



ENVIRONMENTAL • GEOTECHNICAL  
BUILDING SCIENCES • MATERIALS TESTING

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**Wheeler Library  
Hazardous Materials Inspection  
ATC Project No. 01-225996.00  
Document No. 47232  
January 9, 2017**

**Prepared for:**

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## ***EXECUTIVE SUMMARY***

ATC Group Services LLC. has completed a survey on December 15, 2016 for asbestos containing materials (ACM), lead containing paints (LCP) in building materials, and a visual inspection for Other Hazardous Materials (OHMs) at the Wheeler Library located at 49 East Main Street in Orange, Massachusetts. The survey was performed to identify regulated materials that may be disturbed during proposed renovation activities. Survey findings for the subject site are presented in the body of this report.

ATC collected 52 bulk samples of suspect Asbestos Containing Materials (ACM) from the interior and exterior of the building. These samples were analyzed by an accredited laboratory for asbestos content. Analytical results indicate multiple samples represents building materials that are ACM or are presumed to contain asbestos. Findings are presented in Table 3.1.A (Asbestos Containing) and 3.1.B (No Asbestos Detected)

ATC collected nine paint chip bulk samples from various painted surfaces throughout interior and exterior spaces of the building. These samples were analyzed by an accredited laboratory for total lead content. Analytical results did indicate lead was detected in three of the samples collected. Findings are presented in Table 3.2.

ATC inspectors also conducted a visual survey (no sampling) of various hardware, machinery and building systems that may require special handling and/or disposal prior to demolition activities. This included light fixtures/ballasts, and various operating systems that may contain PCB containing oils, mercury or other, recognized hazardous materials. Findings are presented in Table 3.3.

Analytical data sheets for all samples collected are provided as Appendix A.

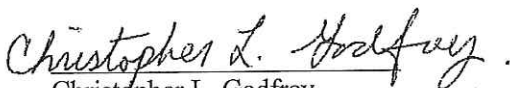
The following report summarizes the independent conclusions representing ATC's best professional judgment based on information and data available to us during the course of this assignment. Factual information regarding operations, conditions, and test data provided by the Client, owner, or their representative has been assumed to be correct and complete. Additionally, the conclusions presented are based on the conditions that existed at the time of the assessment.

Inspector Signature:



Eric Kubic

Massachusetts Asbestos Inspector #AI000327



Christopher L. Godfrey  
Senior Project Manager



## 1.0 INTRODUCTION

This survey was performed at the request of Mr. Daniel Pallota and Mr. Robert Todisco of P3 Project Planning Professionals for the purpose of identifying hazardous building materials that may be impacted during the proposed renovation/demolition of various areas throughout the Wheeler Library located 49 East Main Street in Orange, Massachusetts.

Regulatory requirements and survey practices applicable to demolition projects in Massachusetts are as follows, but not limited to the following:

### *Asbestos*

- The United States Environmental Protection Agency (USEPA) National Emissions Standard for Hazardous Air Pollutants (NESHAPs, 40 CFR 61, Subpart M) requires facilities be inspected by competent persons for the presence of asbestos containing materials (ACM) which could or will be disturbed during renovation, construction and demolition activities. Where quantities of ACM exceed 160 square feet or 260 linear feet, asbestos abatement (removal) is required.
- The Massachusetts Department of Environmental Protection (MADEP) additionally regulates ACM under 310 CMR 7.15 & 310 CMR 19.061.
- The Massachusetts Department of Labor and Workforce Development, Department of Occupational Safety (MA DLWD-DOS) regulates asbestos worker protection and work practices under 453 CMR 6.00
- The Occupational Safety and Health Administration (OSHA) regulates asbestos worker protection under 29 CFR 1926.1101

### *Lead*

- Lead containing materials in a demolition stream have the potential to create a D008 Listed hazardous waste under 40 CFR Part 760 and 310 CRM 30.
- The Occupational Safety and Health Administration (OSHA) regulates construction worker exposure to any amount of lead under 29 CFR 1926.62.

### *Hazardous Materials/Universal Wastes*

- Handling, Transportation & Disposal of hazardous materials including asbestos, lead, PCBs, Universal Wastes and other disposal ban items is regulated by the USEPA, USDOT, and MADEP.

