

5.0 RESULTS AND RECOMMENDATIONS

GREEN has completed a Hazardous Materials Survey of the building located at 28 South Broadway in Salem, New Hampshire. The property building consists of an approximately 1,848 square foot commercial structure constructed in 1947. GREEN understands the existing structure will be demolished. GREEN completed this Hazardous Materials Survey to support the planned redevelopment. The Survey included assessment for the presence of asbestos via bulk sample collection and laboratory analysis, a lead-based paint XRF survey, and the cataloging of oils and/or hazardous materials located within the building.

Asbestos was positively identified at the 28 South Broadway building, as summarized in **Section 2** and **Appendix E**. In accordance with NESHAP and NHDES regulations, all friable ACM, or materials made friable by demolition or renovation activities, must be removed from the building by a licensed asbestos abatement contractor, prior to demolition or renovation. Removal of ACM is regulated by NHDES. GREEN recommends the identified ACMs be removed from the buildings in accordance with applicable asbestos abatement regulations prior to the start of planned demolition activities. Asbestos abatement must be done by a New Hampshire licensed Asbestos Abatement Contractor and be properly disposed of offsite at an appropriate receiving facility in compliance with all applicable state and federal regulations. The New Hampshire asbestos regulations require visual inspection and clearance air monitoring at the completion of an asbestos abatement project. Additionally, full-time monitoring of asbestos abatement procedures in compliance with design specifications and regulations is recommended during major asbestos abatement projects.

NHDES regulations require notification to the Department and local government officials using the Asbestos Demolitions/Renovation Notification Form, 201-05-31 at least 10 working days prior to conducting of an asbestos response action of more than 10 linear-feet or 25 square feet of ACM.

Based on the results of the lead-based paint survey, surfaces analyzed as part of the survey were found to contain relatively low levels of lead in paint. OSHA worker protection rules apply for any amount of lead in paint, GREEN recommends that the owner provide the results of the LBP survey provided in this report to its demolition contractor. The contractor should consider this information in planning for worker protection during the demolition waste disposal. Removal of the paint prior to demolition is not required. However, the contractor may choose to monitor ambient air for lead during demolition, or demonstrate through air monitoring data collected from previous similar projects that the concentrations of lead identified will not result in an exceedance of the OSHA PEL during the demolition. The demolition contractor should also consider whether TCLP characterization of the demolition debris in accordance with RCRA is appropriate. Demolition work must be conducted in accordance with applicable federal, state, and local regulations. The XRF field inspection sheets are included in **Appendix F**.

Other oil and hazardous materials were identified within the building and should be properly segregated, disposed/or recycled as appropriate as summarized in **Section 4 and Appendix G** of this Survey report.

6.0 LIMITATIONS

The opinions expressed by GREEN are based solely on the observations, sampling and analysis, and information cited in this report. Observations were made at the subject site under the conditions stated. The purpose of this study was to determine the nature and approximate quantities of hazardous materials prior to demolition activities. This report does not constitute a complete determination of whether past or current owners, operators or occupants of the site have been in compliance with all applicable state, federal or local environmental regulations. This report does not constitute an AHERA survey. GREEN makes no representation regarding material located in inaccessible areas.

Semi-destructive measures were implemented to obtain bulk samples for asbestos analysis. GREEN makes no representation regarding inaccessible materials which may be located within walls, ceilings, ducts, roofs, below grade or other inaccessible areas. Additional field measurements and/or bulk sampling may be required following the exposure/removal of walls, flooring, etc. Should additional material be identified during demolition activities that are not listed in this report the work should be stopped and samples be collected to determine if hazardous classification is warranted.

Our conclusions are based solely on the information described herein and are believed to be representative of conditions at the time of the building survey. If additional information concerning the environmental conditions of the subject site becomes available, GREEN should be notified and presented with that information. Based on the new information, we will reevaluate the conclusions stated in this report to determine whether modifications are warranted.

This report is not a project specification and should not be used as a bidding document, including an asbestos abatement or building demolition specification.

We appreciate the opportunity to provide you with these environmental services. Please contact the undersigned with any questions at 617-479-0550.

Sincerely,
GREEN ENVIRONMENTAL, INC.

Luke Krzyzewski
Project Manager
Environmental Consulting Services

Kristen Awed-Ladas
Senior Project Manager
Environmental Consulting Services

Plans and Figures

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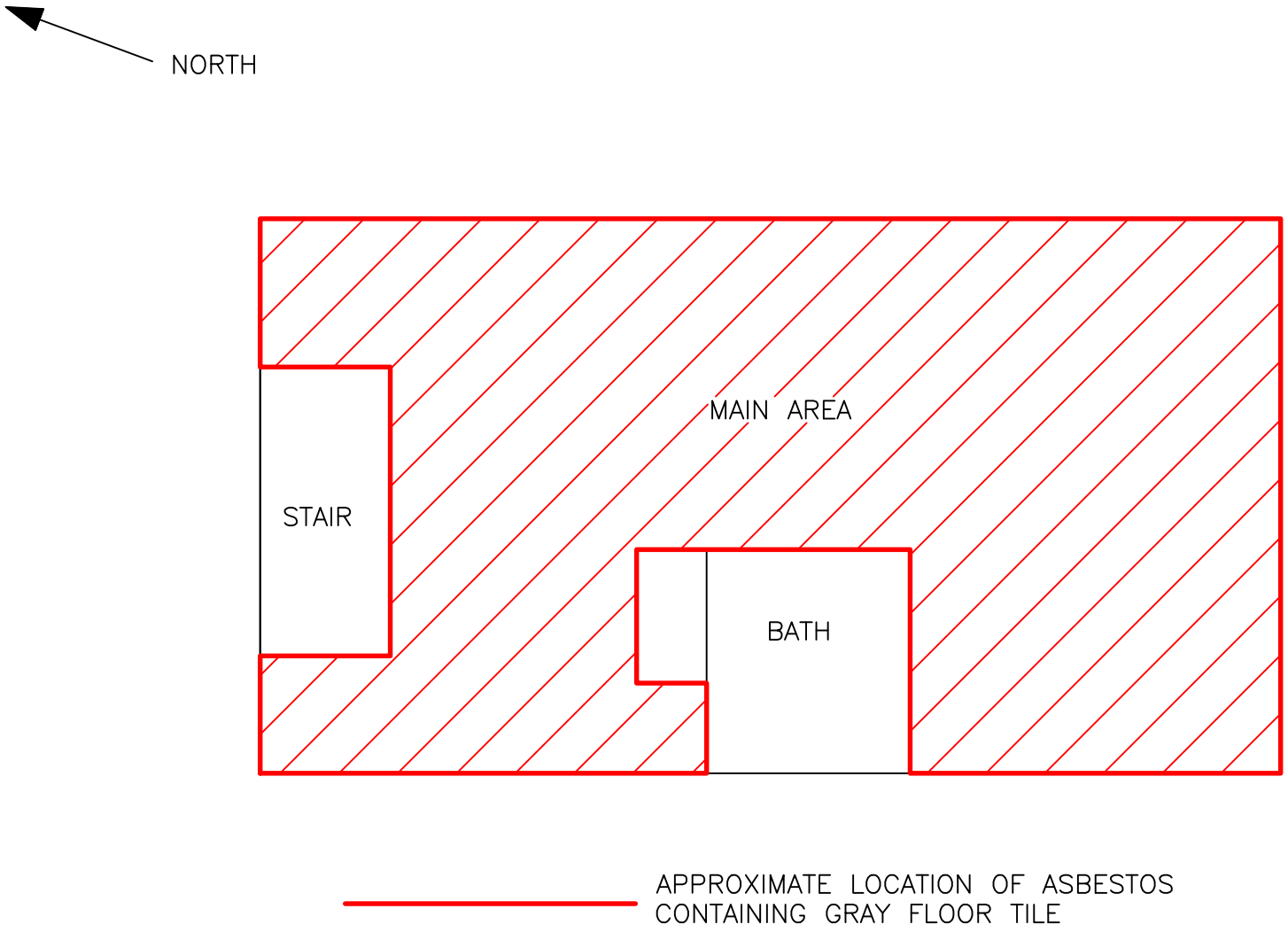

