



LIMITED ASBESTOS INSPECTION REPORT

50 Skyline Drive, Worcester, MA.
Rooms C2 and C3

PREPARED FOR:

Mr. Chris Adcock
City of Worcester
Department of Public Facilities
50 Skyline Drive
Worcester, MA 01605

PREPARED BY:

Atlas Technical Consultants LLC
73 William Franks Drive
West Springfield, MA 01089

December 27, 2021



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December 23, 2021

Atlas No. 183CG21102

Mr. Chris Adcock
City of Worcester-Department of Public Facilities
50 Skyline Drive - Worcester, MA 01605

**Subject: Limited Asbestos Inspection Report
50 Skyline Drive, Worcester, MA.
Rooms C2 and C3**

Dear Mr. Adcock:

The enclosed Asbestos Inspection Report was performed and prepared by Atlas Technical Consultants (ATLAS). The survey included an inspection of accessible areas of Rooms C2 and C3 as directed by Facility Staff. The scope of the survey was determined by the client. ATLAS' visual observations and laboratory reports forms the basis for the conclusions contained in this report.

The following licensed and accredited inspector performed the inspection on December 10, 2021. If you have any questions, please call us at 413.781.0070.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Justin Levesque".

Justin Levesque
Massachusetts Asbestos Inspector #AI000333

A handwritten signature in black ink, appearing to read "Christopher L. Godfrey".

Christopher Godfrey
Senior Project Manager

Attachment: Limited Asbestos Inspection Report

Distribution: adcockcl@worcesterma.gov



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LIST OF ACRONYMS AND ABBREVIATIONS

ACBM	Asbestos-Containing Building Material
ACM	Asbestos-Containing Material
AHERA	Asbestos-Hazard Emergency Response Act
CFR	Code of Federal Regulations
DPH	Department of Public Health
EPA	Environmental Protection Agency
LBP	Lead Based Paint
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOB	Non-Friable Organically Bound
OSHA	Occupational Safety and Health Administration
PACM	Presumed Asbestos-Containing Material
PLM	Polarized Light Microscopy
RACM	Regulated Asbestos-Containing Building Material
TEM	Transmission Electron Microscopy
SF	Square Feet
LF	Linear Feet
EA	Each



1. SITE DESCRIPTION

This report addresses sampling in Rooms C2 and C3 located at 50 Skyline Drive in Worcester. Interior finishes include sheetrock and joint compound, plasters, various floor tiles, drop ceilings and other various materials.

1.1 SURVEY LIMITATIONS

Limited destructive investigation techniques were used in this survey. Suspect lead, PCB, asbestos, mercury or other hazardous materials may exist at inaccessible areas that were not be evaluated during this study.

ATLAS recommends abatement contractors provide removal unit pricing for typical materials in the event unforeseen asbestos is encountered during the renovation.

2. ASBESTOS INSPECTION

ATLAS Services Scope of Work included a limited Asbestos Inspection of the above referenced areas. Outlined below is a description of ATLAS' testing methodology.

2.1 ASBESTOS PROTOCOL

ATLAS performed a limited pre-renovation survey to identify suspect asbestos-containing materials in the above referenced building. The Asbestos Inspection included a visual assessment of accessible suspect asbestos-containing materials and subsequent bulk sampling and analysis.

EPA and OSHA define ACBM as any material containing greater than one percent (>1%) asbestos. The ACBM inspection and bulk sampling was performed in accordance with the methods outlined in the U.S. EPA guidance document titled, Guidance for Controlling Asbestos-Containing Materials in Buildings (Document No. 560/5-85/024). In addition, bulk sampling of asbestos was performed in general accordance with 40 CFR Part 763 Asbestos Hazard Emergency Response Act (AHERA) requirements for number of samples and types of ACBM to be sampled. According to these requirements, materials are classified as either surfacing (e.g., ceiling plaster, wall plaster, spray-applied fireproofing), thermal system insulation (e.g., pipe insulation, pipe fitting insulation, boiler insulation), or miscellaneous materials (e.g., floor tile, ceiling tile, wallboard). The number of samples collected from each material varies based on the classification of the material and increases as the potential for a non-uniform mixture of asbestos in the material increases.