## 1.1 LIMITATIONS

The term “non-destructive sampling method” refers to a method of collecting samples that does not significantly impact interior or exterior finishes of the building. Surveys for the presence of ACM are therefore limited to those materials accessible by non-destructive sampling methods. ACM may be present in materials not accessible by this sampling methodology, and may be encountered during renovation or demolition of the structure. The term “destructive sampling method” refers to the method of collecting samples that would require destruction of various building systems (i.e. wall cavities, ceilings, flooring materials, roofing) for the purpose of locating hidden heating, plumbing, or other building components that may contain ACM. Destructive methods are recommended for properties slated for demolition. Additional limitations may exist for both destructive and non-destructive sampling methods. Certain locations of the building may be physically inaccessible, or inaccessible due to electrical, mechanical, structural, or other hazards which might exist in the structure at the time of the survey.

Suspect ACM and/or LCP subsequently identified or encountered in physically inaccessible areas during demolition and/or demolition activities and not listed in this report should be assumed to contain asbestos, and/or lead unless testing confirms otherwise.

Observations and sampling of the roofing materials was limited due to the build-up of ice and snow on the flat and pitched sections of the roof. No samples were collected of any flashing compounds or asphalt shingles. ATC inspectors observed and sampled what appeared to be residual tar and gravel roofing around the roof hatch. It cannot be definitively stated that all materials on the flat roof sections are homogenous in nature. Additional roof sampling of the flat and pitched sections of the roof will be necessary prior to those materials being disturbed during renovation/demolition. No subsurface inspection or assessment was performed, the possible presence of below grade dampproofing and/or piping may be present and should be determined prior to potential disturbance and/or design.

The following areas were not included in the scope of work at the time of this evaluation.

- Materials only accessible through structural demolition including within walls and above fixed ceilings;
- Fire doors;
- Roofing;
- Below grade;
- Materials entombed or beneath concrete; and
- Materials associated with functioning MEP systems.



## 2.0 METHODS AND MATERIALS

### 2.1 ASBESTOS

Samples were collected per regulations governing asbestos surveys. Samples were placed into plastic bags with an air tight seal. Labels were affixed to the sample bags with specific nomenclature.

Bulk samples were analyzed by Polarized Light Microscopy (PLM) using the United States Environmental Protection Agency USEPA/600/R-93/116 method. Sample analysis was conducted by ProScience Analytical Services, Inc., 22 Cummings Park, Woburn, Massachusetts (NVLAP Accreditation 2000090-0).

There are six minerals grouped into the term "asbestos." Chrysotile, amosite, and crocidolite are the asbestos minerals most commonly found in building materials. ACM is defined as a material containing more than one percent (1%) asbestos by weight. ACBM is a subset of materials in the group ACM and are considered to be ACM that is found in or on interior structural members of a building. Materials found to be asbestos containing are listed in Section 3.0. Exact sample compositions are included in the laboratory reports or chains of custody found in Appendix A.

Types, locations, estimated quantities, and conditions of ACM are shown on Table 3.1.A. Suspect materials sampled and found not to contain ACM are found in Table 3.1.B.

Polarized light microscopy (PLM) is the root method used for the identification of ACM. The USEPA Office of Research and Development (USEPA/ORD) has reviewed data from performance audits of various laboratories performing PLM. The results of that review indicated an unacceptable number of false negatives and positives for visual estimation of materials containing less than 10% asbestos. On the basis of those findings the National Emissions Standards Hazardous Air Pollutants (NESHAP) regulations were amended on November 20, 1990 (Federal Register, V.55, and N.224). The revisions state that if the analyst detects asbestos in the sample and estimates the amount to be less than 10% by visual estimation, the parties legally responsible (owner or operator) for the building may (1) elect to assume the amount to be greater than 1% and treat the material as ACM or (2) require verification of the amount by point counting. Point counting is a technique used to quantify the amount of asbestos present in a sample on which PLM has already been performed. ATC recommends point counting re-analysis for asbestos values less than 10%, and where applicable those results are reflected in the report. In instances where client authorization is not received for this re-analysis, PLM visual results indicating a trace or 1% value will be reported as assumed ACM as required by item (1) above.