1ST FLOOR SITE PLAN
28 SOUTH BROADWAY
SALEM, NH

VHB
101 WALNUT STREET
WATERTOWN, MA

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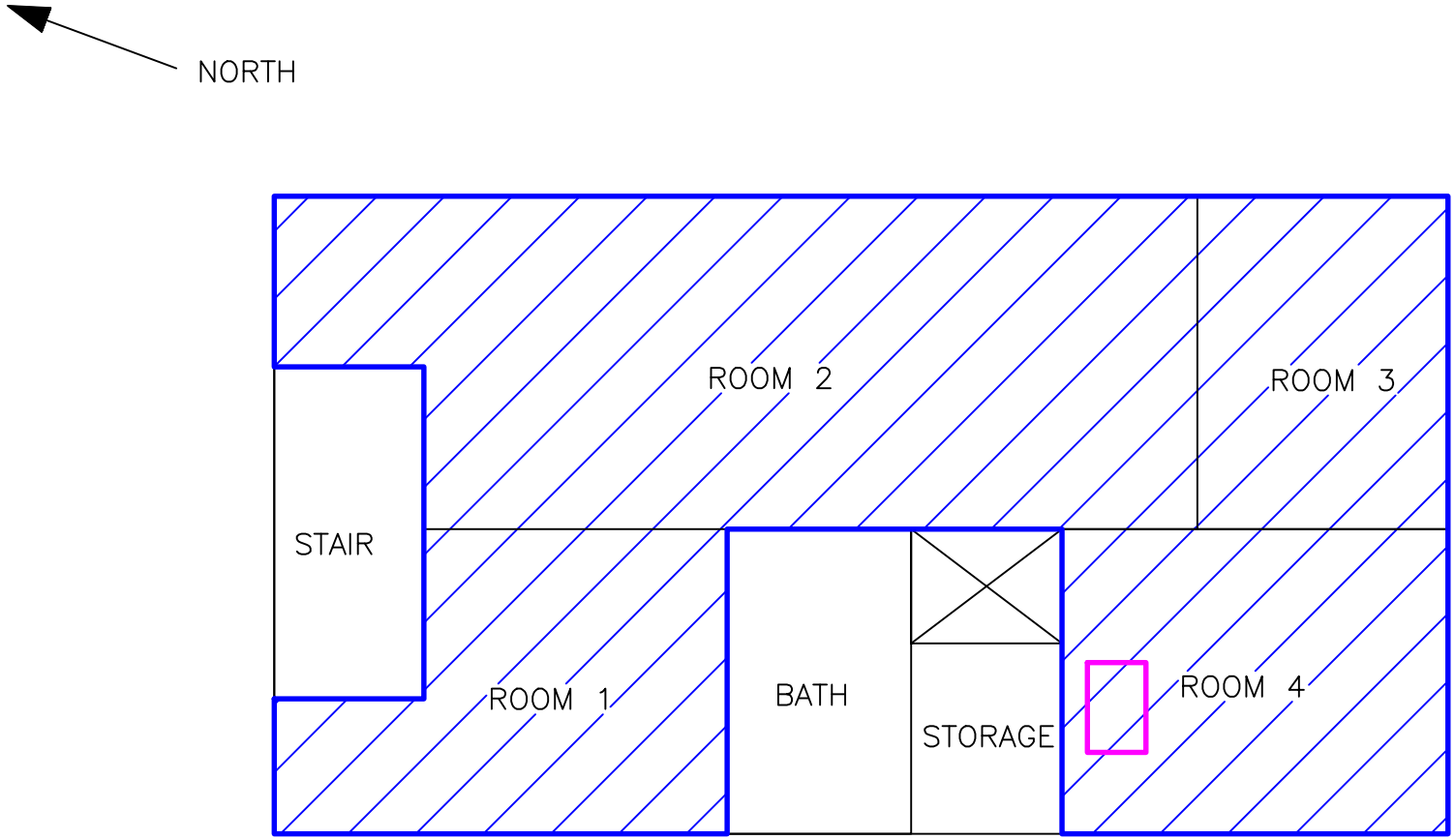
FIGURE: 1
PROJECT NO.: 19039
DATE: JANUARY 2020

APPROVED BY: KA
CHECKED BY: KA
DRAWN BY: LK



APPROXIMATE LOCATION OF ASBESTOS CONTAINING 9" BROWN/BLACK FLOOR TILE

APPROXIMATE LOCATION OF ASBESTOS CONTAINING BLACK SINK COATING

2ND FLOOR SITE PLAN
28 SOUTH BROADWAY
SALEM, NH

VHB
101 WALNUT STREET
WATERTOWN, MA

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FIGURE: 2
PROJECT NO.: 19039
DATE: JANUARY 2020