Samples collected for asbestos analysis were obtained by qualified and certified (Certified State of Massachusetts Site Inspector) personnel utilizing proper safety measures such as wetting the material prior to sampling, cleaning up the area by wet wiping any resulting residual debris, and wearing proper protective equipment, as needed. In order to be certain of sampling the entire thickness of a material, coring tools and knives were utilized to penetrate all layers of a material. All collected samples were then placed in appropriately labeled airtight containers for shipment to the laboratory for analysis.

2.2 ASBESTOS ANALYSIS

All samples collected were transported under chain-of-custody protocol to EMSL lab in Manhattan, NY. Bulk samples were analyzed for asbestos content using Polarized Light Microscopy (PLM) with Dispersion Staining (EPA Method 600/R-93/116 and/or EPA Method 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Building Materials). To qualify as asbestos-containing, the material must be determined to contain greater than or equal to one percent ($\geq 1\%$) from a homogeneous material area set of samples.

Consequently, according to the EPA/AHERA and State of Massachusetts Department of Environmental Protection criteria, all bulk samples from a homogeneous area must be found to contain less than one percent ($< 1\%$) asbestos in order to be classified as non-asbestos-containing. MassDEP also requires materials that contain any asbestos ($< 1\%$) be handled and disposed of as an asbestos containing material.

3. FINDINGS

Refer to the following Appendices for a summary of each tested material, location, and analytical results:

- I DATA TABLE 1- SUMMARY OF ALL MATERIALS SAMPLED
- II LABORATORY REPORTS AND CHAIN OF CUSTODY

4. CONCLUSIONS

Several asbestos containing materials and assumed asbestos contaminated materials were identified in building materials. The following response actions are required to be implemented to properly manage hazardous materials at the site:

- A. In accordance with EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations, all materials found to be asbestos-containing in the proposed work area(s) will be required to be abated prior to renovation/demolition activities. In addition, all asbestos abatement work is required to be performed by a Massachusetts state licensed Asbestos Abatement Contractor in accordance with local, state and federal regulations.
- B. Any suspect asbestos-containing material discovered during the course of renovation/demolition which is not included in this report shall be assumed to be asbestos-containing until further bulk sampling and analysis is performed.
- C. All demolition work, which disturbs lead-containing materials, will be subject to OSHA 29 CFR 1926.62 "Lead in Construction Regulations". Under OSHA, the employer is responsible for protection of their employees when performing renovation and/or demolition work which disturbs lead materials. Compliance shall include written programs, medical monitoring, exposure assessment testing and engineering controls.



NOTE: Any lead waste streams generated during demolition must have a leachate characterization (TCLP) performed prior to disposal. Other regulated metals (e.g. chromium, cadmium, etc.) may be present in paint that were not evaluated as part of this limited survey.

D. To comply with OSHA's Hazard Communication Standard, (29 CFR 1910.1200) workers shall be notified of the presence of lead, asbestos, mercury or PCB in building materials and trained on proper handling methods. This shall include, but not be limited to:

- wearing work clothes and gloves
- washing hands prior to eating
- not smoking or eating within the work area
- employing methods that minimize the generation of dust when disturbing materials to the extent practicable.

E. Prior to the start of the work, hazardous material abatement specifications may be developed to outline project requirements. Air monitoring may also be performed to determine the effectiveness of abatement.

F. For hazardous materials left in place, establish an operation and maintenance program to ensure that workers:

- Are made aware of hazardous materials locations through training or hazard labeling
- Regularly inspect hazardous materials and maintain in good condition
- Utilize personal protective equipment if exposed to hazard materials

APPENDIX I

DATA TABLE 1- SUMMARY OF ALL MATERIALS SAMPLED

Table 1- Bulk Sample Data of ALL Samples Collected, 50 Skyline Drive, Worcester, MA.