A similar situation exists for matrix bound fibers such as those found in floor tiles, mastics, and asphalt based materials. The organic matrix of these bulk samples may interfere with the identification and quantification of asbestos mineral content. These types of samples are generally referred to as Non-friable organically bound (NOB) materials. Transmission Electron Microscopy (TEM-NOB) is a method that utilizes a combination of special sample preparation techniques and high magnification to quantify asbestos content with greater accuracy than PLM. Currently only the State of New York has regulations requiring TEM-NOB re-analysis of suspect ACM for which negative or trace determination resulted from PLM analysis. Although additional cost is involved, ATC recommends TEM-NOB analysis under certain circumstances, as a state of the art means of evaluation.

## **2.2 LEAD CONTAINING PAINT (LCP)**

ATC collected nine total paint chip samples from painted surfaces within the renovation areas of the building. These samples were subsequently submitted to ProScience Analytical Services, Inc. of Woburn, Massachusetts for total lead concentration determination. Laboratory results indicate the presence of lead was detected in three of the samples collected. Paint chip data is provided in Table 3.2.

The U.S. Department of Housing and Urban Development (HUD) standards (24 CFR Part 35) and the USEPA Toxic Substances Control Act (TCSA) define LCP as layers of paint on an applicable surface having lead equal to or greater than 1.0 milligram per square centimeter (mg/cm<sup>2</sup>) or 0.5% by dry weight. The OSHA Lead in Construction standard (29 CFR 1926.62) considers any level of lead to be potentially harmful when disturbed during demolition or construction. Various OSHA work practices and worker protection requirements are mandated depending on the nature of the disturbance.

## **2.3 OTHER HAZARDOUS MATERIALS**

Observations of light fixtures/ballasts/transformers, various operating systems that may contain PCBs, mercury, and/or oils were also performed. Representative light fixtures were accessed and the ballasts were inspected for the presence of PCBs. Any mechanical systems encountered during this survey were inspected for leaks or residual staining related to a potential leak of stored oils, PCBs and other internal fluids. Items that may contain coolants or refrigerants include at a minimum, refrigeration and freezer units, and air conditioner units.

Items that may contain mercury include fluorescent lights, thermometers, heating thermostats, and electrical switches. The majority, if not all, of these items are capable of being removed (with appropriate handling methods) intact for proper disposal or reuse.

### **3.0 RESULTS AND FINDINGS**

The results of this survey are presented in tabular form. These tables summarize the nature, distribution and estimated quantity of ACM, LCP and OHM's found during this survey.

Asbestos Containing Materials are found in Table 3.1.A.

Suspect materials sampled and found not contain asbestos are found in Table 3.1.B.

Lead concentrations for bulk samples collected from various painted surfaces are found in Table 3.2.

Other Hazardous Materials (OHMs) information is presented in Table 3.3



**TABLE 3.1.A**  
**ASBESTOS CONTAINING MATERIALS AND AFFECTED BUILDING COMPONENT SYSTEMS**  
**WHEELER LIBRARY**  
**49 EAST MAIN STREET**  
**ORANGE, MASSACHUSETTS**  
**Asbestos Containing Materials and Affected Building Component Systems**

Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
03A, 03B, 04A, 04B	Beige 12"x12" floor tile and associated black mastic	Children's library	3% Chrysotile	Misc.	Non-Friable, Accessible	Intact	1,200 SF
06A, 06B	White floor penetration packing	Basement-Hallway near the door to the storage room	75% Chrysotile	TSI	Friable, Accessible	Intact	2 SF
11A, 11B, 24A, 16A, 16B	Brown floor tile mastic and white base material under brown floor tile mastic. White base material under 1/2" concrete	Throughout the main floor	10% Chrysotile	Misc.	Non-Friable, Accessible	Intact	3,400 SF
15A, 15B, 15C	Brown carpet pad mastic	Southern half of the main floor.	2% Chrysotile	Misc.	Non-Friable, Accessible	Intact	1,600 SF
21A, 21B	Exterior window casing caulking	Exterior	10% Chrysotile	Misc.	Non-Friable, Accessible	Intact	36 Units
22A, 22B	Exterior door casing caulking	Exterior	20% Chrysotile	Misc.	Non-Friable, Accessible	Intact	3 Units
Presumed	HB Smith Boiler	Boiler room	Presumed	TSI	Friable, Accessible	Intact	1 Unit
Presumed	Thermal Systems Insulation	Throughout	Presumed	TSI	Friable, Accessible	Intact	250 LF

**Notes: \***

- SF = square feet; LF = linear feet
- See Limitations Section for areas deemed inaccessible or not included in Scope of Work.
- White material may be under the uncarpeted section of the main floor, treat all main level floor surfaces as PACM.
- Any suspect materials not identified in report shall be presumed ACM until laboratory data prove otherwise.
- Analytical results for samples obtained by EPA/600/R-93/116 or "visual estimate" quantitative method.