APPROVED BY: KA
CHECKED BY: KA
DRAWN BY: LK

Appendix A

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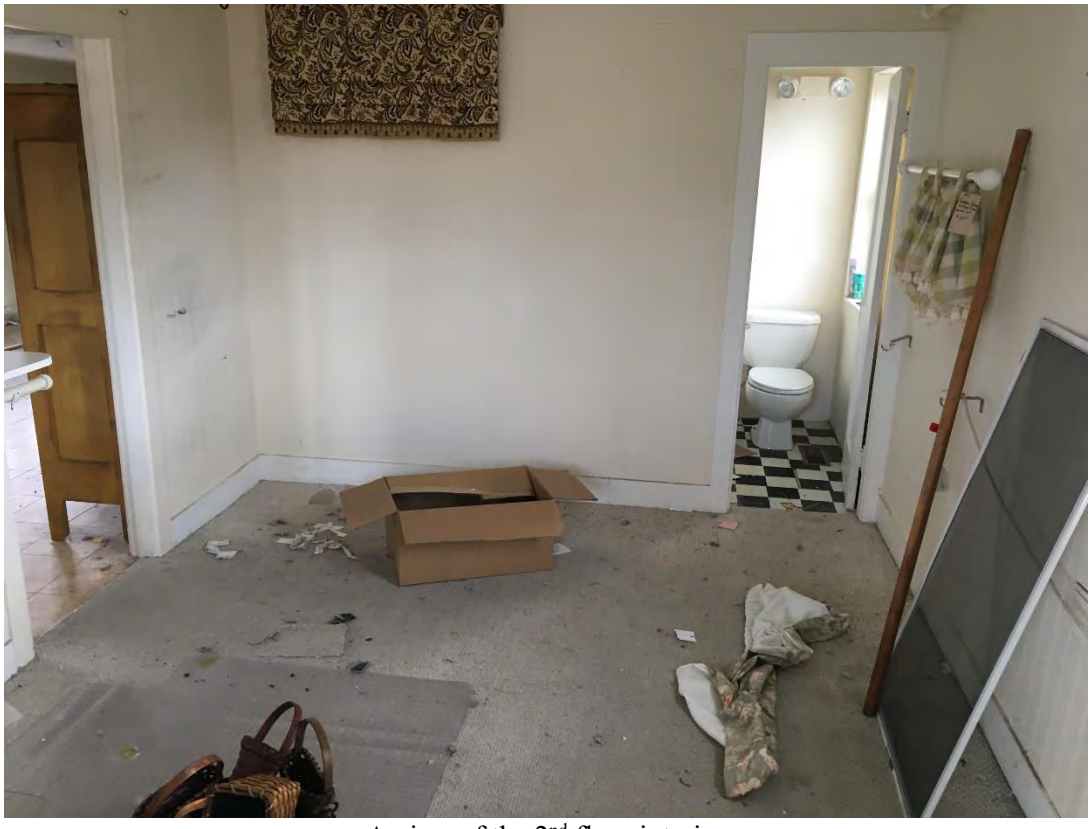
A view of the east side of the building, facing southwest

A view of the south side of the building, facing north

A view of the 1st floor interior

A view of the 1st floor interior

A view of the 2nd floor interior



A view of the 2nd floor interior

Appendix B

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28 S BROADWAY

Location	28 S BROADWAY	**Mblu**	89/ / 1066/ /
Acct#		**Owner**	LLOYD EILEEN E
Assessment	$259,700	**Appraisal**	$259,700
PID	6348	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2018	$105,800	$153,900	$259,700
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2018	$105,800	$153,900	$259,700

Owner of Record

Owner	LLOYD EILEEN E	**Sale Price**	$260,000
Co-Owner		**Certificate**	
Address	28 S BROADWAY SALEM, NH 03079-3023	**Book & Page**	5105/0707
		Sale Date	04/22/2010

Ownership History

Ownership History				
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Sale Date**
LLOYD EILEEN E	$260,000		5105/0707	04/22/2010
JACE ALEX & SONIA	$0		4656/2011	05/12/2006
JACE ALEXANDER	$0		3953/2860	01/31/2003
JACE ROBERT & EDITH	$225,000		2772/2522	12/05/1988
	$0		2401/1391	

Building Information

Building 1 : Section 1

Year Built: 1947
Living Area: 1,848
Replacement Cost: $174,876
Replacement Cost Less Depreciation: $104,900

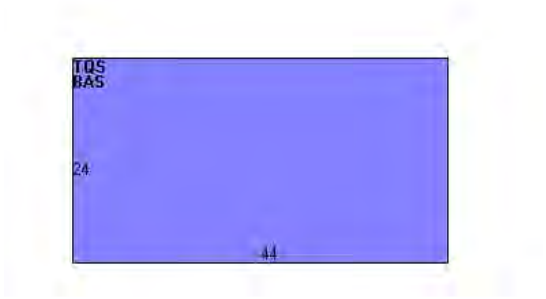
Building Attributes	
Field	**Description**

Building Photo

STYLE	Store
MODEL	Comm/Ind
Stories:	1.75
Occupancy	1
Exterior Wall 1	Vinyl Siding
Exterior Wall 2	
Roof Structure	Gable/Hip
Roof Cover	Asph/F Gls/Cmp
Interior Wall 1	Drywall/Sheet
Interior Wall 2	Plywood Panel
Interior Floor 1	Carpet
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	STORE/SHOP MDL-94
Total Rooms	
Total Bedrms	00
Total Baths	2
1st Floor Use:	
Heat/AC	HEAT/AC PKGS
Frame Type	WOOD FRAME
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	AVERAGE
Wall Height	10
% Comn Wall	

(http://images.vgsi.com/photos/SalemNHPhotos//\00\00\00/91.jpg)

Building Layout



(http://images.vgsi.com/photos/SalemNHPhotos//Sketches/6348

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	1,056	1,056
TQS	Three Quarter Story	1,056	792
		2,112	1,848

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code	3220
Description	STORE/SHOP MDL-94
Zone	CIC
Neighborhood	600
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	0.05
Frontage	0
Depth	0
Assessed Value	$153,900
Appraised Value	$153,900

Outbuildings

Outbuildings						Legend
Code	Description	Sub Code	Sub Description	Size	Assessed Value	Bldg #
PAV1	PAVING-ASPHALT			1000 S.F.	$900	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2017	$105,800	$153,900	$259,700
2016	$105,800	$153,900	$259,700
2015	$101,300	$142,800	$244,100

Assessment			
Valuation Year	Improvements	Land	Total
2017	$105,800	$153,900	$259,700
2016	$105,800	$153,900	$259,700
2015	$101,300	$142,800	$244,100

Appendix C

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GREEN ENVIRONMENTAL, INC.