LabSampleID	ClientSample	SampleLocation	SampleDescription	CollectedDate	Test	Classification	Total Asbestos	AsbestosType	Estimated Quantity
032122627-0001	50-1A	ROOM C2	VIOLET 12X12 FT W/ PURPLE AND BLUE STREAKS	12/10/2021	PLM	Non-ACM	ND		
032122627-0002	50-1B	ROOM C2	VIOLET 12X12 FT W/ PURPLE AND BLUE STREAKS	12/10/2021	PLM	Non-ACM	ND		
032122627-0003	50-2A	ROOM C2	VIOLET 12X12 FT W/ PURPLE AND BLUE ADHESIVE	12/10/2021	PLM	Non-ACM	ND		
032122627-0004	50-2B	ROOM C2	VIOLET 12X12 FT W/ PURPLE AND BLUE ADHESIVE	12/10/2021	PLM	Non-ACM	ND		
032122627-0005	50-3A	ROOM C2	2X2 WHITE PINHOLE / FISSURE SCT	12/10/2021	PLM	Non-ACM	ND		
032122627-0006	50-3B	ROOM C2	2X2 WHITE PINHOLE / FISSURE SCT	12/10/2021	PLM	Non-ACM	ND		
032122627-0007	50-4A	ROOM C2	6" BROWN VINYL COVEBASE	12/10/2021	PLM	Non-ACM	ND		
032122627-0008	50-4B	ROOM C2	6" BROWN VINYL COVEBASE	12/10/2021	PLM	Non-ACM	ND		
032122627-0009	50-5A	ROOM C2	6" BROWN VINYL COVEBASE ADHESIVE	12/10/2021	PLM	Non-ACM	ND		
032122627-0010	50-5B	ROOM C2	6" BROWN VINYL COVEBASE ADHESIVE	12/10/2021	PLM	Non-ACM	ND		
032122627-0011	50-6A	ROOM C2	4" BROWN VINYL COVEBASE	12/10/2021	PLM	Non-ACM	ND		
032122627-0012	50-6B	ROOM C2	4" BROWN VINYL COVEBASE	12/10/2021	PLM	Non-ACM	ND		
032122627-0013	50-7A	ROOM C2	4" BROWN VINYL COVEBASE ADHESIVE	12/10/2021	PLM	Non-ACM	ND		
032122627-0014	50-7B	ROOM C2	4" BROWN VINYL COVEBASE ADHESIVE	12/10/2021	PLM	Non-ACM	ND		
032122627-0015	50-8A	ROOM C2	YELLOW CARPET GLUE	12/10/2021	PLM	Non-ACM	ND		
032122627-0016	50-8B	ROOM C2	YELLOW CARPET GLUE	12/10/2021	PLM	Non-ACM	ND		
032122627-0017	50-9A	ROOM C2	GREY 9X9 FLOOR TILE	12/10/2021	PLM	ACM	6.0	Chrysotile	900 SF
032122627-0018	50-9B	ROOM C2	GREY 9X9 FLOOR TILE	12/10/2021	PLM	ACM	10.0	Chrysotile	
032122627-0019	50-10A	ROOM C2	BLACK MASTIC ON GREY 9X9 FLOOR TILE	12/10/2021	PLM	Non-ACM	ND		*900 SF
032122627-0020	50-10B	ROOM C2	BLACK MASTIC ON GREY 9X9 FLOOR TILE	12/10/2021	PLM	Non-ACM	ND		
032122627-0021	50-11A	ROOM C2	JOINT COMPOUND	12/10/2021	PLM	Non-ACM	ND		* Included in Sheetrock quantity below
032122627-0022	50-11B	ROOM C2	JOINT COMPOUND	12/10/2021	PLM	Non-ACM	ND		
032122627-0023	50-12A	ROOM C2	BROWN GLUE DAUB ON CEILING TILE	12/10/2021	PLM	ACM	4.0	Anthophyllite	900 SF in C2 and 900 SF in C3