**TABLE 3.1.B**  
**SUSPECT MATERIALS WITH NO ASBESTOS DETECTED**  
**WHEELER LIBRARY**  
**49 EAST MAIN STREET**  
**ORANGE, MASSACHUSETTS**

Field ID	Description	Location
01A, 01B	Black paper	Wall of attic stairwell
02A, 02B	Gray duct sealant	Basement boiler room
05A, 05B, 05C, 05D, 05E	White plaster wall and ceiling	Throughout the building
07A, 07B	Spalled concrete-like ceiling	Boiler room
08A, 08B	Residual felt paper on roof deck	Near roof hatch
09A, 009B	Residual black material under felt	Near roof hatch
10A, 10B	12"x12" cork floor tile	Left and right closet
12A, 12B	White floor leveler	Left closet and "Teen Zone"
13A, 13B	Yellow floor tile mastic	Basement meeting room
14A, 14B, 14C	White floor leveler	Basement meeting room
18A, 18B, 18C, 19A, 19B	Joint compound and associated gypsum board	Basement meeting room
20A, 20B, 20C	Exterior window glazing compound	Exterior
23A, 23B	White exterior window casing caulking (repair)	Exterior

**Notes:**

- See Limitations Section for areas deemed inaccessible or not included in Scope of Work.
- Any suspect materials not identified in report shall be presumed ACM until laboratory data prove otherwise.

**TABLE 3.2**  
**LEAD CONTAINING PAINT SAMPLING RESULTS**  
**WHEELER LIBRARY**  
**49 EAST MAIN STREET**  
**ORANGE, MASSACHUSETTS**

Field ID	Description	Location and Substrate	Result (% Weight)	Reporting Limit (RL)
Pb-1	Lavender paint	Gypsum board wall in the meeting room	0.49	0.013
Pb-2	Green paint	Plaster wall paint under wood wall paneling	0.56	0.025
Pb-3	Green paint	Concrete floor paint in the Directors office	2.0	0.022
Pb-4	White paint	Plaster wall paint in the bathroom	6.8	0.0076
Pb-5	White paint	Plaster ceiling paint in the mezzanine	0.023	0.016
Pb-6	Red paint	Structural steel in the attic	0.15	0.016
Pb-7	Yellow paint	Plaster wall in the "Teen Zone"	0.56	0.017
Pb-8	White paint	Concrete ceiling paint in the meeting room	0.037	0.024
Pb-9	Lavender paint	Wood window sash in the Children's library	7.3	0.015

**Notes:**

- Total Lead Analysis in Paint Using SW846-7420/3051

**TABLE 3.3**  
**OTHER HAZARDOUS MATERIALS (OHM'S)**  
**WHEELER LIBRARY**  
**49 EAST MAIN STREET**  
**ORANGE, MASSACHUSETTS**

Suspect Hazardous Item	Location	Estimated Quantity
Fluorescent tube lights	Throughout	135 units
Ballasts	Throughout	82 units
Compact fluorescent bulbs	Basement office	3 units
Fire extinguishers	Throughout	3 units
Hydraulic door close	Throughout	4 units
Exit sign	Throughout	5 units
Boiler	Boiler room	2 units
Ceiling mounted heaters	Throughout	3 units
275 gallon above ground storage tank	Boiler room	2 units



## **4.0 DISCUSSION AND INTERPRETATION**

### **4.1 ASBESTOS**

Response actions are based in part upon our current understanding of area usage or future usage at the time of the survey. Removal is always required where pending demolition will disturb ACM's. Any material discovered in the course of demolition activities, which is not identified in this report, should be presumed to contain asbestos until sampling shows otherwise. Section 1.1 Limitations details areas that were deemed inaccessible or were not included in the scope of work.