Personnel Accreditation

Accredited Inspector

Name: Luke Krzyzewski

Accreditation Number: AI100882

Signature: _____

Licensure:


STATE OF NEW HAMPSHIRE
Department of Environmental Services
Asbestos Management & Control Program
ASBESTOS INSPECTOR
LUKE E KRZYZEWSKI
DOB: 05/20/89
Eff. Date: 01/17/20
Exp. Date: 01/16/21
R
AI100882
Craig A. Wright, Director
Air Resources Division

Appendix D

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Asbestos Identification Laboratory

165 New Boston St., Ste 227
Woburn, MA 01801
781-932-9600

Web: www.asbestosidentificationlab.com
Email: mikemanning@asbestosidentificationlab.com

Batch: 50031

NVLAP®
Lab Code: 200919-0

January 22, 2020

Luke Krzyzewski
Green Environmental Inc.
296 C Weymouth St.
Rockland, MA 02370

Project Name:	*28 South Broadway, Salem, NH*
Project Number:	#19039
Date Sampled:	2020-01-15
Work Received:	2020-01-16
Work Analyzed:	2020-01-21

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

Dear Luke Krzyzewski,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.
Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Luke Krzyzewski for your business.

Michael Manning
Owner/Director

January 22, 2020

Luke Krzyzewski
Green Environmental Inc.
296 C Weymouth St.
Rockland, MA 02370

Project Name: *28 South Broadway, Salem, NH*
Project Number: #19039
Date Sampled: 2020-01-15
Work Received: 2020-01-16
Work Analyzed: 2020-01-21

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

FieldID / LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
1A / 555135	Gray Floor Tile	1st Floor, Main Area	gray	Non-Fibrous 97	**Detected** Chrysotile 3
1B / 555136	Gray Floor Tile	1st Floor, Main Area			Not Analyzed
2A / 555137	Gray Floor Tile Black Mastic	1st Floor, Main Area	black	Non-Fibrous 100	None Detected
2B / 555138	Gray Floor Tile Black Mastic	1st Floor, Main Area	black	Non-Fibrous 100	None Detected
3A / 555139	9" Brown Floor Tile	2nd Floor, Room 2	brown	Non-Fibrous 97	**Detected** Chrysotile 3
3B / 555140	9" Brown Floor Tile	2nd Floor, Room 3			Not Analyzed
4A / 555141	9" Brown Floor Tile Black Mastic	2nd Floor, Room 2	black	Non-Fibrous 100	None Detected
4B / 555142	9" Brown Floor Tile Black Mastic	2nd Floor, Room 3	black	Non-Fibrous 100	None Detected
5A / 555143	9" Black Floor Tile	2nd Floor, Room 1	brown	Non-Fibrous 97	**Detected** Chrysotile 3
5B / 555144	9" Black Floor Tile	2nd Floor, Room 1			Not Analyzed
6A / 555145	9" Black Floor Tile Black Mastic	2nd Floor, Room 1	black	Non-Fibrous 100	None Detected
6B / 555146	9" Black Floor Tile Black Mastic	2nd Floor, Room 1	black	Non-Fibrous 100	None Detected
7A / 555147	Drywall	1st Floor, Main Area	multi	Cellulose 10 Non-Fibrous 90	None Detected
7B / 555148	Drywall	2nd Floor, Room 2	multi	Cellulose 10 Non-Fibrous 90	None Detected

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
8A 555149	Joint Compound	1st Floor, Main Area	white	Non-Fibrous 100	None Detected
8B 555150	Joint Compound	1st Floor, Main Area	white	Non-Fibrous 100	None Detected
8C 555151	Joint Compound	2nd Floor, Room 1	white	Non-Fibrous 100	None Detected
8D 555152	Joint Compound	2nd Floor, Room 2	white	Non-Fibrous 100	None Detected
8E 555153	Joint Compound	2nd Floor, Room 2	white	Non-Fibrous 100	None Detected
9A 555154	Plaster Skim Coat	2nd Floor, Room 2	white	Non-Fibrous 100	None Detected
9B 555155	Plaster Skim Coat	2nd Floor, Room 1	white	Non-Fibrous 100	None Detected
9C 555156	Plaster Skim Coat	2nd Floor, Room 3	white	Non-Fibrous 100	None Detected
9D 555157	Plaster Skim Coat	2nd Floor, Room 4	white	Non-Fibrous 100	None Detected
9E 555158	Plaster Skim Coat	2nd Floor, Storage	white	Non-Fibrous 100	None Detected
10A 555159	Plaster Base Coat	2nd Floor, Room 2	gray	Non-Fibrous 100	None Detected
10B 555160	Plaster Base Coat	2nd Floor, Room 2	gray	Non-Fibrous 100	None Detected
10C 555161	Plaster Base Coat	2nd Floor, Room 3	gray	Non-Fibrous 100	None Detected
10D 555162	Plaster Base Coat	2nd Floor, Room 4	gray	Non-Fibrous 100	None Detected
10E 555163	Plaster Base Coat	2nd Floor, Storage	gray	Non-Fibrous 100	None Detected
11A 555164	Skim Coat on Brick	1st Floor, Main Area	white	Non-Fibrous 100	None Detected
11B 555165	Skim Coat on Brick	1st Floor, Main Area	white	Non-Fibrous 100	None Detected
11C 555166	Skim Coat on Brick	1st Floor, Main Area	white	Non-Fibrous 100	None Detected

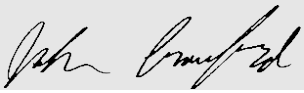
FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
12A 555167	Textured Ceiling	2nd Floor, Room 1	white	Non-Fibrous 100	None Detected
12B 555168	Textured Ceiling	2nd Floor, Room 1	white	Non-Fibrous 100	None Detected
12C 555169	Textured Ceiling	2nd Floor, Room 1	white	Non-Fibrous 100	None Detected
13A 555170	Fiberboard	2nd Floor, Room 2	brown	Cellulose 100	None Detected
13B 555171	Fiberboard	2nd Floor, Room 2	brown	Cellulose 100	None Detected
14A 555172	Black Sink Coating	2nd Floor, Room 4	black	Non-Fibrous 90	**Detected** **Chrysotile 10**
14B 555173	Black Sink Coating	2nd Floor, Room 4			Not Analyzed
15A 555174	Cement Siding	Exterior, West Side	gray	Non-Fibrous 90	**Detected** **Chrysotile 10**
15B 555175	Cement Siding	Exterior, North Side			Not Analyzed
16A 555176	Black Siding Paper	Exterior, West Side	black	Cellulose 40 Non-Fibrous 60	None Detected
16B 555177	Black Siding Paper	Exterior, North Side	black	Cellulose 40 Non-Fibrous 60	None Detected
17A 555178	Black Siding Paper	Exterior, West Side	black	Cellulose 50 Non-Fibrous 50	**Detected** **Chrysotile < 1**
17B 555179	Black Siding Paper	Exterior, North Side	black	Cellulose 50 Non-Fibrous 50	**Detected** **Chrysotile < 1**
18A 555180	Exterior Window Glaze	Exterior, West Side	white	Other 5 Non-Fibrous 95	None Detected
18B 555181	Exterior Window Glaze	Exterior, West Side	white	Other 5 Non-Fibrous 95	None Detected
19A 555182	Roof Paper	Exterior, Roof	black	Fiberglass 20 Non-Fibrous 80	None Detected
19B 555183	Roof Paper	Exterior, Roof	black	Fiberglass 20 Non-Fibrous 80	None Detected
20A 555184	Asphalt Shingle	Exterior, Roof	black	Fiberglass 20 Non-Fibrous 80	None Detected

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
20B 555185	Asphalt Shingle	Exterior, Roof	black	Fiberglass 20 Non-Fibrous 80	None Detected

Wednesday 22

End of Report

Analyzed by:



Batch: 50031

Client: Green Env.