032122627-0024	50-12B	ROOM C3	BROWN GLUE DAUB ON CEILING TILE	12/10/2021	PLM	ACM	5.0	Anthophyllite	
032122627-0025	50-13A	ROOM C2	WHITE 1X1 PINHOLE CEILING TILE	12/10/2021	PLM	Non-ACM	ND		* 900 SF in C2 and 900 SF in C3
032122627-0026	50-13B	ROOM C3	WHITE 1X1 PINHOLE CEILING TILE	12/10/2021	PLM	Non-ACM	ND		
032122627-0027	50-14A	ROOM C2	SHEETROCK	12/10/2021	PLM	Non-ACM	ND		* 900 SF in C2 and 900 SF in C3
032122627-0028	50-14B	ROOM C3	SHEETROCK	12/10/2021	PLM	Non-ACM	ND		
032122627-0029	50-15A	ROOM C3	GREEN 9X9 FLOOR TILE	12/10/2021	PLM	ACM	8.0	Chrysotile	450 SF
032122627-0030	50-15B	ROOM C3	GREEN 9X9 FLOOR TILE	12/10/2021	PLM	ACM	10.0	Chrysotile	
032122627-0031	50-16A	ROOM C3	BLACK MASTIC ON GREEN 9X9 FLOOR TILE	12/10/2021	PLM	Non-ACM	ND		*450 SF
032122627-0032	50-16B	ROOM C3	BLACK MASTIC ON GREEN 9X9 FLOOR TILE	12/10/2021	PLM	Non-ACM	ND		
032122627-0033	50-17A	ROOM C3	BLACK 9X9 FLOOR TILE	12/10/2021	PLM	ACM	8.0	Chrysotile	450 SF
032122627-0034	50-17B	ROOM C3	BLACK 9X9 FLOOR TILE	12/10/2021	PLM	ACM	10.0	Chrysotile	
032122627-0035	50-18A	ROOM C3	BLACK MASTIC ON BLACK 9X9 FLOOR TILE	12/10/2021	PLM	Non-ACM	ND		*450 SF
032122627-0036	50-18B	ROOM C3	BLACK MASTIC ON BLACK 9X9 FLOOR TILE	12/10/2021	PLM	Non-ACM	ND		
032122627-0037	50-19A	ROOM C3	WALL PLASTER SKIM WHITE	12/10/2021	PLM	Non-ACM	ND		
032122627-0038	50-19B	ROOM C3	WALL PLASTER SKIM WHITE	12/10/2021	PLM	Non-ACM	ND		
032122627-0039	50-19C	ROOM C3	WALL PLASTER SKIM WHITE	12/10/2021	PLM	Non-ACM	ND		
032122627-0040	50-20A	ROOM C3	WALL PLASTER BASE GREY	12/10/2021	PLM	Non-ACM	ND		
032122627-0041	50-20B	ROOM C3	WALL PLASTER BASE GREY	12/10/2021	PLM	Non-ACM	ND		
032122627-0042	50-20C	ROOM C3	WALL PLASTER BASE GREY	12/10/2021	PLM	Non-ACM	ND		
032122627-0043	50-21A	ROOM C3	ROOF DRAIN PIPE INSULATION	12/10/2021	PLM	ACM	8.0	Chrysotile	10 LF
032122627-0044	50-21B	ROOM C3	ROOF DRAIN PIPE INSULATION	12/10/2021	PLM	Non-ACM	<1	Chrysotile	
032122627-0045	50-21C	ROOM C3	ROOF DRAIN PIPE INSULATION	12/10/2021	PLM	ACM	10.0	Chrysotile	
032122627-0046	50-22A	ROOM C3	ROOF DRAIN FITTING NSULATION	12/10/2021	PLM	ACM	40.0	Chrysotile	
032122627-0047	50-22B	ROOM C3	ROOF DRAIN FITTING NSULATION	12/10/2021	PLM	ACM	22.0	Chrysotile	
032122627-0048	50-22C	ROOM C3	ROOF DRAIN FITTING NSULATION	12/10/2021	PLM	ACM	25.0	Chrysotile	