### **4.2 LEAD**

The presence of lead associated with various painted surfaces was detected in all of the samples collected. Table 3.2 details locations and results of the materials tested.

### **4.3 OTHER HAZARDOUS MATERIALS**

ECS conducted a visual inspection (no sampling) of various hardware, machinery, and building systems which may require special handling and/or disposal prior to demolition activities. The results of the Other Hazardous Material Inspection are detailed in Table 3.3. The majority, if not all, of these items are capable of being removed (with appropriate handling methods) intact for proper disposal or reuse

## 5.0 CONCLUSION

Asbestos abatement of items listed in Table 3.1.A will be required prior to any demolition work that would disturb these materials. Additional roof sampling of the flat and pitched sections of the roof will be necessary prior to those materials being disturbed during renovation/demolition. ATC recommends the preparation of an asbestos abatement specification to define work practice requirements in these areas.

OSHA lead regulations will apply to any demolition operation (i.e. sanding, scraping, cutting, and welding) that would disturb painted surfaces which contain lead. ATC recommends the preparation of a LCP handling specification to define work practice requirements in these areas.

Disposal of materials coated with paint containing lead is subject to the USEPA RCRA regulations. At the present time, federal and state regulations do not necessarily require that materials coated with lead-based paint be removed prior to demolition. However, wastes generated are required to be characterized prior to disposal. ATC recommends that TCLP testing be performed on the waste stream generated from demolition activities performed at the property inspected.

Other Hazardous Materials are listed in Table 3.3 and should be removed before any demolition and/or demolition activities impact these materials. ATC recommends the preparation of a specification defining the handling and disposal of these materials.

# **Appendix A**

## *Laboratory Analytical Data*



# ProScience Analytical Services, Inc.

## PLM Asbestos Chain of Custody Record

### LABORATORY/HEADQUARTERS

22 Cummings Park, Woburn, MA 01801  
T: 781-935-3212 F: 781-932-4857

Client: ATC Associates

Address: 588 Silver Street, Agawam, MA 01001

Project Site: Wheeler Library Orange Ma-

Project #: 01-225-996-00

Phone Number: (413) 386-4774

Contact: Eric Kubic Ekubic@ecsconsult.com

For Lab Use Batch # B103233

### Special Instructions:

Relinquished by/date:

Received by/date:

Samples received:

Fixed (E-mailed) Verbal by/date:

Stop on first positive Yes/No

Turn Around Time Requested

Same day 24 Hour 48 Hour 72 Hour 5 Days

Analyzed by/date:

Stop on first positive Yes/No

Stop on first positive Yes/No

Stop on first positive Yes/No

Stop on first positive Yes/No

Stop on first positive Yes/No

Stop on first positive Yes/No

Stop on first positive Yes/No

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Stop on first positive Yes/No

Stop on first positive Yes/No

Sample ID	Date Sampled	Description/Location	% Asbestos	Color	Homogeneity	Texture	Friable	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RT	Asbestos Percentage (%)	Circle Type	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non Fibrous
01A	12/15/16	FT/M Lm Cm Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rt Description: Paper on wall of stairwell Location: 1st fl	0	Brown	Homogeneous	Granular	Friable	Amorphous	Extinction	Sign of Elongation	Birefringence	Pleochroism	RT	Asbestos Percentage (%)	Circle Type	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non Fibrous
01B		FT/M Lm Cm Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rt Description: 1' Location: 1st fl	0	Brown	Homogeneous	Granular	Friable	Amorphous	Extinction	Sign of Elongation	Birefringence	Pleochroism	RT	Asbestos Percentage (%)	Circle Type	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non Fibrous
02A		FT/M Lm Cm Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rt Description: Gey duct Sealant Location: 1st fl	0	Green	Homogeneous	Granular	Friable	Amorphous	Extinction	Sign of Elongation	Birefringence	Pleochroism	RT	Asbestos Percentage (%)	Circle Type	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non Fibrous
02B		FT/M Lm Cm Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rt Description: 1' Location: 1st fl	0	Green	Homogeneous	Granular	Friable	Amorphous	Extinction	Sign of Elongation	Birefringence	Pleochroism	RT	Asbestos Percentage (%)	Circle Type	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non Fibrous
03A		FT/M Lm Cm Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rt Description: Beige 12x12 Location: 1st fl	0	Green	Homogeneous	Granular	Friable	Amorphous	Extinction	Sign of Elongation	Birefringence	Pleochroism	RT	Asbestos Percentage (%)	Circle Type	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non Fibrous
03B		FT/M Lm Cm Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rt Description: 1' Location: 1st fl	0	Green	Homogeneous	Granular	Friable	Amorphous	Extinction	Sign of Elongation	Birefringence	Pleochroism	RT	Asbestos Percentage (%)	Circle Type	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non Fibrous