Address:

Project Site & #: 28 South Broadway

Phone / email address:

Contact:

Relinquish by/date:

Received by/date: 1/16/20

# of Samples Received: 51

CHAIN OF CUSTODY

EPA/600/R-93/116

Asbestos Identification Lab

165 New Boston St.
Suite 227
Woburn, MA 01801
(781)932-9600
www.asbestosidentificationlab.com

Date Sampled:

BATCH# 50031 Rev 06/16

Page 1 of 11

Turnaround Time

- [ ] Less 3 Hrs
- [ ] Same Day
- [ ] Next Day
- [x] Two Day 4 Day

Sample Method

- [x] Bulk
- [ ] Soil
- [ ] Wipe
- [ ] Point Count

Stop on 1st Positive? (Yes)/No

Notify Method: Mail/E-Mail/Verbal

Analyzed By:

Date: 1/21/20

Temp in Celsius = 25

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Material / Location	Stereo Scope: % of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Optical Properties: Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI: ∥	RI: ⊥	Non-Asbestos Percentage (%): Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
55135	1A	Material	0	Gy	Y	Gr	N	Chrysotile	3	W	II	+	0.008	NC	1.553	1.550							
								Amosite															
								Crocidolite															
		Location						Tremolite															
								Anthophyllite															97
								Actinolite															
36	1B	Material	~~0~~					Chrysotile															
								Amosite															
								Crocidolite															
		Location	A					Tremolite															
								Anthophyllite															
								Actinolite															
55	2A	Material	0	Bk	Y	Gr	N	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															
								Anthophyllite															100
								Actinolite															

DNB

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celcius = ____ / Material / Location	Stereo Scope: % of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Optical Properties: Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI: ∥	RI: ⊥	Non-Asbestos Percentage (%): Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
38	2B	Material	Ø	Bk	Y	Gn	N	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															100
								Anthophyllite															
								Actinolite															
39	3A	Material	Ø	Br	Y	Gn	N	Chrysotile	3	W	W	+	0.003L	NC	1.553	1.550							
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															97
								Actinolite															
40	3B	Material	~~Ø~~	~~Br~~	~~Y~~	~~Gn~~	~~N~~	Chrysotile															
		Location		Ø				Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															
								Actinolite															
41	4A	Material	Ø	Bk	Y	Gn	N	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															100
								Actinolite															
42	4B	Material	Ø	Bk	Y	Gn	N	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															100
								Actinolite															

DNA

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celcius = ____ / Material / Location	Stereo Scope: % of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Optical Properties: Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI: ∥	RI: ⊥	Non-Asbestos Percentage (%): Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
AB	5A	Material	Ø	Br	Y	Gr	N	Chrysotile	3	W	II	≠	0.003	NC	1.553	1.530							
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															97
								Actinolite															
AA	5B	Material						Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															
								Actinolite															
AS	6A	Material	Ø	BK	Y	Gr	N	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															100
								Actinolite															
AB	6B	Material	Ø	BK	Y	Gr	N	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															100
								Actinolite															
AA	7A	Material	Ø	MC	N	F/Gr	Y	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															90
								Actinolite															

DNA

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celcius = ____ / Material / Location	Stereo Scope: % of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Optical Properties: Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI: ∥	RI: ⊥	Non-Asbestos Percentage (%): Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
48	7B	Material	Ø	mc	w	FF/Gr	Y	Chrysotile															
								Amosite															
								Crocidolite											R				
		Location						Tremolite															
								Anthophyllite											10				90
								Actinolite															
49	8A	Material	Ø	w	Y	Gr	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															
								Anthophyllite															
								Actinolite															100
50	8B	Material	Ø	w	Y	Gr	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															
								Anthophyllite															
								Actinolite															100
51	8C	Material	Ø	w	Y	Gr	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															
								Anthophyllite															
								Actinolite															100
52	8D	Material	Ø	w	Y	Gr	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															
								Anthophyllite															
								Actinolite															100

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celcius = ____ / Material / Location	Stereo Scope					Asbestos Minerals	Optical Properties						RI		Non-Asbestos Percentage (%)						
			% of Asbestos	Color	Homogeneity	Texture	Friable		Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	=	⊥	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
53	8E	Material	0	w	Y	Gr	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															
								Anthophyllite															100
								Actinolite															
54	9A	Material	0	w	Y	Gr	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															
								Anthophyllite															100
								Actinolite															
55	9B	Material	0	w	Y	Gr	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															
								Anthophyllite															100
								Actinolite															
56	9C	Material	0	w	Y	Gr	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															
								Anthophyllite															100
								Actinolite															
57	9D	Material	0	w	Y	Gr	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															
								Anthophyllite															100
								Actinolite															

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celcius = ____ / Material / Location	Stereo Scope					Asbestos Minerals	Optical Properties						RI		Non-Asbestos Percentage (%)						
			% of Asbestos	Color	Homogeneity	Texture	Friable		Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	=	⊥	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
58	9E	Material	0	w	Y	bn	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															100
								Anthophyllite															
								Actinolite															
59	10A	Material	0	bn	Y	bn	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															100
								Anthophyllite															
								Actinolite															
60	10B	Material	0	bn	Y	bn	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															100
								Anthophyllite															
								Actinolite															
61	10C	Material	0	bn	Y	bn	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															100
								Anthophyllite															
								Actinolite															
62	10D	Material	0	bn	Y	bn	Y	Chrysotile															
								Amosite															
								Crocidolite															
		Location						Tremolite															100
								Anthophyllite															
								Actinolite															