NOTES: * = Presumed ACM Contaminated due to adherence with ACM

APPENDIX II

LABORATORY REPORTS AND CHAIN OF CUSTODY



EMSL Analytical, Inc.

307 West 38th Street New York, NY 10018

Tel/Fax: (212) 290-0051 / (212) 290-0058

<http://www.EMSL.com> / manhattanlab@emsl.com

EMSL Order: 032122627

Customer ID: ATC62

Customer PO: 11-81-0030

Project ID:

Attention: Chris Godfrey
Atlas Technical
73 William Franks Drive
West Springfield, MA 01089

Phone: (413) 781-0070
Fax: (413) 781-3734
Received Date: 12/13/2021 11:08 AM
Analysis Date: 12/17/2021
Collected Date: 12/10/2021

Project: 183CG21102/ 50 SKYLINE DR WORCESTER

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
50-1A 032122627-0001	ROOM C2 - VIOLET 12X12 FT W/ PURPLE AND BLUE STREAKS	Gray Non-Fibrous Homogeneous		25% Ca Carbonate 75.0% Non-fibrous (Other)	None Detected
50-1B 032122627-0002	ROOM C2 - VIOLET 12X12 FT W/ PURPLE AND BLUE STREAKS	Gray Non-Fibrous Homogeneous		35% Ca Carbonate 65.0% Non-fibrous (Other)	None Detected
50-2A 032122627-0003	ROOM C2 - VIOLET 12X12 FT W/ PURPLE AND BLUE ADHESIVE	Yellow Non-Fibrous Homogeneous	3% Cellulose	15% Ca Carbonate 82.0% Non-fibrous (Other)	None Detected
50-2B 032122627-0004	ROOM C2 - VIOLET 12X12 FT W/ PURPLE AND BLUE ADHESIVE	Yellow Non-Fibrous Homogeneous	2% Cellulose	10% Ca Carbonate 88.0% Non-fibrous (Other)	None Detected
50-3A 032122627-0005	ROOM C2 - 2X2 WHITE PINHOLE / FISSURE SCT	Tan Fibrous Homogeneous	45% Cellulose 15% Glass	40.0% Non-fibrous (Other)	None Detected
50-3B 032122627-0006	ROOM C2 - 2X2 WHITE PINHOLE / FISSURE SCT	Tan Non-Fibrous Homogeneous	40% Cellulose 20% MinWool	15% Perlite 25.0% Non-fibrous (Other)	None Detected
50-4A 032122627-0007	ROOM C2 - 6" BROWN VINYL COVEBASE	Brown Non-Fibrous Homogeneous		15% Ca Carbonate 85.0% Non-fibrous (Other)	None Detected
50-4B 032122627-0008	ROOM C2 - 6" BROWN VINYL COVEBASE	Brown Non-Fibrous Homogeneous		20% Ca Carbonate 80.0% Non-fibrous (Other)	None Detected
50-5A 032122627-0009	ROOM C2 - 6" BROWN VINYL COVEBASE ADHESIVE	Tan/White Non-Fibrous Homogeneous		25% Ca Carbonate 75.0% Non-fibrous (Other)	None Detected

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. New York, NY AIHA-LAP, LLC--IHLAP Accredited #102581, NVLAP Lab Code 101048-9, NJ NY022, CT PH-0170, MA AA000170

Initial report from: 12/17/2021 17:00:11



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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
50-5B 032122627-0010	ROOM C2 - 6" BROWN VINYL COVEBASE ADHESIVE	Tan/White Non-Fibrous Homogeneous		40% Ca Carbonate 60.0% Non-fibrous (Other)	None Detected
50-6A 032122627-0011	ROOM C2 - 4" BROWN VINYL COVEBASE	Brown Non-Fibrous Homogeneous		15% Ca Carbonate 85.0% Non-fibrous (Other)	None Detected
50-6B 032122627-0012	ROOM C2 - 4" BROWN VINYL COVEBASE	Brown Non-Fibrous Homogeneous		20% Ca Carbonate 80.0% Non-fibrous (Other)	None Detected
50-7A 032122627-0013	ROOM C2 - 4" BROWN VINYL COVEBASE ADHESIVE	Brown/Tan Non-Fibrous Homogeneous	6% Cellulose	15% Ca Carbonate 79.0% Non-fibrous (Other)	None Detected
50-7B 032122627-0014	ROOM C2 - 4" BROWN VINYL COVEBASE ADHESIVE	Tan Non-Fibrous Homogeneous	2% Cellulose	20% Ca Carbonate 78.0% Non-fibrous (Other)	None Detected
50-8A 032122627-0015	ROOM C2 - YELLOW CARPET GLUE	Yellow Non-Fibrous Homogeneous		10% Ca Carbonate 90.0% Non-fibrous (Other)	None Detected
50-8B 032122627-0016	ROOM C2 - YELLOW CARPET GLUE	Yellow Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	None Detected
50-9A 032122627-0017	ROOM C2 - GREY 9X9 FLOOR TILE	Gray Non-Fibrous Homogeneous		94.0% Non-fibrous (Other)	6% Chrysotile
50-9B 032122627-0018	ROOM C2 - GREY 9X9 FLOOR TILE	Gray Non-Fibrous Homogeneous		35% Ca Carbonate 55.0% Non-fibrous (Other)	10% Chrysotile