3103233

Sample ID	Date Sampled	Description/Location	% Asbestos	Color	Homogeneity	Texture	Fracture	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	I	II	Chrysotile	Amosite	Crocidolite	Tremolite	Anthophyllite	Actinolite	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
04A	12/15/16	Location: Kids Library Description: Black FT/M Lm Cm Plb/Pis Gyp/Jc CT CK Giz Adh Ppr Rf	0	B N T U				W P + L U S S 50 3																			97
04B		Location: Kids Library Description: DNA FT/M Lm Cm Plb/Pis Gyp/Jc CT CK Giz Adh Ppr Rf																									
04C		Location: Kids Library Description: DNA FT/M Lm Cm Plb/Pis Gyp/Jc CT CK Giz Adh Ppr Rf																									
05A		Location: Kids Library Description: Kids Library FT/M Lm Cm Plb/Pis Gyp/Jc CT CK Giz Adh Ppr Rf	0	W H N T U																							95
05B		Location: Mezzanine Description: Mezzanine FT/M Lm Cm Plb/Pis Gyp/Jc CT CK Giz Adh Ppr Rf	0	W H N T U																							95
05C		Location: Bathroom Description: Bathroom FT/M Lm Cm Plb/Pis Gyp/Jc CT CK Giz Adh Ppr Rf	0	W H N T U																							95
05D		Location: Teen Zone Description: Teen Zone FT/M Lm Cm Plb/Pis Gyp/Jc CT CK Giz Adh Ppr Rf	0	W H N T U																							95
05E		Location: Main Adult Library Area Description: Main Adult Library Area FT/M Lm Cm Plb/Pis Gyp/Jc CT CK Giz Adh Ppr Rf	0	W H N T U																							95
06A		Location: Hallway near door to Theater Rm. Description: Hallway near door to Theater Rm. FT/M Lm Cm Plb/Pis Gyp/Jc CT CK Giz Adh Ppr Rf	75	W H N T U				W P + L U S S 50 75																			25
06B		Location: Kids Library Description: Kids Library FT/M Lm Cm Plb/Pis Gyp/Jc CT CK Giz Adh Ppr Rf																									

Wheeler Library Orange Ma.

Relinquished By: [Signature]

Date: 12/16/16  
Page 2 of 2



mmv  
B10322233

Sample ID	Date Sampled	Description/Location	% Asbestos	Color	Homogeneity	Texture	Frangible	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	I	II	Chrysolia	Amosite	Crocidolite	Tremolite	Anthophyllite	Actinolite	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non Fibrous
07A	12/15/16	FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: Spalled cement-like Ceiling. Location: Boiler Room	Ø	GNH																							100
07B		FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: "	Ø	GNH																							100
08A		FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: Removal felt Paper on roof deck (wood)	Ø	GNH																							5
08B		FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: Roof Hatch	Ø	GNH																							5
09A		FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: " FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: "	Ø	GNH																							100
09B		FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: " FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: "	Ø	GNH																							100
10A		FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: " FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: "	Ø	GNH																							2
10B		FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: " FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: "	Ø	GNH																							2
11A		FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: " FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: "	Ø	GNH																							100
11B		FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: " FT/M Lm Cm Plb/Pls Gyp/Jc CT CK Glz Adh Ppr Rt Description: " Location: "	Ø	GNH																							100

\*Heavily contaminated with a positive material, Wheellet Library Orange Ma.