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celcius = ____ / Material / Location	Stereo Scope					Asbestos Minerals	Optical Properties						RI		Non-Asbestos Percentage (%)						
			% of Asbestos	Color	Homogeneity	Texture	Friable		Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	=	⊥	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
63	10E	Material	Ø	br	Y	Gr	Y	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															100
								Anthophyllite															
								Actinolite															
64	11A	Material	Ø	w	Y	Gr	Y	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															100
								Actinolite															
65	11B	Material	Ø	w	Y	Gr	Y	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															100
								Actinolite															
66	11C	Material	Ø	w	Y	Gr	Y	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															100
								Actinolite															
67	12A	Material	Ø	w	Y	Gr	Y	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															100
								Actinolite															

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celcius = ____ / Material / Location	Stereo Scope					Asbestos Minerals	Optical Properties							RI		Non-Asbestos Percentage (%)						
			% of Asbestos	Color	Homogeneity	Texture	Friable		Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism		=	⊥	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
68	12B	Material	ø	w	Y	Gn	Y	Chrysotile																
								Amosite																
								Crocidolite																
		Location						Tremolite																
								Anthophyllite																100
								Actinolite																
69	12C	Material	ø	w	Y	Gn	Y	Chrysotile																
								Amosite																
								Crocidolite																
		Location						Tremolite																
								Anthophyllite																100
								Actinolite																
70	13A	Material	ø	Br	Y	F	Y	Chrysotile																
								Amosite																
								Crocidolite												R				
		Location						Tremolite																
								Anthophyllite												100				
								Actinolite																
71	13B	Material	ø	Br	Y	F	Y	Chrysotile																
								Amosite																
								Crocidolite												R				
		Location						Tremolite																
								Anthophyllite												100				
								Actinolite																
72	14A	Material	ø	Blk	Y	Gn	N	Chrysotile	10	w	ll	+	0.005	NC	1.555	1.550								
								Amosite																
								Crocidolite																
		Location						Tremolite																
								Anthophyllite																90
								Actinolite																

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celcius = ____ / Material / Location	Stereo Scope: % of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Optical Properties: Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI: =	RI: ⊥	Non-Asbestos Percentage (%): Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous	
73	14B	Material						Chrysotile																DNA
		Location						Amosite																
								Crocidolite																
								Tremolite																
								Anthophyllite																
								Actinolite																
74	15A	Material	10	Gy	N	F/Gr	N	Chrysotile	10	w	w	+	0.005	NC	1555	1550								
		Location						Amosite																
								Crocidolite																
								Tremolite																
								Anthophyllite															80	
								Actinolite																
75	15B	Material						Chrysotile																DNA
		Location						Amosite																
								Crocidolite																
								Tremolite																
								Anthophyllite																
								Actinolite																
76	16A	Material	0	Bk	N	F/Gr	N	Chrysotile																
		Location						Amosite																
								Crocidolite												R				
								Tremolite																
								Anthophyllite												40			60	
								Actinolite																
77	16B	Material	0	Bk	N	F/Gr	N	Chrysotile																
		Location						Amosite																
								Crocidolite												R				
								Tremolite																
								Anthophyllite												40			60	
								Actinolite																

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celcius = ____ / Material / Location	Stereo Scope: % of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Optical Properties: Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI: ∥	RI: ⊥	Non-Asbestos Percentage (%): Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
78	17A	Material	0	Blk	N	F/Gr	N	Chrysotile	Tr	W	II	+	0.005	NC	1.555	1.550			R				
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite											50				50
								Actinolite															
79	17B	Material	0	Blk	N	F/Gr	N	Chrysotile	Tr	W	II	+	0.005	NC	1.555	1.550							
		Location						Amosite															
								Crocidolite											R				
								Tremolite															
								Anthophyllite											50				50
								Actinolite															
80	18A	Material	0	W	N	Gr	N	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite														T/-	
								Anthophyllite														5	95
								Actinolite															
81	18B	Material	0	W	N	Gr	N	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite														T/-	
								Anthophyllite														5	95
								Actinolite															
82	19A	Material	0	Blk	N	F/Gr	N	Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite									1						
								Anthophyllite									20						80
								Actinolite															

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celcius = ____ / Material / Location	Stereo Scope: % of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Optical Properties: Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI: ∥	RI: ⊥	Non-Asbestos Percentage (%): Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
83	19B	Material	6	Blk	N	F/Gr	N	Chrysotile									1						
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite									20						80
								Actinolite															
84	20A	Material	6	Blk	N	F/Gr	N	Chrysotile															
		Location						Amosite									1						
								Crocidolite															
								Tremolite															
								Anthophyllite									20						80
								Actinolite															
85	20B	Material	6	Blk	N	F/Gr	N	Chrysotile															
		Location						Amosite									1						
								Crocidolite															
								Tremolite															
								Anthophyllite									20						80
								Actinolite															
		Material						Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															
								Actinolite															
		Material						Chrysotile															
		Location						Amosite															
								Crocidolite															
								Tremolite															
								Anthophyllite															
								Actinolite															

GREEN ENVIRONMENTAL

Bulk Sampling Chain-of-Custody

Client: VHB Date: 1/15/2020 Page: 1 of 5

Project Address: 28 South Broadway, Salem NH Project #: 19039 Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop TAT: 3-4 days

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
28 South Broadway	1st	Main Area	Gray Floor Tile	1A		-
↓	↓	↓	↓	1B		-
			Gray Floor Tile Black mastic	2A		-
	↓	↓	↓	2B		-
	2nd	Room 2	9" Brown Floor Tile	3A		-
	↓	Room 3	↓	3B		-
		Room 2	9" Brown Floor Tile Black mastic	4A		-
		Room 3	↓	4B		-
		Room 1	9" Black Floor Tile	5A		-
		↓	↓	5B		-
			9" Black Floor Tile Black mastic	6A		-
↓	↓	↓	↓	6B		-

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples
[signature]	1/16/2020	51	[signature]	1/16/20		

296 Weymouth Street, Rockland MA 02370 - P: (617)479-0550 - F: (617) 479-5150

GREEN ENVIRONMENTAL

Bulk Sampling Chain-of-Custody

Client: VHB Date: 1/15/2020 Page: 2 of 5

Project Address: 28 South Broadway, Salem NH Project #: 19039 Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop TAT: 3-4 days

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
28 South Broadway	1st	Main Area	Drywall	7A		
↓	2nd	Room 2	↓	7B		
↓	1st	main Area	Joint Compound	8A		
↓	↓	↓	↓	8B		
↓	2nd	Room 1	↓	8C		
↓	↓	Room 2	↓	8D		
↓	↓	↓	↓	8E		
↓	2nd	Room 2	Plaster Skim Coat	9A		
↓	↓	↓	↓	9B		
↓	↓	Room 3	↓	9C		
↓	↓	Room 4	↓	9D		
↓	↓	Storage	↓	9E		