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Samples analyzed by EMSL Analytical, Inc. New York, NY AIHA-LAP, LLC--IHLAP Accredited #102581, NVLAP Lab Code 101048-9, NJ NY022, CT PH-0170, MA AA000170

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
50-10A 032122627-0019	ROOM C2 - BLACK MASTIC ON GREY 9X9 FLOOR TILE	Black Non-Fibrous Homogeneous	2% Cellulose	98.0% Non-fibrous (Other)	None Detected
50-10B 032122627-0020	ROOM C2 - BLACK MASTIC ON GREY 9X9 FLOOR TILE	Black Non-Fibrous Homogeneous	3% Cellulose	97.0% Non-fibrous (Other)	None Detected
50-11A 032122627-0021	ROOM C2 - JOINT COMPOUND	White Non-Fibrous Homogeneous		70% Ca Carbonate 5% Mica 25.0% Non-fibrous (Other)	None Detected
50-11B 032122627-0022	ROOM C2 - JOINT COMPOUND	White Non-Fibrous Homogeneous		55% Ca Carbonate 10% Mica 35.0% Non-fibrous (Other)	None Detected
50-12A 032122627-0023	ROOM C2 - BROWN GLUE DAUB ON CEILING TILE	Brown Non-Fibrous Homogeneous	6% Cellulose	90.0% Non-fibrous (Other)	4% Anthophyllite
50-12B 032122627-0024	ROOM C3 - BROWN GLUE DAUB ON CEILING TILE	Brown Non-Fibrous Homogeneous		95.0% Non-fibrous (Other)	5% Anthophyllite
50-13A 032122627-0025	ROOM C2 - WHITE 1X1 PINHOLE CEILING TILE	Brown Fibrous Homogeneous	80% Cellulose	20.0% Non-fibrous (Other)	None Detected
50-13B 032122627-0026	ROOM C3 - WHITE 1X1 PINHOLE CEILING TILE	Brown/White Fibrous Homogeneous	85% Cellulose	15.0% Non-fibrous (Other)	None Detected
50-14A 032122627-0027	ROOM C2 - SHEETROCK	Brown/Gray Non-Fibrous Homogeneous	12% Cellulose	55% Gypsum 33.0% Non-fibrous (Other)	None Detected

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Samples analyzed by EMSL Analytical, Inc. New York, NY AIHA-LAP, LLC--IHLAP Accredited #102581, NVLAP Lab Code 101048-9, NJ NY022, CT PH-0170, MA AA000170

Initial report from: 12/17/2021 17:00:11



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EMSL Order: 032122627

Customer ID: ATC62

Customer PO: 11-81-0030

Project ID:

Attention: Chris Godfrey
Atlas Technical
73 William Franks Drive
West Springfield, MA 01089

Phone: (413) 781-0070

Fax: (413) 781-3734

Received Date: 12/13/2021 11:08 AM

Analysis Date: 12/17/2021

Collected Date: 12/10/2021

Project: 183CG21102/ 50 SKYLINE DR WORCESTER

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
50-14B 032122627-0028	ROOM C3 - SHEETROCK	Brown/Gray Non-Fibrous Homogeneous	10% Cellulose 3% Glass	55% Gypsum 32.0% Non-fibrous (Other)	None Detected
50-15A 032122627-0029	ROOM C3 - GREEN 9X9 FLOOR TILE	Green Non-Fibrous Homogeneous		92.0% Non-fibrous (Other)	8% Chrysotile
50-15B 032122627-0030	ROOM C3 - GREEN 9X9 FLOOR TILE	Green Non-Fibrous Homogeneous		90.0% Non-fibrous (Other)	10% Chrysotile
50-16A 032122627-0031	ROOM C3 - BLACK MASTIC ON GREEN 9X9 FLOOR TILE	Black Non-Fibrous Homogeneous	3% Cellulose	10% Quartz 87.0% Non-fibrous (Other)	None Detected
50-16B 032122627-0032	ROOM C3 - BLACK MASTIC ON GREEN 9X9 FLOOR TILE	Black Non-Fibrous Homogeneous	2% Cellulose	98.0% Non-fibrous (Other)	None Detected
50-17A 032122627-0033	ROOM C3 - BLACK 9X9 FLOOR TILE	Black Non-Fibrous Homogeneous		92.0% Non-fibrous (Other)	8% Chrysotile
50-17B 032122627-0034	ROOM C3 - BLACK 9X9 FLOOR TILE	Black Non-Fibrous Homogeneous		30% Ca Carbonate 60.0% Non-fibrous (Other)	10% Chrysotile
50-18A 032122627-0035	ROOM C3 - BLACK MASTIC ON BLACK 9X9 FLOOR TILE	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	None Detected
50-18B 032122627-0036	ROOM C3 - BLACK MASTIC ON BLACK 9X9 FLOOR TILE	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	None Detected