*[Signature]*



B1032-3

Sample ID	Date Sampled	Description/Location	% Asbestos	Color	Homogeneity	Texture	Flake	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	I	II	Chrysotile	Amosite	Crocidolite	Tremolite	Anthrophyllite	Actinolite	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non Fibrous
12A	12/15/16	Location: Left Closet Description: White floor level - Back Closet	Ø	W H	2	2	2	2																			100
12B		Location: Teen Zone Description: IL under book case	Ø	W H	2	2	2	2																			100
13A		Location: Teen Zone Description: Yellow	Ø	W H	2	2	2	2																			100
13B		Location: Meeting Room Description: Yellow	Ø	W H	2	2	2	2																			100
14A		Location: IL Description: White floor level	Ø	W H	2	2	2	2																			100
14B		Location: IL Description: white floor level	Ø	W H	2	2	2	2																			100
14C		Location: IL Description: Brown Carpet Red Mastic	Ø	W H	2	2	2	2																			100
15A		Location: Teen Zone Description: DNA	Ø	W H	2	2	2	2																			98
15B		Location: Main Area Description: DNA																									
15C		Location: Large Point Area Description: DNA																									

Wheeler Library Orange Ma.

Relinquinshed By:

Comments: Birefringence L= less than .010, M= .011-.029, H= greater than .03; Microscope Olympus BH-2, Serial # circle 1- 242277, 229027, 235000, 230663

Date: 12/16/16  
Page 4 of 5

[illegible]

Wheeler Library Orange Ma.

*[Handwritten signature]*

Date: 12/18/16  
Page 5 of 2

W needed a dim change / na.  
Relinquished By: \_\_\_\_\_  
Comments: Birefringence |  $\leq$  less than 010. M= .011-.029. H= greater than .03. Microscope Olympus BH-2, Serial # circle 1- 242277, 229027, 235000, 230663



B103.33

Sample ID	Date Sampled	Description/Location	% Asbestos	Color	Homogeneity	Texture	Friable	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	I	II	Chrysotile	Amosite	Crocidolite	Tremolite	Anthophyllite	Actinolite	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non Fibrous
20A	12/15/14	FT/M Lm Om Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rf Description: ext w/c Location: North side	0	g	NH	HN	0																			100	
20B		FT/M Lm Om Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rf Description: ext Location: East side	0	g	NH	HN	0																			100	
20C		FT/M Lm Om Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rf Description: ext w/c Location: South side	0	g	NH	HN	0																			100	
21A		FT/M Lm Om Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rf Description: ext Location: ext	10	g	NH	HN	0																			90	
21B		FT/M Lm Om Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rf Description: w/c Location: ext																									
22A		FT/M Lm Om Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rf Description: DCC Location: ext	20	g	NH	HN	0																			80	
22B		FT/M Lm Om Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rf Description: " " DWA Location: " "																									
23A		FT/M Lm Om Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rf Description: White ext w/c (Refract) Location: ext	0	g	NH	HN	0																			100	
23B		FT/M Lm Om Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rf Description: " " " " Location: ext	0	g	NH	HN	0																			100	
24A		FT/M Lm Om Plb/Pis Gyp/Jc CT Ck Glz Adh Ppr Rf Description: White material under brown Location: floor tile mastic w/11B	15	g	NH	HN	0																			80	

Wheeler Library Orange Ma.

Relinquished By: 

Comments: Birefringence L = less than .010, M = .011-.029, H = greater than .03; Microscope Olympus BH-2, Serial # circle 1- 242277, 229027, 235000, 230663

Date: 12/16/14  
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**ProScience Analytical Services, Inc.**  
22 Cummings Park, Woburn, MA 01801

Telephone: 781-935-3212  
Facsimile: 781-932-4857  
Email: [chemistry@proscience.net](mailto:chemistry@proscience.net)

## Laboratory Report

**Contact:** Chris Godfrey  
**Client:** ATC Group Services, LLC  
**Address:** 588 Silver Street  
Agawam, MA 01001

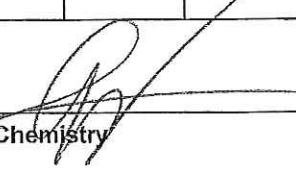
**Batch #:** C 290455  
**Date received:** 12/19/2016  
**Date analyzed:** 12/19/2016  
**Date of report:** 12/19/2016