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples

296 Weymouth Street, Rockland MA 02370 - P: (617)479-0550 - F: (617) 479-5150

GREEN ENVIRONMENTAL

Bulk Sampling Chain-of-Custody

Client: VHB Date: 1/15/2020 Page: 3 of 5

Project Address: 28 South Broadway, Salem NH Project #: 19039 Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop TAT: 3-4 days

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
28 South Broadway	2nd	Room 2	Plaster Base Coat	10A		
↓	↓	↓	↓	10B		
		Room 3		10C		
		Room 4		10D		
		Storage		10E		
	1st	Main Area	Skim Coat on Brick	11A	Behind DW	
	↓	↓	↓	11B	↓	
	↓	↓	↓	11C		
	2nd	Room 1	Textured Ceiling	12A		
	↓	↓	↓	12B		
	↓	↓	↓	12C		
↓	2nd	Room 2	Fiberboard	13A		

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples

GREEN ENVIRONMENTAL

Bulk Sampling Chain-of-Custody

Client: VHB Date: 1/15/2020 Page: 4 of 5

Project Address: 28 South Broadway, Salem NH Project #: 19039 Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop TAT: 3-4 days

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
28 South Broadway	2nd	Room 2	Fiberboard	13B		-
↓	↓	Room 4	Black Sink Coating	14A		-
↓	↓	↓	↓	14B		-
↓	Exterior	West Side	Cement Siding	15A		-
↓	↓	North Side	↓	15B		-
↓	↓	West Side	Black Siding Paper	16A	Top layer	-
↓	↓	North Side	↓	16B	↓	-
↓	↓	West Side	Black Siding Paper	17A	Bottom Layer	-
↓	↓	North Side	↓	17B	↓	-
↓	↓	West Side	Exterior Window Glaze	18A		-
↓	↓	↓	↓	18B		-
↓	↓	Roof	Roof Paper	19A		-

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples

296 Weymouth Street, Rockland MA 02370 - P: (617)479-0550 - F: (617) 479-5150

GREEN ENVIRONMENTAL

Bulk Sampling Chain-of-Custody

Client: VHB Date: 1/15/2020 Page: 5 of 5

Project Address: 28 South Broadway, Salem NH Project #: 19039 Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop TAT: 3-4 days

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
28 South Broadway	Exterior	Roof	Roof Paper	19B		
↓	↓	↓	Asphalt Shingle	20A		
↓	↓	↓	↓	20B		

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples

Appendix E

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Appendix E Locations of the Identified Asbestos-Containing Materials 28 South Broadway, Salem, NH		
Location	**Material Description**	**Estimated Quantity**
1st Floor		
1st Floor - Main Area	Gray Floor Tile (below wood subfloor)	1,056 SF
2nd Floor		
Room 1	9" Black Floor Tile	160 SF
Room 2	9" Brown Floor Tile	430 SF
Room 3	9" Brown Floor Tile	130 SF
Room 4	9" Brown Floor Tile	150 SF
	Black Sink Coating	1 Unit
Exterior		
North Side	Cement Siding (below vinyl siding)	450 SF
	Black Siding Paper (Trace <1%) (behind wood siding- bottom Layer)	450 SF
South Side	Cement Siding (below vinyl siding)	450 SF
	Black Siding Paper (Trace <1%) (behind wood siding- bottom Layer)	450 SF
West Side	Cement Siding (below vinyl siding)	675 SF
	Black Siding Paper (Trace <1%) (behind wood siding- bottom Layer)	675 SF
East Side	Cement Siding (below vinyl siding)	540 SF
	Black Siding Paper (Trace <1%) (behind wood siding- bottom Layer)	540 SF
Notes: 1. SF = Square Feet 2. Unit = Each		

Appendix F

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Titan Lead Testing, LLC

Titan Lead Testing, LLC
PO Box 760709
Melrose, MA 02176

Tel: 781-799-8763
Fax: 781-662-3300

January 23, 2020
Luke Krzyzewski
Green Environmental
296 Weymouth St., Unit C
Rockland, MA 02370

RE: Lead Paint Testing Results
28 South Broadway
Salem, New Hampshire

Dear Mr. Krzyzewski:

This report presents the results of testing for the presence of lead paint on interior painted at 28 South Broadway, Salem, New Hampshire. Representative of Titan Lead Testing (Titan), Mr. David Pesce performed the testing on January 15, 2020. Mr. Pesce is manufacturer's-trained in the proper use and interpretation of results of the XRF Spectrum Analyzer. Mr. Pesce is also a New Hampshire Department of Health and Human Services licensed Lead Inspector and Risk Assessor (Lic # RA-00059).

Scope of Work

The purpose of the lead testing was to determine the lead content of various painted building substrates prior to renovation and demolition activities. Selected relevant accessible painted surfaces were tested by Titan. Concentrations of lead in paint were measured on site by portable XRF analysis.

Sampling Protocol

The lead content of painted surfaces was determined using a portable X-ray Fluorescence (XRF) Spectrum Analyzer (HEURESIS Pb200i; Serial # 1645). The XRF Spectrum Analyzer uses a radioactive source to excite the electrons of lead atoms (if present) in paints. As the lead atom electrons return to their normal state, they emit X-rays, which are counted by the XRF Spectrum Analyzer. This data is processed and the results are converted to milligrams of lead per square centimeter (mg/cm^2) of sampled surface area.

Results

The XRF testing results indicate that levels of lead on surfaces tested range from less than 0.1 mg/cm^2 (lower limit of quantification of the XRF) to 0.5 mg/cm^2. Renovation and demolition activities that impact surfaces where lead may be present require specific work practices and disposal requirements. A summary of the lead testing results is attached.

Recommendations

The employer of workers who disturb or remove lead paint must comply with OSHA Standard 29 CFR 1926.62 - Lead. This applies to all construction work, alteration, or repair, including painting, where an employee may be occupationally exposed to lead. This standard does not establish a minimum threshold for the lead content, below which an initial exposure assessment is not required. An initial exposure assessment is required for each renovation or demolition activity that will disturb lead. This standard also contains additional requirements concerning the disturbance or removal of lead.

Limitations

Lead paint testing was performed on representative building substrates in selected building areas. Additional lead-containing building substrates and components may be present in other building areas or hidden by floor, wall and ceiling finishes or otherwise may be inaccessible.

Lead paint testing was performed to determine the lead content of painted building components that may be impacted by renovation activities and should **not** be used to determine compliance with the New Hampshire Lead Paint Poisoning Prevention and Control Act (RSA 130-A)

Please call if you have any questions or require additional information.