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Project: 183CG21102/ 50 SKYLINE DR WORCESTER

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
50-19A 032122627-0037	ROOM C3 - WALL PLASTER SKIM WHITE	White Non-Fibrous Homogeneous		50% Ca Carbonate 50.0% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
50-19B 032122627-0038	ROOM C3 - WALL PLASTER SKIM WHITE	White Non-Fibrous Homogeneous		50% Ca Carbonate 50.0% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
50-19C 032122627-0039	ROOM C3 - WALL PLASTER SKIM WHITE	White Non-Fibrous Homogeneous		50% Ca Carbonate 50.0% Non-fibrous (Other)	None Detected
50-20A 032122627-0040	ROOM C3 - WALL PLASTER BASE GREY	Gray Non-Fibrous Homogeneous		55% Quartz 45.0% Non-fibrous (Other)	None Detected
50-20B 032122627-0041	ROOM C3 - WALL PLASTER BASE GREY	Gray Non-Fibrous Homogeneous		45% Quartz 55.0% Non-fibrous (Other)	None Detected
50-20C 032122627-0042	ROOM C3 - WALL PLASTER BASE GREY	Gray Non-Fibrous Homogeneous		45% Quartz 20% Ca Carbonate 4% Mica 31.0% Non-fibrous (Other)	None Detected
50-21A 032122627-0043	ROOM C3 - ROOF DRAIN PIPE INSULATION	Brown/Gray Fibrous Homogeneous	80% Cellulose	12.0% Non-fibrous (Other)	8% Chrysotile
50-21B 032122627-0044	ROOM C3 - ROOF DRAIN PIPE INSULATION	Brown Fibrous Homogeneous	90% Cellulose	10.0% Non-fibrous (Other)	<1% Chrysotile
50-21C 032122627-0045	ROOM C3 - ROOF DRAIN PIPE INSULATION	Brown/Gray Fibrous Homogeneous	80% Cellulose	10.0% Non-fibrous (Other)	10% Chrysotile

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Received Date: 12/13/2021 11:08 AM

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Collected Date: 12/10/2021

Project: 183CG21102/ 50 SKYLINE DR WORCESTER

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
50-22A 032122627-0046	ROOM C3 - ROOF DRAIN FITTING INSULATION	Gray Fibrous Homogeneous		60.0% Non-fibrous (Other)	40% Chrysotile
50-22B 032122627-0047	ROOM C3 - ROOF DRAIN FITTING INSULATION	Brown/Gray Fibrous Homogeneous	30% Cellulose	48.0% Non-fibrous (Other)	22% Chrysotile
50-22C 032122627-0048	ROOM C3 - ROOF DRAIN FITTING INSULATION	Gray/Tan Non-Fibrous Homogeneous	40% Cellulose	35.0% Non-fibrous (Other)	25% Chrysotile

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Analysis Date: 12/17/2021

Collected Date: 12/10/2021

Project: 183CG21102/ 50 SKYLINE DR WORCESTER

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk materials via EPA/600 (0513) Method using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date: 12/13/2021

Sample Receipt Time: 11:08 AM

Analysis Completed Date: 12/17/2021

Analysis Completed Time: 4:39 PM

Analyst(s):

Ghaly Hemaya PLM (26)

Migena Shehu PLM (22)

Samples Reviewed and approved by:

Charles Johnson, Asbestos Laboratory Manager
or other approved signatory

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Initial report from: 12/17/2021 17:00:11