**Project #** 01-225996  
**P.O.#** N/A  
**Project Site:** Wheeler Library  
Orange, MA

AIHA-LAP, LLC Lab ID 102754

### Lead Analysis In Paint Using SOP Based on SW846-7420/3051 Results in weight percent on an "as received" weight basis

Lab ID	Client ID	Sample date	Description	Result	Reporting Limit	Comments
C 564763	Pb-1	12/15/16	Lavender Gypsum Wall Paint- Meeting Room	0.49	0.013	
C 564764	Pb-2	12/15/16	Green Plaster Wall Paint under Paneling- Kids Library	0.56	0.025	
C 564765	Pb-3	12/15/16	Green Concrete Floor Paint- Director's Office	2.0	0.022	
C 564766	Pb-4	12/15/16	White Plaster Wall Paint- Bathroom	6.8	0.0076	
C 564767	Pb-5	12/15/16	White Ceiling Plaster Paint- Mezzanine	0.023	0.016	
C 564768	Pb-6	12/15/16	Red Structural Steel Paint- Attic	0.15	0.016	
C 564769	Pb-7	12/15/16	Yellow Plaster Wall Paint- TeeA Zone	0.56	0.017	
C 564770	Pb-8	12/15/16	White Concrete Ceiling Paint- Meeting Room	0.037	0.024	
C 564771	Pb-9	12/15/16	Lavender Wood Window Sash Paint- Meeting Room	7.3	0.015	

  
Simona Peavey, Tech. Manager Chemistry  
Aimee Cormier, Lab Director

Page 1 of 1

Unless otherwise indicated, all samples were received in acceptable condition.

All result apply only to the samples as received and are accurate to no more than two significant figures.

Unless otherwise indicated, all the quality control criteria for the method above have been met.

RL-Reporting Limit(%by weight)

Note on units: mg/Kg is the same as ppm by weight.

# ProScience Analytical Services, Inc.

## Chemistry Chain of Custody Record

LABORATORY/HEADQUARTERS  
22 Cummings Park, Woburn, MA 01801  
T: 781-935-3212 F: 781-932-4857

Client

ATE

Address 598 Silver Street  
Town Andover State/Zip MA 01801  
Project Site Wheeler Library Project Number 01-225996  
Line 1  
Line 2  
PO Orange, MA  
Contact Phone  
FAX  
AUPager

www.proscience.net  
general@proscience.net

Turn Around Time Requested

Rush < 6 Hours

Same Day

Next Day

2 Day

3 Day

5 Days

☐ NELAC analysis

Element gravimetric

TYPE OF ANALYSIS (circle)  
DUST WIPES (0.1 g) SOIL (1 g)  
AIR TSP (100g) TQIP (100g)  
PM10 Other

Element Pb Cd Cr As  
Se Ag Ba Fe

For Laboratory Use

Other (please specify under Comments)

BATCH NUMBER

☐ QC

C 290455

Please use a separate form for each matrix.

☐ ASTM E1792 FOR LABORATORY USE ONLY

Date and Time Sampled	Field I.D.	Sample Description/Location	Air Sampling Information				Wiped area				ANALYSIS				Lab I.D.
			Start Time	End Time	Start Flowrate	End Flowrate	Volume (liters)	length (inch)	width (inch)	Area (sq in)	Weight (grams)	AA/ICP Reading	Dil'n	RESULT	
12/15/16	76-1	lavender Gyp wall Paint - Meeting Room													564763
	76-2	Green Plaster wall Paint under Running - kids Library													64
	76-3	Green concrete floor Paint. Directors Office													65
	76-4	White Plaster wall Paint. Bathroom.													66
	76-5	White ceiling Plaster Paint. mezzanine.													67
	76-6	Red structural steel Paint. Attic													68
	76-7	Yellow Plaster wall Paint. Twp Zone.													69
	76-8	White concrete ceiling Paint - meeting Rm.													70
	76-9	lavender wood window Sash Paint - meeting Room.													71

Relinquished By:

Received By:

Date:

Date:

12/16/16

12/19/16

Time: 5:00

Time: 10:45am

Comments:

ver 5.3

Field blanks are required for airs and wipes per the sampling method.

Proscience Analytical Services reserves the right to subcontract samples to an appropriately accredited laboratory when we are unable to perform the analysis in house.

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