Sincerely,

David Pesce

Attachment

ATTACHMENT

LEAD TESTING RESULTS BY XRF

Lead Paint Testing Results by XRF
28 South Broadway
Salem, New Hampshire
January 15, 2020

Room/Area	Location/Component	Color	Substrate	Results (mg/cm^2)
Exterior	Siding	Gray	Concrete	< 0.1
Exterior	Door	Green	Metal	< 0.1
Exterior	Door Casing	White	Wood	< 0.1
Exterior	Door Jamb	White	Wood	< 0.1
Exterior	Railing Cap	Black	Metal	< 0.1
Exterior	Awning	Gray	Metal	0.5
Exterior	Electrical Conduit	Gray	Metal	< 0.1
Exterior	Gas Pipe	Gray	Metal	< 0.1
1st Floor Main Room	Wall	White	Gypsum	< 0.1
1st Floor Main Room	Wall	Gray	Gypsum	< 0.1
1st Floor Main Room	Ceiling	White	Gypsum	0.2
1st Floor Main Room	Door	White	Metal	0.3
1st Floor Main Room	Door Casing	White	Wood	< 0.1
1st Floor Main Room	Door Jamb	White	Wood	< 0.1
1st Floor Main Room	Window Sill	White	Wood	0.3
1st Floor Main Room	Column	White	Gypsum	< 0.1
1st Floor Main Room	Baseboard	White	Wood	< 0.1
1st Floor Main Room	Electrical Panel	Gray	Metal	< 0.1
1st Floor Main Room	Shutters	White	Wood	< 0.1
1st Floor Rear Room	Wall	Gray	Gypsum	< 0.1
1st Floor Rear Room	Wall	White	Gypsum	< 0.1
1st Floor Rear Room	Baseboard	White	Wood	< 0.1
1st Floor Rear Room	Door	White	Metal	< 0.1
1st Floor Rear Room	Door Casing	White	Wood	< 0.1
1st Floor Rear Room	Door Jamb	White	Wood	< 0.1
1st Floor Rear Room	Door	White	Wood	< 0.1
1st Floor Rear Room	Door Casing	White	Wood	< 0.1
1st Floor Rear Room	Door Jamb	White	Wood	< 0.1
1st Floor Bathroom	Wall	White	Gypsum	< 0.1
1st Floor Bathroom	Shelf	White	Wood	< 0.1
1st Floor Bathroom	Shelf Support	Black	Metal	< 0.1
1st Floor Bathroom	Door	White	Wood	< 0.1
1st Floor Bathroom	Door Casing	White	Wood	< 0.1
1st Floor Bathroom	Door Jamb	White	Wood	< 0.1
Stairs 1st to 2nd	Wall Panel	White	Wood	0.2
Stairs 1st to 2nd	Baseboard	White	Wood	0.2
Stairs 1st to 2nd	Chair Rail	White	Wood	< 0.1

Lead Paint Testing Results by XRF
28 South Broadway
Salem, New Hampshire
January 15, 2020

Room/Area	Location/Component	Color	Substrate	Results (mg/cm^2)
Stairs 1st to 2nd	Door	White	Wood	< 0.1
Stairs 1st to 2nd	Door Casing	White	Wood	0.2
Stairs 1st to 2nd	Door Jamb	White	Wood	< 0.1
Stairs 1st to 2nd	Window Sill	White	Wood	< 0.1
Stairs 1st to 2nd	Window Casing	White	Wood	< 0.1
Stairs 1st to 2nd	Ceiling	White	Gypsum	< 0.1
Stairs 1st to 2nd	Shelf	White	Wood	0.4
2nd Floor Main Room	Wall	White	Gypsum	0.3
2nd Floor Main Room	Baseboard	White	Wood	< 0.1
2nd Floor Main Room	Ceiling	White	Gypsum	< 0.1
2nd Floor Main Room	Window Sill	White	Wood	< 0.1
2nd Floor Main Room	Window Casing	White	Wood	< 0.1
2nd Floor Main Room	Door Casing	White	Wood	< 0.1
2nd Floor Main Room	Door Jamb	White	Wood	< 0.1
2nd Floor Main Room	Bookshelf	Black	Wood	< 0.1
2nd Floor Small Front Room	Wall	Beige	Gypsum	< 0.1
2nd Floor Small Front Room	Ceiling	White	Gypsum	< 0.1
2nd Floor Small Front Room	Door	White	Wood	< 0.1
2nd Floor Small Front Room	Door Casing	White	Wood	< 0.1
2nd Floor Small Front Room	Door Jamb	White	Wood	< 0.1
2nd Floor Small Front Room	Window Sill	White	Wood	< 0.1
2nd Floor Small Front Room	Window Casing	White	Wood	< 0.1
2nd Floor Small Front Room	Shelf	White	Wood	< 0.1
2nd Floor Kitchen	Wall	White	Gypsum	< 0.1
2nd Floor Kitchen	Ceiling	White	Gypsum	< 0.1
2nd Floor Kitchen	Baseboard	White	Wood	< 0.1
2nd Floor Kitchen	Door	White	Wood	0.3
2nd Floor Kitchen	Door Casing	White	Wood	< 0.1
2nd Floor Kitchen	Door Jamb	White	Wood	< 0.1
2nd Floor Kitchen	Window Sill	White	Wood	< 0.1
2nd Floor Kitchen	Window Casing	White	Wood	0.2
2nd Floor Kitchen	Window Sash	White	Wood	0.4
2nd Floor Kitchen	Exterior Sill	White	Wood	0.3
2nd Floor Kitchen	Cabinet	White	Wood	< 0.1
2nd Floor Bathroom	Wall	White	Gypsum	< 0.1
2nd Floor Bathroom	Ceiling	White	Gypsum	< 0.1
2nd Floor Bathroom	Window Sill	White	Wood	< 0.1

Lead Paint Testing Results by XRF
28 South Broadway
Salem, New Hampshire
January 15, 2020

Room/Area	Location/Component	Color	Substrate	Results (mg/cm^2)
2nd Floor Bathroom	Door	White	Wood	0.2
2nd Floor Bathroom	Door Casing	White	Wood	< 0.1
2nd Floor Bathroom	Door Jamb	White	Wood	< 0.1

- <0.1 = less than the limit of quantification of the XRF.
- mg/cm^2 = milligrams of lead per square centimeter of sampled surface area.

Appendix G

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Appendix G Locations of the Regulated Materials 28 South Broadway, Salem, NH		
Location	**Material Description**	**Quantity**
1st Floor - Throughout	Fire Extinguisher	1
	Exit Sign	3
	Emergency Light Battery	1
2nd Floor - Throughout	4’ Fluorescent Tubes	24
	PCB/Non-PCB Containing Ballasts	6
	Fire Extinguisher	1
	Exit Sign	3
	Emergency Light Battery	3
	Refrigerator	1
	Window A/C Unit	1