ATLAS

Asbestos Bulk Sample Chain-of-Custody

032122627

Project Name: 50 Skyline Dr. WorcesterProject Address: 50 Skyline Dr. WorcesterProject Number: 183CG21102Project Manager: C. GodfreySampled By: J. LevesqueResults To: C. GodfreyAnalysis Type: PLMTurnaround Time: 5 DayDate: 12/10/21Positive Stop: Yes

No

Special Instructions or Comments:

Field ID	Sample Description	Location	Homogeneous Material
50-1a	Violet 12'x12" VET w/ Purple + Blue Streaks	Room C2	1
50-1b	⊥		13
50-2a	Violet 12'x12" "		2
50-2b	⊥		2
50-3a	2'x2' White pinhole/fissure SCT		3
50-3b	⊥		3
50-4a	6" Brown Vinyl Cave Base		4
50-4b	⊥		4
50-5a	6" Brown Vinyl Cave Base Adhesive		5
50-5b	⊥		5
50-6a	4" Brown Vinyl Cave Base		6
50-6b	⊥		6
50-7a	4" Brown Vinyl Cave Base Adhesive		7
50-7b	⊥		7
50-8a	Yellow Carpet Glue		8
50-8b	⊥		8
50-9a	Grey 9"x9" Floor Tile		9

Relinquished By: [Signature]Date: 12/10/21Received By: [Signature]Date: 12/13/21 11:28Am

Relinquished By: _____

Date: _____

Received By: _____

Date: _____

MS
12/17/202173 William Franks Drive, V
Springfield, MA 01089
413.781.0070 | oneatlas.comG. Godfrey
12/17/21

ATLAS

Asbestos Bulk Sample Chain-of-Custody

D32122627

Project Name: 50 Skyline Dr Worcester Project Address: 50 Skyline Dr Worcester

Project Number: 183CG21102 Project Manager: C. Godfrey

Sampled By: J. Levesque Results To: C. Godfrey

Analysis Type: PLM Turnaround Time: 5 Day Date: 12/10/21 Positive Stop: Yes No

Special Instructions or Comments:

Field ID	Sample Description	Location	Homogeneous Material
50-9b	Grey 9"x9" Floor Tile	Room C2	9
50-10a	Black Mastic on Grey 9"x9" Floor Tile		10
50-10b	└		10
50-11a	Joint Compound		11
50-11b	└		11
50-12a	Brown Glue Dabs on ceiling		12
50-12b	└		12
50-13a	White 1'x1' Pinhole ceiling tile	Room C3	13
50-13b	└	Room C2	13
50-14a	Sheetrock	Room C3	14
50-14b	└	Room C3	14
50-15a	Green 9"x9" Floor Tile		15
50-15b	└		15
50-16a	Black Mastic on Green 9"x9" Floor Tile		16
50-16b	└		16
50-17a	Black 9"x9" Floor Tile		17
50-17b	└		17

Relinquished By: [Signature] Date: 12/10/21

Relinquished By: _____ Date: _____

Received By: [Signature] Date: 12/10/21

Received By: _____ Date: _____

Date: 12/10/21 11:28 AMMS
12/17/2021

ATLAS

Asbestos Bulk Sample Chain-of-Custody

Project Name: 50 Skyline Dr Worcester Project Address: 50 Skyline Dr Worcester

Project Number: 183CG21102 Project Manager: C. Godfrey

Sampled By: J. Levesque Results To: C. Godfrey

Analysis Type: PLM Turnaround Time: 5 Day Date: 12/10/21 Positive Stop: Yes No

Special Instructions or Comments:

Field ID	Sample Description	Location	Homogeneous Material
50-18a	Black mastic Black 9"x9" Floor Tile	Room C3	18
50-18b	I		18
50-19a	Wall Plaster Skim (White)		17
50-19b	I		17
50-19c	I		19
50-20a	Wall Plaster Base (Grey)		20
50-20b	I		20
50-20c	I		20
50-21a	Roof drain pipe insulation		21
50-21b	I		21
50-21c	I		21
50-22a	Roof drain fitting insulation	I	22
50-22b	I		22
50-22c	I		22

Relinquished By: C. GodfreyDate: 12/10/21Received By: MarkDate: 12/13/21 11:28 AM

Relinquished By: _____

Date: _____

Received By: _____

Date: _____